

Welsh Carbon Budgets – Call for Evidence Response

Organisation

Confor (Confederation of forest industries)

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?

Paris agreement aside, any change, up or down, to long term targets will impact on nearer term targets.

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

How the targets can be met will be affected by Brexit as the ability to pay for climate change mitigation measures, which has historically been supported by EU funding, which will cease post Brexit.

As the carbon reduction targets are set in the Wales Environment Act, and are Wales's response to international climate change agreements, we believe the scale and timing of the targets should not be changed by Brexit, but changes to domestic policy on agriculture, caused by Brexit, could enable a large increase in woodland and forestry creation which would significantly boost the ability of Wales to meet the targets.

With Brexit, Wales will leave the CAP. This gives us a unique opportunity to refocus policy and funding beyond the agricultural sector and food production. Agriculture is a major emitter of greenhouse gases and we should use Brexit to enable it to be a carbon sink through woodland and forestry creation.

<http://www.fao.org/resources/infographics/infographics-details/en/c/218650/>

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)?

Decarbonising any sector will be a huge challenge. Most sectors only have two options, offset their emissions or reduce fossil fuel use. Offsetting emissions can just move the problem elsewhere and reducing fossil fuel usage will become increasingly difficult to achieve without reducing economic activity.

Increasing woodland and forest cover here in Wales is a radically different way to tackle climate change. Unlike other sectors, increasing the economic activity of the forestry sector by woodland and forestry expansion actually increases our ability to tackle climate change by carbon sequestration and storage, it also delivers economic growth and jobs and additional environmental benefits for society, including recreational facilities, biodiversity habitats, and water management and flood prevention.

The Read report of 2010 (COMBATING CLIMATE CHANGE A ROLE FOR UK FORESTS.

<http://www.forestry.gov.uk/readreport>) makes an assessment of the potential impact forests have on climate change. "Existing UK forests, including soils, are both a large store of carbon (estimated at around 790 MtC) and a system removing CO₂ from the atmosphere (about 15 MtCO₂ per year in 2007). Sustainable forest management can maintain the carbon store of a forest at a constant level while the trees continue to remove CO₂ from the atmosphere and transfer a proportion of the carbon into long-term storage in forest products". The estimated total quantity of carbon stored in wood-based construction products in the UK housing stock in 2009 is 19 Mt (equivalent to 70 MtCO₂e). If the market for wood construction products continues to grow there is the potential to store much more carbon in the UK's new and refurbished homes.

The Read report notes that:

- Current sequestration from Welsh woodlands is estimated to be about 1,419,000 tonnes annually.
- Forestry is predicted to remain a net sink for atmospheric carbon. (Woodlands for Wales Indicators 2014-15, <http://gov.wales/statistics-and-research/woodlands-wales-indicators/?lang=en>)
- The total carbon stored in the forest and its associated 'wood chain' therefore increases over time under appropriate management systems

And the report concluded that "woodland creation provides a highly cost-effective and achievable abatement of GHG emissions when compared with potential abatement options across other sectors. The two most cost-effective options were conifer plantations" (which are reducing in Wales, Welsh Softwood Timber Supplies and Our Green Economy workshop 2014. <http://www.confor.org.uk/resources/publications/confor-publications/> page 6) "and rapidly growing energy crops".

Creating new woodlands and forests can lock up carbon in the short and longer term. Improved tree breeding has given the forestry sector the ability to increase yields and reduce the rotation lengths in commercial forests. This will increase the carbon sequestration potential of the forests when linked to producing and using more wood products. New strains of Sitka spruce planted 15 years ago are proving that they can grow much faster than previous generations of trees. The comparison with previous strains of trees is impressive, the estimations of volume gain per Ha is in the region of 21%- 29% over previous varieties (Benefits of improved Sitka spruce: volume and quality of timber. <https://www.forestry.gov.uk/PDF/fcrn003.pdf/%24FILE/fcrn003.pdf>). Even this gain has been exceeded in the results from thinning some forests in recent months and we could be seeing even greater volume increases at final harvest.

