Forestry Commission

Agenda Item 5

Forest Services Board

Paper 5.1

24 April 2019

FS's strategy for accelerating woodland creation

Purpose

1. To discuss and agree Forest Services' strategy for accelerating woodland creation to achieve Government's short term tree planting commitment and longer term woodland expansion aspirations.

Summary

- Achieving the ambitions set out in the 25 Year Environment Plan and Clean Growth Strategy, and recently called for by Confor, will be challenging. The shift to 'net targets' accommodating woodland loss for open habitat restoration and development, raises the bar even further and requires the highest planting rates since reliable planting statistics have been collected (1970).
- Current tools and resources fall a long way short of what is required to achieve these challenging targets.
- The proposed major changes to food, farming and countryside policy and the priority across Government to support cost-effective decarbonisation and greenhouse gas removal technologies (both of which afforestation provides) represent the biggest opportunity for such a step change in planting since the drive for a timber resource following the First World War.
- Much work remains to realise these opportunities, for example in designing and securing an effective future woodland capital grant, securing funding through the impending Spending Review and establishing forestry's role in future energy policy and the bio-economy.
- The English Tree Strategy provides a unique opportunity to articulate a truly sustainable (socially, economically and environmentally) and effective afforestation strategy that delivers a rapid acceleration of planting rates that meets society's needs.

Background

Scope

2. To aid a focussed discussion on measures to accelerate woodland creation, the scope of this paper is restricted to woodland creation, with initiatives to increase urban tree cover and reduce woodland loss out of scope.

Existing commitments and ambitions

3. The 2017 Conservative Manifesto committed to '*plant another 11 million trees this Parliament*', which, for reporting purposes, is being treated as April 2017 to March 2022. A longer term aspiration to increase woodland cover from 10% (1,307,000 hectares) to 12% (1,564,000 hectares) of land area by 2060 was restated in the 25-Year Environment Plan. This would require an annual planting programme of around 7,000 ha/yr. The 2017 Clean Growth Strategy's illustrative 2032 pathway, to help meet the fifth (2028 to 2032) and later carbon budgets, included a more challenging short term planting programme of 10,000 ha/yr in England between now and 2032. Recently, the Confederation of Forest Industries (Confor) has called for planting rates across the UK to rise to 40,000 ha/yr by 2030, including 10,000 ha/yr in England.

Future Ambitions?

4. The UNFCCC's 2015 Paris Agreement set a goal to balance anthropogenic emissions and removals by sinks ('net zero emissions') in the second half of the century. This will require the adoption of Greenhouse Gas Removal Technologies (GGRs) including direct air capture (DACCS), biomass energy with carbon capture and storage (BECCS), enhanced weathered or certain geological deposits, increased use of timber in construction, soil carbon sequestration and afforestation.

5. GGRs will be required to meet the UK's 2050 domestic emissions reduction target. The UK Committee on Climate Change's central scenario requires 55 million tonnes of carbon dioxide equivalent (MtCO2e) of GGR abatement in 2050. Estimates of GGR costs in 2050 are of the order of £6 billion to £20 billion. Afforestation is considered the most advanced of the GGR technologies and is one of the few available for deployment now, in part because of the existence of the UK's Woodland Carbon Code (and other forestry-related offsetting schemes available globally) to satisfy monitoring, reporting and verification (MRV) requirements. It is also considered highly cost effective (£2-£24 per tonne CO2) although costs are likely to be significantly higher if the very ambitious and therefore challenging planting rates are to be achieved

Current Plans

6. These policy drivers have informed the primary outcome for Programme 4 (Expansion of Tree and Woodland cover) of Forest Service's Business Plan for 2019-20: '*Ensuring that England's Woodland and Tree cover expands both through enabling woodland creation and providing advice to reduce the impact of development on existing woodland and tree canopy cover. Our woodland creation*

activities will achieve Government's 11 million trees commitment by 2022 and meet the longer term ambitions stated in the 25 YEP, alongside planting one million in towns and cities by 2022 as government works with stakeholders to deliver a range of benefits close to where people live.'

