

## Response to the CCC Call for Evidence from the Mineral Products Association

### Call for Evidence - Welsh Carbon Budgets

The Environment (Wales) Act received Royal Assent in March 2016. It sets a 2050 target to reduce emissions by at least 80% and provides the legislative framework for establishing a carbon budgeting approach in Wales.

The Act requires that before the end of 2018, Welsh Ministers must set in regulation interim emissions targets for 2020, 2030 and 2040, together with 5-year carbon budgets for the periods 2016-2020 and 2021-2025.

The Committee on Climate Change has been asked by the Welsh Government to provide advice on these emissions targets and is seeking evidence to help with that task.

The Committee will provide advice in two stages:

- Stage 1: Advice on carbon accounting and design of Welsh carbon budgets/targets (March 2017)
- Stage 2: Advice on the level of ambition embodied within the targets and budgets and sectors in which there are particular opportunities to decarbonise (October 2017)

This Call for Evidence focuses on the first of these stages. Responses to this Call will help inform the Committee's advice to the Welsh Government, to be published in March 2017. This Call contains questions relevant to the Act, including the emissions accounting framework, scope of the targets and role for emissions trading.

Our subsequent advice on the level of the targets and budgets will be the focus of a second Call for Evidence later in 2017. **The deadline for responses is 12 noon on 1 February 2017.** For information about how to submit your response to this call for evidence, see: [INSERT LINK](#)

#### a. Form of emissions targets and carbon accounting framework

The Environment (Wales) Act requires interim targets to be set for 2020, 2030 and 2040, as a percentage reduction against baseline (essentially 1990) emissions. It also requires carbon budgets to be set as a maximum amount of emissions produced in Wales over a 5-year period (initially 2016-2020 and 2021-2025).

When targets are set, they are done so on the basis of the latest understanding of climate science and the best estimates of recent and historical emissions. However, over time methodological changes are made to how emissions under the greenhouse gas inventory are estimated, in order to improve the quality of these estimates.

The revisions to the emissions estimates reflect an updated understanding of actual levels of emissions, and therefore of their contribution to climate change. These revisions affect both recent and historical estimates of emissions, and can make targets harder or easier to meet without reflecting actual progress in reducing emissions.

Budgets set on an absolute basis, specifying the allowed quantity of emissions, retain a link to the underlying climate science regarding the extent to which they affect the climate. However, they would be more vulnerable to changes in inventory estimation practices, potentially making budgets much harder or easier to meet.

An alternative approach would be to base budgets on percentage reductions relative to the base year (1990). These would be less affected by such revisions, as estimates of current emissions and those in the base year would, in general, move in the same direction. However, budgets on a percentage basis are less strongly linked to the absolute level of emissions, which are the fundamental driver of climate change.

**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:**

The budgets should be set on percentage terms for consistency with the targets. The use of percentages is clear and easy to communicate. Furthermore it ensures that when reporting against the budgets, the reductions made compared to the base year are real and the budget hasn't just been met/not met because of methodological changes to emissions estimates.

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

**ANSWER:**

Consideration should not just be given to making targets resilient but to making the accounting system fit for purpose. The United Nations Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) is a principle within the United Nations Framework Convention on Climate Change (UNFCCC)

that acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change<sup>1</sup>. This principle applies here. Target setting and carbon budgets should take into account the abatement potential of the sectors and operations in Wales. This will ensure the targets and budgets are fit for purpose and achievable.

Climate change is a global, rather than a regional issue. Ideally it should be tackled at a global level. Trying to address the issue in smaller and smaller geographical areas moves the action further from the main global problem and prevents a holistic view of the problem to be overcome. Regional action has its place but it must be set in a global context.

In setting carbon budgets that are fit for purpose, Wales has an ideal opportunity to lead the UK in the measurement of consumption emissions. This is the only method of accounting that reflects the true level of emissions responsibility in Wales.

The measurement of consumption emissions will also show if Wales is achieving decarbonisation through deindustrialisation or through real emissions reductions. MPA therefore call for the Welsh carbon budgets to differ from UK budgets and to take account of consumption data including quantification and analysis of the 'carbon' cost of Welsh manufacturing compared to other nations.

