Trees keep on giving for carbon reduction



Eleanor Harris on the importance of forestry in the climate change debate

n a year which began with the 'beast from the east' exacerbating a crisis in timber supply, and which continued into a summer in which woodland owners face the highest risk of fire for many years, climate change is becoming a very real risk for forestry. Yet, to an extent unparalleled in almost any other industry, forestry also holds the potential to make a significant contribution to tackling climate change, not by reducing its operations, but by expanding them.

Climate change and carbon reduction is coming up many political agendas and is already the driver which sets the tree planting targets in the various parts of the UK, although only Scotland is currently approaching meeting these. But how does forestry and timber have such huge potential in tackling climate change, why is it so difficult to translate this potential into 'trees in the ground', and how can we change that?

Timber: Impacting carbon three times over The importance of timber in construction as a medium-term carbon sink has only recently begun to be recognised. Confor was an early advocate of this, and in 2015 commissioned Sandy Greig to calculate the carbon benefit from the 20,000 hectare, UK Forestry Standard forest of Eskdalemuir, taking into account the final uses of the harvested timber. It has proved a difficult challenge to present the study in a form which was easily understood, but this is now available in the leaflet enclosed with this magazine, summarised in the graphic on the right.

The Eskdalemuir study concludes that every hectare of productive forest results in a carbon benefit approximately equal to one individual's carbon emissions over a year. It also demonstrates that the lion's share of the benefit is derived from the use of timber, rather than the growing tree.

A tree grown for timber tackles climate change in three ways: (1) by sucking up carbon in the forest, (2) by locking up the carbon in a timber product, and (3) by avoiding the pollution caused by making the product from concrete, steel or plastic.

Harvested wood products and easy wins Sometimes the easiest things are the hardest to do. This was highlighted by the recent report of the ComForestry holds the potential to make a significant contribution to tackling climate change, not by reducing its operations, but by expanding them mittee on Climate Change (the CCC) to the UK government on progress to tackle climate change (see FTN web resources). The report leads with a stern warning that the government is missing four key 'easy wins' in tackling climate change (see graphic below), one of which is tree planting, and that this will be an expensive failure.

Encouragingly, however, this year, for the first time, the benefit of timber (the subject of our Eskdalemuir study) is included in the calculations made by the CCC, under Harvested Wood Products (HWP). HWP calculations assume that carbon is locked up in paper for two years, particleboard for 25 years, and sawn timber for 35 years. This means that the 'carbon life' of a tree is extended well beyond the time it stands in the forest, while new trees continue to sequester more carbon in its place.

Confor is working with the CCC to help develop more sophisticated ways of measuring the carbon benefit of forests and developing policy to maximise their carbon benefit.



Graphic from the Committee on Climate Change June 2018 Progress Report to Parliament



The policy gap

Confor is also helping the CCC to understand the policy blocks which mean that, despite the good intentions, trees are not planted. They recommend that the government urgently 'develop a strategy in England and each of the devolved administrations to deliver around 20,000 hectares per year across the UK by 2020, rising to 27,000 hectares by 2024, in line with stated ambition', but recognise that this advice, accepted before, has not resulted in action.

One potential problem is the desire of governments to avoid subsidising timber production by distinguishing between timber grown for commercial use, and timber grown for carbon. It is immediately obvious from the discussion above that there is no distinction: all timber is created from carbon taken from the atmosphere, and in fact the best way to grow timber for carbon, for cost-effectiveness, scale, and long-term storage is to grow it for commercial use: to build our cities from wood.

The distinction therefore creates a danger that carbon funding will be directed into land uses which compete with tree planting, delivering worse results than if there were no carbon funding at all.

An example would be a cattle farm which makes only a marginal business profit but receives carbon funding to improve grassland management. The business is still carbon-emitting, albeit at a lower level. The farmer cannot afford to diversify into forestry, although the farm would make higher business profits in the long run, because of a loss of carbon funding: carbon sequestration is part of the normal course of forestry business, rather than an additional, non-commercial activity. If there were no carbon funding, the farmer would have a business case to plant 20% of the land with timber to diversify income, which would result in the business becoming a 'carbon sink' instead of a 'carbon source'.

This is why governments need to be extremely careful in developing policies around 'public' and 'private' goods as if these operated in distinct spheres. Public funding affects the private economy, for example by making uneconomic activities viable, or changing the balance of profitability between two activities. Meanwhile, the private sector is increasingly aware of the risk of climate change to their businesses, although it is a 'public' issue.