Rationale for expanding woodland cover

7. A number of co-benefits are associated with woodland creation, including:
   - Wildlife habitat;
   - Water quality improvement;
   - Flood alleviation;
   - Sites for recreation;
   - Landscape enhancement;
   - Renewable energy feedstock;
   - Future timber supply
   - Rural economy (growth and employment);
   - Positive impacts on balance of trade from displaced imported wood;
   - Contribution to timber security in the long term.

   Some of these benefits (landscape, recreation and biodiversity) are included in the cost-effectiveness figures in table 1. But a number of other benefits are not: in particular the contribution to water quality and health objectives are omitted.

   Table 1: Annualised value of public goods provided by woodland

Public benefit	[1]**Annualised value (£/ha/yr)**
Landscape enhancement	£30
Biodiversity	£40
Flood water storage	£89
Water quality improvement	n/a
Air quality improvement	£85
Carbon sequestration	Up to ~£800
Recreation	£326

[1]The full value of the public good is assumed to be provided at the time of canopy closure (~20 years).

Past planting rates

8. Woodland cover in England has doubled since the beginning of the 20th century. This implies that net planting has averaged nearly 6,000 ha/yr over this period. There is also evidence that the net increase in woodland cover accounts for significant areas of deforestation, with 134,000 ha of woodland lost between 1932

and 2007 during which time 493,000 ha of woodland was planted. The area of new woodland expansion must therefore have been well in excess of 6,000 ha/yr at times during the past century; but reliable statistics, which differentiate between new planting and restocking, are only available from 1970.

9. The highest recorded annual rate of planting was in 1971, when 6,500 ha was planted. At this time, direct planting by the Forestry Commission (i.e. expansion of the nation's forests) made a significant contribution. Planting rates declined through the 1970s and averaged only 1,700 ha/yr in the 1980s. Following the introduction of the European Union Rural Development Programme funded Woodland Creation Grant and income foregone payments via the Farm Woodland Scheme and Farm Woodland Premium scheme in 1990, planting rates rose and averaged 5,100 ha/yr between 1990 and 2005. Planting rates declined followed the introduction of the English Woodland Grant Scheme in 2007, which had shorter income foregone agreements, averaging 2,600 ha/yr between 2008 and 2015. The rate of woodland creation fell further to 700 ha in 2015, following the difficult introduction of the Countryside Stewardship (CS) grant scheme, and has only increased gradually since then.

10. Historically, higher planting rates have been achieved in Scotland than in England, with 32,300 planted in 1971 and 1972. A similar pattern of decline was seen through the 1970s, although an average planting rate of 21,500 ha/yr was maintained through the 1980s. Planting rates fell further between 1990 and 2005 to an average of 10,500 ha/yr and then to 6,000 ha/yr between 2008 and 2015. As was the case in England, the first two years of the current Rural Development Programme saw planting rates dip further (to 4,700 ha/yr) although the acceleration since then has been more rapid, with 7,100 ha planted in 2017/18 and expectations that more than 10,000 were planted in 2018/19.

Recent progress

11. To date, 3.16 million trees have been planted this Parliament (from April 2017 to end December 2018), with an addition 4.5 million in signed CS, Woodland Carbon Fund (WCF) and HS2 Woodland Fund agreements ('Committed'), 1.5 million in grant agreements currently being processed ('Pipeline') and 4.8 million in Woodland Creation Planning Grant proposals and plans to expand the Public Forest Estate ('In Plan') that have not yet progressed to grant applications (see the Ministerial afforestation dashboard at Annex A). A further 1.7 million trees are associated the grant agreement for the Northern Forest kick-start funding and we would expect 0.2-0.3 million trees to be planted each year as a result of funding provided by Environment Agency, National Forest Company, Highways England and non-woodland CS tree planting options supported by Natural England.

12. We are confident that the 11 million tree commitment will be achieved but, to date, the acceleration required to meet longer term woodland expansion aspirations and objectives has not been realised.

13. A note of caution should be sounded as to the practicality of a rapid acceleration in planting rates. Prior to the current planting season, there were concerns that insufficient planting stock was available to support the upturn in planting rates (both new planting and restocking) in Scotland, a pattern that is common across much of Europe. Seed houses have also raised concerns over reserves of improved Sitka spruce seed while the variability in supply of species such as oak, exhibit 'mast years', also affects the ability of agreement holders to complete a planting programme in any given year. Furthermore, the aging contractor workforce may not be able to implement a rapid acceleration in planting, particularly if replicated across the UK, a position that could be compounded by the UK's decision to leave the European Union.