## **b. Role for emissions trading and implications for the competitiveness of Welsh industry**

There are various different ways to account for emissions under domestic climate targets. The primary questions relate to their interaction with wider frameworks for emissions reduction. In the case of Wales, this means interaction with the EU emissions trading system (EU ETS) and UK carbon budgets.

There are two main ways of accounting for emissions:

- **'Gross' basis.** Emissions could be accounted for on a 'gross' basis, with actual emissions counting towards the targets for all sectors, as with the existing target to reduce Welsh emissions by 40% by 2020. This would reward action to reduce emissions in sectors covered by the EU ETS (the 'traded sector'), for example through reducing the carbon-intensity of electricity generation or from reduced emissions at Welsh carbon-intensive industrial facilities (whether from improvements in carbon intensity or reduced output).

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<sup>1</sup> <http://climatenexus.org/about-us/negotiation-issues/common-differentiated-responsibilities-and-respective-capabilities-cbdr>

- **‘Net’ basis.** Accounting for emissions on a ‘net’ basis, as under the UK carbon budgets, also counts actual emissions for sectors outside the EU ETS (the ‘non-traded sector’). However, the traded sector would be reflected in the Welsh Account as a cap reflecting Wales’s share of the overall EU ETS cap. This means that investment in low-carbon power generation – or other emissions reduction in the traded sector – would not directly affect the level of emissions accounted within the Welsh Account. From a carbon budgeting perspective, a ‘net’ approach effectively fixes the EU ETS contribution to the targets and removes the variability from the EU-ETS sector.

Policy levers available to the Welsh Government currently have very limited influence on the level of emissions from EU ETS installations.

Emissions in Wales (on a gross basis) have fallen 18% since 1990. However, since 2009 they have risen 1% per year largely due to average rises in emissions from power and industry. Industry emissions account for a much larger share of total emissions in Wales than other areas of the UK with 34% from the sector (compared to 22% at a UK-wide level). Power emissions account for 28% of total. Both of these sectors are largely traded in the EU ETS and therefore the split between traded and non-traded emissions is significant in Wales, with 56% of total emissions covered by the EU ETS.

Depending on the future relationship with the European Union, participation in the EU Emissions Trading System (EU ETS) may or may not continue.

For those sectors where emissions are accounted for on a gross basis, there is the potential to make up shortfalls in emissions reduction by buying international ‘offset credits’ (i.e. resulting from overseas action to reduce emissions) to make up the difference. This could provide additional flexibility in how nearer-term targets are met. Credit purchase could imply costs to the Welsh Government and would need to be procured through a programme that meets a required standard.

However, the Committee’s position is that we should plan now for the 2050 target at UK level to be met through domestic action, given that emissions credits may be unavailable or expensive.<sup>2</sup> Nearer-term reliance on offset credits would be inappropriate if it meant that domestic action is insufficient and is not on track to meet the 2050 target.

**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:

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<sup>2</sup> CCC (2015) *The fifth carbon budget – The next step towards a low-carbon economy*,  
<https://www.theccc.org.uk/publication/the-fifth-carbon-budget-the-next-step-towards-a-low-carbon-economy/>

Trading schemes have a role in helping to reduce emissions from certain energy intensive sectors but it is important to note that these sectors have been subject to decarbonisation policy for some time. As a result, they have taken early action to reduce carbon emissions and any remaining abatement potential is technically complex and will require considerable cost. Furthermore, current policies affecting these sectors already present challenging manufacturing and investment environments. The balance needs to move from industry decarbonisation towards action by non-industrial carbon emitting sectors, to redress the imbalance currently weighted against traded sectors.

Rather than a difference in contribution between traded sectors, it is more important that the contribution to Welsh emissions reductions differs between the traded sector, that has already taken early action to reduce emissions, and the non-traded sector where there are likely to be much easier and more cost effective emission reductions to be made.