This is all part of the development of the very new idea of natural capital accounting: how we measure the value of our planet's resources so as to avoid exploiting them to our own destruction. A stable climate is one of the services of nature, like air to breathe, water to drink, and the diversity of life, that we take for granted in everything we do,





This century must credibly be called a century of decarbonisation **Angela Merkel**

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Whereas in previous years it barely registered as a risk, now [April 2018] close to a third of global CEOs are "extremely concerned" about the threat climate change poses to their organisation's growth Mark Carney, Governor of the Bank of England

>> but which businesses and governments increasingly realise that they must safeguard actively to continue in future, as a business must ensure its financial accounts remain in the black. As the world's only costeffective, large-scale carbon-capturing industry, the forestry industry has an essential role to play in replenishing the world's store of natural capital. The private sector knows this: investment for this truly sustainable industry is flourishing. It is now essential that the public sector develop land use policies which do not hinder this development, in every part of the UK.

FTN WEB RESOURCES

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Download the infographic on p7 Download the enclosed leaflet Download CCC report on progress to tackle climate change www.confor.org.uk/ftnweb

In the post....

Some members have suggested a practical way that Confor itself could reduce its carbon footprint – by finding a more sustainable postal wrapper for FTN.

Simon Tooth, publisher responsible for FTN at Countrywide Publications, said: "We are looking at alternatives to the plastic wrapping we use for mailing our portfolio of magazines, including FTN.

"Like most mailing houses, ours is highly automated and geared around plastic film. While this film is accepted for recycling in some parts of the country, it is true that the vast majority goes to landfill where it takes many years to degrade.

"Reduced and non-carbon alternatives – including biodegradable and compostable films – are being introduced to the market. However, these are still relatively expensive and, by their very nature, have a shorter 'shelf life' which can make handling and storage more problematic.

"A better option for FTN may well be a return to paper or even card envelopes and we are currently costing a number of different grades to ensure the magazine is protected in the post. We hope to advise Confor on a least-cost but sustainable solution in time to implement for the October issue."

What is Confor doing?

As well as engaging with the Committee on Climate Change, Confor is involved in a wide range of policy discussions on the future role of timber in UK land use and climate policy:

• Working with Defra and BEIS (Department for Business, Energy and Industrial Strategy) to develop English Forestry Investment Zones to deliver the low-carbon Clean Growth Strategy.

• Working with Defra to design Environmental Land Management schemes (ELMs) to deliver public goods like decarbonisation effectively.

• Working with Welsh Government to ensure timber has a high profile in both the recent Woodlands for Wales Strategy and consultations including Brexit and our land and A low-carbon pathway for Wales.

• Working with the Scottish Government to ensure the Scottish Forestry Strategy and post-Brexit policy deliver integrated land use, and that the commendable improvements in rates of productive woodland creation are uninterrupted during the transition to new structures.

• Working with think-tanks including the English Bright Blue, the Food, Farming & Countryside Commission, and the Institute of Welsh Affairs to ensure that land use including forestry and timber is in the forefront of thinking about the low-carbon economy.

• Engaging with farmers and the public to generate interest in productive forestry, through media articles and attendance at events like the Royal Highland and Royal Welsh Shows.

• Arranging visits for key politicians to sawmills, forests and nurseries, to see for themselves how trees turn climate-changing carbon dioxide into 'home-grown homes'.

What can members do?

More and more of our members are asking us how they can help with getting the forestry message across. Making the carbon argument is one area where your many voices around the country can do far more to change the mindset of businesses, campaigners, the public, academics and politicians than our one voice.

• Respond to consultations such as those mentioned above. It is of great value for Confor's response to be supplemented by others from around the sector, both in reiterating our points and adding others from your own business's point of view.

• Engage with your local low-carbon groups. These coalitions of policymakers, environmentalists, academics and activists are often innovative and open-minded in their quest for evidence-based ideas to decarbonise their local economy. They are often also urban-based and therefore unaware of the forestry industry and the solutions it can offer. Get involved and perhaps offer to give a presentation: please contact us if you would like assistance with this.

• Invite your local politicians to visit your business, to show them forestry's potential for tackling climate change issues while improving the local economy.

• Make use of the Eskdalemuir study to demonstrate the carbon benefits of your forests. If the composition or produce of your forest is different you might be able to use the methodology to adjust the results. Please contact us if you would like extra copies of the leaflet, or high-resolution versions of the graphic.