Barriers to woodland planting

14. The current barriers to achieving a rapid acceleration of planting rates include:
    a. there is no compulsion on landowners to plant and the permanent nature of land use change to woodland means that doing so is a serious decision, particularly at a time of uncertainty as the UK prepares to leave the European Union;
    b. grant schemes, even if financially attractive, take two to three years to be taken up at significant levels – as demonstrated by the current limited uptake of CS and the WCF
    c. the lack of income from year ten (when grant payments end) to the age of first thinning (assuming that the woodland is managed) makes woodland creation a financially unattractive option for many land-owners and is incompatible with the annual revenue streams of conventional farm business models.
15. Current grant schemes, although generous compared to previous capital grant schemes, are generally only successful in incentivising landowners to bring cheaper land in the uplands forward for larger scale planting. This land often has environmental and landscape constraints which is reinforcing the view that there is a presumption against planting. The process associated with CS applications is then also (perceived) as complex. These factors combine to undermine the sector's confidence to commit to much woodland creation in England.

16. There is a cultural and economic disconnect between landowners (farmers) and forestry. Most farmers believe that land is for growing food and do not appreciate the additional income stream that well-established and managed woodland can

provide. In part, this may result from the nature of most farm woodland that has been planted over the past 30 years, with little focus given to timber and wood-fuel production coupled with the drop in land value associated with planting and the loss (after 10 years) of area-based payments.

Grants and initiatives supporting woodland expansion

17. Woodland creation has been Forest Services' top priority since 2015. Actions taken aimed at accelerating woodland creation rates have included improving regulations (revised thresholds for woodland creation EIA determinations and the introduction of 'notification' in low risk areas); grants (improvements to CS and introduction of complementary new and simpler exchequer-funded grant schemes), and advice and guidance (the creation of a new dedicated Woodland Creation Unit and new Woodland Creation Planning grant).

18. The Woodland Creation Planning Grant (WCPG) was launched in 2015 and has resulted in 50 plans for large scale woodlands (more than 10 ha) being drawn up covering 3,450 ha (5.7 million trees), with an average size of 69 ha. Together with the changes to the EIA (Forestry) Regulations in 2017 and the Woodland Creation Design training events in 2018, WCPG has given the sector confidence to come forward with large scale woodland creation proposals, including significant levels of conifer (37% in CS18 applications), which will be necessary to meet woodland expansion aspirations.

19. The Countryside Stewardship Woodland Creation Grant remains the principal source of funding for tree planting in England. Proposals received during the 2018 application window were significantly higher than in the previous three years (3.95 million trees compared with 1.83 million trees in 2017). It is anticipated that proposals for funding new woodland will further accelerate with applications now being welcome all year. Although 98% of trees associated with signed agreements resulting from the CS15 application window were planted, there is some concern that there may be a lower out-turn from the CS16 window, as a result of poor weather conditions in the 2017/18 planting season and uncertainty following the UK's decision to leave the UK. This last factor is also thought to be a material factor in so far lower than expected numbers of applications to the now rolling window.

20. The Woodland Carbon Fund opened for applications in November 2016, following announcement of £19.6 million in the 2015 Spending Review. Initial take-up was slow, with one application (subsequently withdrawn) received in 2016/17 and three applications (one subsequently withdrawn) received in 2017/18, including for Doddington North Moor. In the current financial year, 11 applications have

been received (including one from Forestry England) bringing the total area of proposals proceeding to 755 hectares (1.4 million trees).

21. £50 million funding for the Woodland Carbon Guarantee (WCaG) was announced in the autumn 2018 Budget. The WCaG will provide funding over 30 years for eligible projects, as the carbon is sequestered and verified via the Woodland Carbon Code. It is anticipated that the WCaG will provide top-up funding for other grant schemes, at least initially, with the objectives of (a) accelerating planting rates by incentivising projects that would otherwise not be financially viable, and (b) strengthening the nascent domestic carbon offset market, as set out in the 2017 Clean Growth Strategy and 2018 25-Year Environment Plan. It is hoped that the scheme will open in late summer 2019. New applications after 29 October 2018 and those in progress for CS, the WCF or the HS2 Woodland Fund will be eligible to apply.