**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:**

The UK carbon budgets may be set on a net basis but Wales has another opportunity to lead the UK and use a gross basis, or at least report on both net and gross. Setting targets on a gross basis will allow full account to be taken of emissions reductions by those sectors in EU ETS.

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

**ANSWER:**

The targets should not require sectors in Wales to go above and beyond that required by UK targets or the ambitious targets already in place under the EU Emissions Trading System for the traded sector. This is not only confusing but could introduce competitive distortions across sectors, like cement, that have operations in Wales, England, Scotland and Northern Ireland.

However, the design of Welsh targets should reflect the percentage contribution from each sector in Wales. For example, the traded sector in Wales makes up 56% of emissions and it is likely that for this

sector any cost effective reductions have already been implemented. This should be taken into account when setting targets and budgets and could lead to a slightly less ambitious target than for the UK as a whole, as the overall UK carbon budget has a smaller contribution to its overall emissions from the traded sector.

**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:**

If the gross emission targets required Welsh businesses to go above and beyond their competitors in the rest of the UK, or European competitors, then this would definitely have competitiveness implications. This could be overcome by ensuring that the targets are aligned as far as possible with targets for the UK as a whole.

This problem highlights the issue that climate change is a global problem and trying to deal with it in smaller and smaller geographical regions introduces additional and unnecessary complexities.

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

**ANSWER:**

Climate change is a global problem and it should be possible for emissions reductions to be made at the point of lowest cost. Due to the early action taken by businesses in Wales under policies such as EU ETS, further abatement comes at high cost. Therefore paying for reductions that take place elsewhere should be a legitimate way to deal with reducing emissions.

Furthermore, international offset credits could be important for sectors such as the cement sector where 70% of the total CO<sub>2</sub> emissions arise from the chemical breakdown of the raw materials and are therefore unavoidable without technologies such as Carbon Capture and Storage or Use (CCS/U). International offset credits could allow the sector to make reductions elsewhere that are otherwise

currently impossible. Such credits can be a force for good in appropriately controlled and managed schemes.

### c. Scope of emissions targets

The Welsh Government has asked the Committee whether or not emissions from Wales's share of international aviation and international shipping (IAS) emissions should be included within the targets and budgets.

Under the Climate Change Act at UK level, IAS emissions are currently outside the scope of the 5-year carbon budgets, but are taken into account in their setting. The Committee's approach has been to include IAS emissions within the scope of the target to reduce emissions by at least 80% by 2050, and examine what levels of reductions are required in the other sectors in order to meet this target. This has been part of the analytical work that has gone into recommending the first five UK carbon budgets, which to date have all been legislated in line with CCC advice.

The Committee has previously set out a principle that IAS emissions should be included within the scope of UK carbon budgets if it is practical to do so. On this basis, alongside our recommendation on the level of the fifth carbon budget, the Committee recommended that the scope of UK carbon budgets be expanded to include international shipping.<sup>3</sup> However, the UK Government rejected this aspect of our recommendations.

Inclusion of international aviation within carbon budgets is complicated by carbon accounting regulations relating to their inclusion with the European emissions trading system. As UK carbon budgets are accounted for on a net basis and the EU ETS covers flights within Europe but not those outside (i.e. only a subset of international flights), we recommended that inclusion of international aviation is not currently practical. However, it could be included were the basis of carbon accounting to be gross (i.e. actual) emissions, by using estimates of fuel sales.

**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:**

Imported products from less carbon constrained economies are increasing and threatening domestic production. This is not only bad for the Welsh economy and employment but also puts at risk security of supply of vital materials such as cement. Furthermore, the transport of these materials increases global emissions. Over 17% of the UK cement demand is now met by imports. Therefore, despite the difficulties associated with this, MPA believe that international shipping should be included within

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<sup>3</sup> CCC (2015) *The fifth carbon budget – The next step towards a low-carbon economy*,  
<https://www.theccc.org.uk/publication/the-fifth-carbon-budget-the-next-step-towards-a-low-carbon-economy/>



Welsh emissions targets and budgets.

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

ANSWER:

Aviation contributes considerably to emissions and should therefore be included within Welsh emissions targets.