Confor Briefing

Land use: policies for a net-zero UK

The Committee on Climate Change. 23 January 2020 View on web

Tree planting is the first key message in the CCC's latest recommendations.

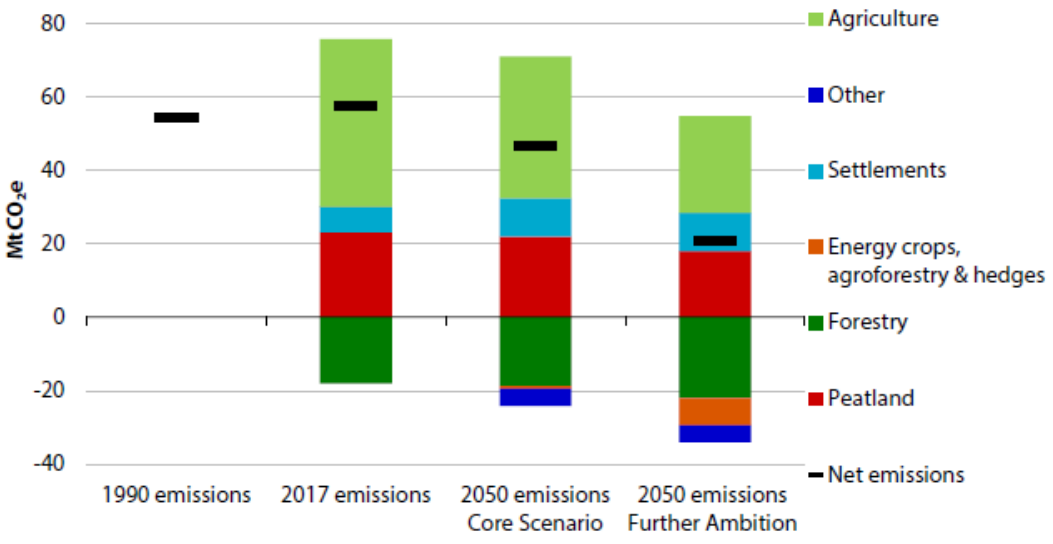
What is this report?

Scope of the report

- how we use land in the UK
- what government needs to do to reach net-zero – this report goes beyond previous reports to suggest ways to deliver on proposed actions like greater tree planting
- how to do this without 'carbon leakage' through exported production

Key recommendations

- increase tree planting
- encourage low-carbon farming practices
- restore peatlands
- encourage bioenergy crops
- reduce food waste and high-carbon foods
- government needs to make more explicit the need for change in agricultural land use



Core and Further Ambition scenarios for emissions cuts, showing the key role of forestry in delivering deep net reductions in land use carbon emissions. P.32

What are the forestry related targets in more detail?

- At least 30,000 hectares new planting per year, 'both productive conifer and standing broadleaf'
- 80% of broadleaf woodland brought into UKFS compliant active management
- 23,000 hectares of bioenergy crops including miscanthus, short rotation coppice and short rotation forestry per year
- Agroforestry resulting in 10% of cropland and grassland planted with trees by 2050 P.33

What will the carbon benefits be?

Activity	$MtCO_2e$ per year
Growing forests	14
Harvested wood	14
Growing bio crops	2
Harvested bio crops	11
Agroforestry	6
Total	**47**

What policies do they propose to deliver these?

1. A carbon market to fund tree planting
2. Public funding to deliver wider benefits from tree planting
3. Public funding for broadleaf woodland management
4. Protection for hedgerows
5. Incentivise private investment in tree planting
6. Review of forestry taxation to ensure land use change from agriculture is not a disadvantage
7. Streamline application process for new afforestation schemes
8. Support scale-up of capacity of forestry supply chain from nursery to processor P.14, 93

What do these proposals mean in more detail, and what is Confor's assessment?

A carbon market to fund tree planting

'A carbon trading scheme or auctioned contracts to attract private sector investment. Either of these could be funded through a levy on greenhouse gas-emitting industries. These schemes must explicitly avoid double counting of credits. The Woodland Carbon Code, which complies with the UK Forestry Standard already exists to monitor, report and verify carbon savings.' P.76, MORE DETAIL P.91

Confor's assessment: The cost to the public purse of grants to lock up carbon by tree planting is relatively very low compared to alternative forms of carbon capture and storage. The grant system is also well established and understood and shown to be successful in Scotland – the key is to get the applications and approvals process functioning as it should in England and Wales. Carbon trading has made some progress in forestry as a top-up payment, but there can be reluctance from owners of woodland to have the carbon in their trees 'owned' by a third party who might, for example, restrict their sale of timber. The additional carbon application process further complicates an already difficult woodland creation process in England especially. The calculation that conifer forestry is not economic (P.62) is based on an assumption of YC13 forests on a 60-year rotation, with a 10% improvement over 30 years. This is a huge underestimate of present and anticipated private sector productivity.

Public funding for other benefits

'Public funding should be used to encourage the non-carbon benefits of afforestation (e.g. alleviating flood risk, recreation). Public funding may also be needed for planting trees on farms where it would not occur through the main mechanism above (e.g. because costs are higher than the price established through the market or where there are non-financial barriers).' P.76

Confor's assessment: This proposal provides welcome recognition that modern tree planting delivers a wide range of additional public goods in addition to locking up carbon. However, it's not clear how this funding would interact with carbon payments – separate or additional? Driving up tree planting in England and Wales requires a focus on improving processes to provide confidence to potential applicants – avoiding unnecessary additional complexity and uncertainty is key.