22. Phase one of the HS2 Woodland Fund provided £1 million funding for PAWS restoration and native woodland creation within the 'HS2 corridor'. The first phase was quickly oversubscribed with 50% of the funding committed to the planting of 90 ha of new woodland (139,000 trees). The second phase has recently opened, providing a further £4 million funding for the same objectives.

23. The Northern Forest is a Woodland Trust / Community Forest Trust initiative which aims to plant 50 million trees across a broad swathe of Northern England between Liverpool and Hull over the next 25 years. Defra has repurposed £5.7 million funding from the WCF to kick-start the initiative, with a facilitation group established to streamline regulatory approval and signpost landowners to the most appropriate source of funding. One of the objectives of the kick-start funding is to draw out (private-sector) partnership funding to realise green / innovative finance opportunities as set out in the 25 Year Environment Plan.

24. The Forestry Investment Zone policy was established to direct commercial investment in new productive planting towards Forestry Investment Zones by creating the conditions that will give investors the confidence they need to bring woodland large scale productive woodland creation proposals forward. The local objectives for the FIZ pilot in northeast Cumbria have been established to reflect local priorities and concerns and will seek to smooth the application & approval process for creation schemes in appropriate locations.

25. The Woodland Creation Unit (WCU) has been established to provide advice, guidance and support for larger scale woodland creation and administers the WCPG, WCF and HS2 Woodland fund. The WCU has also prepared a 'woodland creation guide' to help those wishing to plant woodland to navigate planning/design, regulatory and grant application processes. A second guide is

being prepared to support landowners considering planting woodland, setting out the reasons that they might do so, particularly the economic benefits to farm businesses, and what is practically required to establish a farm woodland successfully. FC's woodland creation activities are underpinned by the Defra-Group Woodland Creation Campaign.

26. To date, all these improvements have contributed to some acceleration in planting rates but one that remains some way short of that expected and desired. When paired with coinciding increased rates of woodland removal, for development in particular, this could mean that the net deforestation that England experienced in 2015/16 may prove to be more than the one off blip we had expected it would be. While the impact of all these improvements may continue to grow over time, it seems reasonable to conclude that the current suite of incentives, regulations and advice remain inadequate to achieve Government's aspirations, at least in the current wider context.

Options for further accelerating planting

27. Landowners identify numerous barriers to woodland creation (as earlier described). These can broadly be broken down into behavioural/cultural, administrative and financial burdens. Policy options to address each of these include:

    a. Amending regulations (Forestry Act, Felling Licence Regime, Environmental Impact Assessment [forestry] regulations) an further improving how they are delivered to make woodland creation more straightforward, certain, flexible, and possibly cheaper.
    b. Changing the tax regime associated with forestry to make woodland creation a more financially attractive option for landowners.
    c. Introducing a Greenhouse Gas trading or cap and trade scheme for agriculture and land use to increase the value of woodland creation.
    d. Reforming agricultural policy to remove perverse incentives that maintain land in agricultural use that would otherwise be better suited to forestry.
    e. Establishing an easily accessible incentives scheme that provides (adequate) annual payments for public goods alongside necessary capital payments to cover the cost of establishment.
    f. Promoting the economic and farm business benefits of farm forestry, providing an enhanced practical advice and support offer.
    g. Expanding the Nation's Forests, including through working with other public bodies with large land holdings.

Questions for the Board to consider

28. The Board is asked for its views on how the forthcoming English Tree Strategy could be used to help accelerate planting rates. The overarching question is:

    a. What would an effective policy, incentives and regulations framework for woodland creation capable of accelerating planting to meet Government's aspirations of 7,000 to 10,000 ha/yr look like?

29. Further specific questions include:
    a. How do we ensure that we remove all the barriers to accelerating woodland creation and avoid simply unblocking one only to find a critical bottleneck remains elsewhere in the system?
    b. How can farming and forestry be better integrated so that the majority of landowners see merit in woodland planting?
    c. What role should Forestry England take in woodland expansion?
    d. What actions should the FC and Defra take now to grasp the opportunities that the carbon budgets, net zero and GGR policies present, given that these policies are forward-looking over periods compatible with forestry planning horizons?
    e. How should the forestry sector and FC administered incentives and regulations embrace bioenergy and the bio-economy?

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