Volume is important in carbon terms as wood is 49% carbon by volume, so the greater the volume of wood produced the greater volume of carbon it sequesters and stores. Increasing the volume of timber produced per Ha is therefore increasing the volume of carbon sequestered and stored every year. This has a great impact on carbon storage and stocks, it will have an immediate impact and will have sequestered large amounts of carbon by 2030. Reducing the rotation length of the forest from planting to thinning and final cropping will also have a huge impact as we can now grow several generations of crops instead of just one on the same piece of ground in the same

time. <http://www.sitkacoop.co.uk/>

Adding in soil carbon, which changes from an emission to a sink when changing land use from agriculture to forestry, increases the overall carbon sequestration potential of forests. On top of that the volume of carbon saved by product substitution when using wood to replace high carbon materials, and the long term carbon storage capacity of timber products, means the total carbon mitigation potential of creating new forests is enormous. The forestry sector is even reducing its carbon footprint by using new technologies, advances in the design of machinery which uses hybrid technology as the power units for harvesters is reducing the carbon emissions of the sector even further, increasing the carbon sink potential of the sector.

http://www.logset.com/Logset_products/Harvesters/12H_GTE_Hybrid

The opportunities woodland and forestry creation provide for climate change mitigation is huge, however the challenge is getting permissions in place to plant the trees. This requires an acceptance that we will have substantial changes in land use in Wales and that will make the landscape look very different. We need to acknowledge that, recognise the benefits and be willing to make the trade-offs that will enable large scale woodland and forestry creation. We also need to have support packages in place that will enable farmers and landowners to look longer term, be confident that in the short term they can see a viable income stream that will bridge the gap between planting and harvesting. Fortunately, due to improved tree breeding and the reductions in rotation times that give us, means that time gap is reducing which gives us a vital window of opportunity.

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?

We need to make the link between land use change and climate change. Acknowledging that climate change will inevitably force changes to land use will give regulators and governments evidence that they must accept changes to land use and accept that preservation of the existing land uses simply will not help with climate change mitigation.

We need to do different things not the same things differently.

Woodland and forestry creation is a very visual change to land use and is often opposed for that reason despite the fact that the land use we have now is actually historically very recent and that tree cover was the norm.

We need action now to enable large scale tree planting to take place from spring 2018. If planted with new varieties now, by 2030, 5000Ha (the WG planting target for climate change) could have sequestered 120000 tons of CO₂ in the timber alone and would only be half way through its potential rotation. Planting now will mean that the timber crops are harvested possibly by 2045 and that those crops would have been used to create wood products which would be counted as carbon storage by 2050. In addition, if we act now, we would also have a second rotation of trees in the ground which would be counting towards carbon sequestration targets from 2050 up to 2085.

This action to create new woodlands and forests needs to be underpinned now by using the existing legislative framework to enable not restrict tree planting. Ministers need to ensure the regulators use legislation creatively, for example the regulator needs to use the information available to them to justify the trade-offs that need to be made. Creating woodlands and forests will mean change and we need to be sure that we value that change and can judge the value of that change against the value of keeping and protecting what is there already which may well have less biodiversity and employment benefit, never mind be a source of damaging greenhouse gases.

To enable existing landowners and farmers to change from sheep to timber production will need financial incentives that provide for a short term income to farmers until the first income from timber crops is realised, probably 12-15 years from planting. Long term budgets will need to be agreed with treasury and ministers in order to give confidence and facilitate this transformation.

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?

UK Gov: Acceptance that we need change. Making the difficult decisions needed for climate change mitigation measures more possible by balancing the benefits from climate change mitigation measures against other objectives to enable decisions to be made.

WG: Acceptance that we need change. Making the difficult decisions needed for climate change mitigation measures more possible by balancing the benefits from climate change mitigation measures against other objectives to enable decisions to be made.