Public funding for broadleaf woodland management

'Although managing existing broadleaf woodlands would deliver a net annual benefit of £0.1 billion, the presence of non-financial barriers probably explains the current low rate of management […] Where possible, the costs of improved management could be part funded by the buyers of the harvested material.' P.90, 93

Confor's assessment: This appears to be based on a paper calculation (to be published, but not yet available) rather than analysis of why broadleaf woodland is not managed in practice. This is usually due to the small size of woodlands and complexity of access and management making extraction of wood economically unviable.

Protection for hedgerows

'Hedgerows that are protected under existing cross-compliance rules should continue to be so to avoid the loss of this habitat' P.93

Outreach to incentivise private sector investment

Development of Forestry Investment Zones: 'The appointment of a FIZ officer to offer tailored advice to land owners and investors is expected to provide confidence in the application process, while a programme of whole farm audits is being finalised to seek opportunities to further integrate farming and forestry.' P.94

Confor's assessment: The Forestry Commission's first attempt at developing a Forestry Investment Zone in Cumbria has yet to deliver any planting or substantive transferable lessons. Confor has promoted a different approach of 'forestry partnerships' and put forward Northumberland as a more suitable location for a pilot. This has secured support from the forestry Minister Zac Goldsmith and Northumberland County Council. We would focus future energy in this direction.

Review of forestry taxation to ensure land use change is not a disadvantage

No further detail

Confor's assessment: Forestry related taxation is generally considered to be positive towards tree planting and is understood by the sector. Any proposed changes would have to be discussed at an early stage with Confor to ensure there are no unintended consequences.

Streamline application process for new afforestation schemes

No further detail

Confor's assessment: The complexity and uncertainty of the application process is the key barrier to woodland creation in England and Wales. This should be the number one policy proposal, with more analysis on why this barrier exists and how it can be overcome. Useful reference could be made to the McKinnon Review which has facilitated greater planting in Scotland.

Support scale-up of capacity of forestry supply chain from nursery to processor

'Given the restrictions placed on importing nursery stock for phytosanitary reasons, the domestic nursery capacity will have to increase markedly to provide the quantity of planting stock needed to afforest 30,000 hectares each year. This will need to be accompanied by a rise in the skilled silviculture workforce to plant and manage the trees. Providing advanced market commitment to instil supply-chain confidence is critical, while the development of new planting technologies (e.g. seed planting drones) can support a scale-up in planting.' P.93

Confor's assessment: This is another key proposal which merits further analysis, including of the gap in public investment in the forestry supply chain compared to farming. Confor has a Nursery Producers Group which includes all the key nurseries trading in forestry material and our membership includes the public forest bodies in England and Scotland who manage nurseries.

Wood products

The report recognises that sustainably managed forests provide a store of carbon in the landscape and that harvested wood can be used in construction, creating an additional stock of carbon in the built environment. However, there is an absence of detail on how that can be achieved.

Confor's assessment: This is a gap that the CCC needs to address as there is an absence of Government policy and action. The carbon benefit of UK grown trees is significantly increased when wood products displace other much more carbon intensive materials and new vigorous young trees are planted in their place.

What else in the report affects forestry?

The report recommends large-scale upland peatland restoration. However, removal of forestry to restore peatland is a low priority: only in the 'further ambition' scenario is it proposed to remove 21,000 hectares. This is because the cost is higher and the carbon benefit is lower when loss of tree growth is included. P.68

There is considerable discussion (P.41) of methane in the context of agriculture, and the disproportionate effect of an increase or decrease in sustained methane emissions on climate targets. It is surprising, therefore, that there is no discussion of the evidence that draining peatland substantially reduces methane emissions while rewetting substantially increases it (ABDALLA 2016)

Overall assessment and next steps

The CCC Land Use for Net Zero report is extremely welcome in its recognition of the importance of tree planting to meet net-zero targets, and the substantial additional carbon benefits of planting productive conifers and bringing broadleaf woodland into management. The CCC has made clear that current Government policy isn't driving the change required – a number of challenges remain, including tackling gaps in delivery like agriculture and joining up policies and actions across sectors.

The policies and mechanisms are generally worth considering further, although they are based on a poor understanding of commercial forestry in practice in the UK and as a result are not always well developed and prioritised. This report largely collates previous research by the CCC to provide a steer on delivering net-zero policies, and cautions that 'there is uncertainty in how far these

levels of ambition can be achieved in practice, and in estimates of the carbon impacts. These will need to be updated with on the ground learning and ongoing research. However, the majority of measures are cost-effective from a carbon perspective'. P.34

The CCC will now be beginning to develop their advice on setting the sixth carbon budget at the end of 2020. This will be an opportunity for Confor to ensure that they engage more fully with a wide range of stakeholders from the private sector and address assumptions including:

- Anticipated yields and date of harvest from forests planted now
- Anticipated productivity gains through silvicultural and genetic improvement (the CCC assume over 100% for crops by 2050 (LAND USE 2018 REPORT P.36) yet only 10% for forestry)
- Investment interest in forestry as a green investment
- Market drivers in broadleaf woodland management
- Why the approvals process is so complicated and how it can be improved
- What investment is required in the supply chain, including nurseries, contracting, processing, skills, plant health, promotion of UK wood products, etc
- The extent of UK reliance on imported wood and the 'carbon leakage' implications of this (the imports figure cited on P.23 of two thirds is for sawnwood only; for all wood products it is 81%)

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