NGO: Acceptance that we need change, that land use will change and we cannot, and should not, preserve everything as it is indefinitely. The benefits of such change should be fully understood and made available to regulators and all interested parties so that these can be compared with the benefits of the current land-use.

Public sector: Acceptance that we need change, that land use will change and we cannot, and should not, preserve everything as it is indefinitely. The benefits of such change should be fully understood and made available to regulators and all interested parties so that these can be compared with the benefits of the current land-use.

Individuals: Could be a huge driver of demand for forest products by asking for UK grown wood products.

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

As an individual, high level targets have little impact on me and I suspect that is true for most individual members of society however much we try and change that. A much greater impact is the cost of products, therefore linking climate change to cost of the products will have more impact.

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 is the third largest importer of wood products in the world. The potential carbon emissions from that and the potential carbon savings from producing the timber products we need ourselves should be considered and valued which would assist the UK forestry sector to create more woodlands and forests.

Forestry statistics 2016. <https://www.forestry.gov.uk/forestry/infd-7aqdgc>

UK Wood Production and Trade 2016. [https://www.forestry.gov.uk/pdf/ukwpt17.pdf/\\$FILE/ukwpt17.pdf](https://www.forestry.gov.uk/pdf/ukwpt17.pdf/$FILE/ukwpt17.pdf)

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?

Losing one of these large emitters is not expected (phasing out of coal fired generation is already expected) and would be a one off large event, it may mean that Wales meets its targets much easier. Most carbon reduction measures, including woodland and forestry creation, needs long term planning and we need confidence that those plans will be enacted from start to finish. Changes to carbon budgets and targets part way through a long term programme caused by a large and sudden reduction in carbon emissions, even though welcome, would be disastrous for any long term programme and especially so for a sector like forestry, that by its nature works on longer timescales than most others sectors.

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?

Forests, Carbon and Climate Change: the UK Contribution.

[https://www.forestry.gov.uk/pdf/fcin048.pdf/\\$file/fcin048.pdf](https://www.forestry.gov.uk/pdf/fcin048.pdf/$file/fcin048.pdf)

Forestry Commission, carbon, trees and forests. <https://www.forestry.gov.uk/forestry/infd-7m8fge>

COMBATING CLIMATE CHANGE A ROLE FOR UK FORESTS. <http://www.forestry.gov.uk/readreport>

Will the axe fall on UK businesses when it comes to timber. <https://blogs.wwf.org.uk/blog/habitats/forests/will-the-axe-fall-on-uk-businesses-when-it-comes-to-timber/>

The Sitka co-op, <http://www.sitkacoop.co.uk/>

Welsh Softwood Timber Supplies and Our Green Economy workshop 2014.

<http://www.confor.org.uk/resources/publications/confor-publications/> page 6)

Softwood availability forecast 2013-2061

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?

UK is the third largest importer of timber products in the world now, only Japan and China import more timber and wood products than we do. WWF report shows that as underdeveloped countries improve and develop their timber usage will increase and the report suggests that the demand for timber will triple by 2050. The demand for timber in developing countries will be met by exploitation of their local forest resources and as most of the important reserves of rainforest are in developing countries the likelihood is that these rainforests would be the first place harvested for timber, in addition to a loss of carbon stored in the trees there would likely be a loss of soil carbon associated with the harvesting process as these countries would not have the expertise in forest management needed to mitigate that loss. Developed countries, by increasing their plantation forest area, could supply timber to the world markets and so offset the risk of losing more vital rainforest. However many developed countries already have large areas of productive commercial forest so are limited in their capacity to expand further (the EU average forest area is 45%). The UK has a much lower forest area (14% in Wales) and so is much better placed to increase their forest area.

Expanding the UK woodland and forestry area specifically with plantation forests will reduce the UK's reliance on timber imports and reduce the demand on other countries who could also help to supply developing countries with timber products.

<https://blogs.wwf.org.uk/blog/habitats/forests/will-the-axe-fall-on-uk-businesses-when-it-comes-to-timber/>

