



Future Funding Models for Woodland Creation

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1. Introduction

On 25th November 2009 Professor Sir David Read launched a report on the potential that UK forests hold for climate change mitigation, and steps needed to ensure their successful adaptation to a changing climate in coming decades.

The Read report concludes that UK forests could make a significant and cost effective¹ contribution to mitigating climate change. The potential exists to store 36.7 MtCO₂e in wood products used in the construction of new and refurbished homes by 2019; sustainably produced woodfuel could reduce emissions by 7 million tonnes over a 5 years period through avoided emissions from fossil fuel. Appropriate planting of 23,000 hectares a year – equivalent to about 30,000 football pitches – could result in forests sequestering about 10% of the UK's GHG emissions by the 2050s. This would lift woodland cover in the UK from its current 12 per cent of the land area to 16 per cent, still well below the European average of 37 per cent.

Historically private investment in UK woodland has taken place for a range of reasons including (but not limited to) timber production, tax planning, good stewardship and the simple desire for a personal woodland retreat. In future new markets for woodland products (e.g. biomass) and services (e.g. biodiversity and carbon sequestration) may play a significant role in attracting investors to woodland creation. Equally woodland creation could appeal to a growing band of 'impact' investors looking for projects that deliver strong social and ecological benefits alongside financial returns.

A number of possibilities exist. But to what extent are these sources of funding likely to support woodland creation on the scale envisioned in the Read report? This report explores existing and emerging funding models, highlights key trends in demand for woodland product and services, and scopes out a range of measures that could be considered for catalysing future (private) funding of woodland creation in England.

¹ Compared to options in other UK sectors.

2. Approach

This study combines a desk review of the existing finance available for woodland creation with a brief analysis of future demand for woodland products and services.

Based on this research relevant existing, and possible new, approaches to funding are scoped out. The ability to increase the flow of funds requires that both funding and suitable opportunities to deploy those funds are available, and our development of models reflects this.

The models are compared using a set of key performance indicators (table 1) and the role of external stakeholder in enabling them assessed (table 2).

Figure 1: Key Performance Indicators (KPI) for Analysis of Models

KPI	Description
Simple	▪ Easily comprehended by both target investors and foresters
Flexible	▪ Fit with different types and scale of woodland creation
Scalable	▪ Potential to fund overall woodland creation target
Marketable	▪ Seen in a positive light by key stakeholders
Accessible	▪ Easily accessible to foresters
Efficient	▪ Delivers cost effective access to required funding

Figure 2: Influencing Stakeholders

Stakeholder	Influencing Role
Forestry Commission	<ul style="list-style-type: none"> ▪ Woodland management ▪ Regulation ▪ Research
Forest managers	<ul style="list-style-type: none"> ▪ Woodland management ▪ Woodland products and services
Forest resource users	<ul style="list-style-type: none"> ▪ Communities, sports groups etc ▪ Forest products companies ▪ Energy companies
Investors	<ul style="list-style-type: none"> ▪ Capital in return for share of profit or interest
NGO	<ul style="list-style-type: none"> ▪ Champion conservation ▪ Regenerate and restore woodland ▪ Independent assessment of policies and practices
Local government	<ul style="list-style-type: none"> ▪ Planning ▪ Public procurement
Central government	<ul style="list-style-type: none"> ▪ Forest and land use policy ▪ Framework for market based incentives
Financial Regulators	<ul style="list-style-type: none"> ▪ Set financial regulations in relation to forestry ▪ Monitor regulated funding activities

The analysis is also informed by insights and feedback gained at a workshop on funding models for woodland creation held in London on March 22nd 2011. The workshop, organised on behalf of Forest Commission England by Forum for the Future, was attended by 25 leading UK forest and sustainable finance sector stakeholders².

² A summary of workshop can be obtained from Pat Snowden (pat.snowdon@forestry.gsi.gov.uk)

3. Woodland Asset Base

This chapter briefly summarises existing UK woodland cover and land potentially suitable for future woodland creation.

3.1 Current woodland

At the end of March 2010 the area of woodland in the UK officially stood at 2.85m hectares; 17% of land area in Scotland, 14% in Wales, 9% in England and 6% in Northern Ireland³.

At the same time the total area of certified woodland across the UK stood at 1.29m hectares; 56% of woodland area in Scotland, 44% in Wales, 30% in England and 73% in Northern Ireland.

3.2 Woodland creation⁴

The total area of new planting in the UK in 2009-10 was 5.4k hectares; 51% in Scotland, 2% in Wales, 43% in England and 4% in Northern Ireland.

Figure 3: New Planting in the UK 2009-10

	England	Wales	Scotland	Northern Ireland	UK
New planting by forest type					
Conifers	0.0	0.0	0.5	0.0	0.5
Broadleaves	2.3	0.1	2.2	0.2	4.8
All new planting	2.3	0.1	2.7	0.2	5.4
New planting by ownership					
FC/ FS	0.0	0.0	0.7	0.0	0.7
Non-FC/ FS	2.3	0.1	2.0	0.2	4.6
All new planting	2.3	0.1	2.7	0.2	5.4

Source: Forestry Commission, Forest Service, grant schemes.

No definitive figure exists for the amount of land available for future woodland creation, although in England there could be significant potential for planting on low grade agricultural land and non-agricultural land without compromising other land-uses and environmental or planning constraints. In practice private investors report a range of 'soft' issues from landscape concerns to owner preferences that heavily restrict the amount of land readily available for commercial 'timber focused' woodland creation⁵.

³ Great Britain. Forestry Commission (2010) *First Release: Woodland Area, Planting and Restocking*

⁴ We refer here to new planting as opposed to restocking

⁵ Key conclusion from workshop to explore funding models for woodland creation organised on behalf of Forest Commission England by Forum for the Future in London on March 22nd 2011

4. Existing Funding

This chapter explores existing funding models for woodland creation in the UK and beyond.

4.1 Investor motivation

Motivation for private investment in woodland varies widely.

4.1.1 Financial returns

Commercial

A number of UK focused forestry funds invest with the aim of generating attractive risk adjusted financial returns for their investors, leveraging the favourable tax status afforded to UK forestry.

Box 1: The Role of Indices in UK Woodland Creation

The value of commercial woodlands is underpinned by its timber value; the price paid to owners for their standing timber crop, either now or at some point in the future. Properties are typically valued by a cash flow derived from projected timber sales combined with management costs, grants and other income although in reality other interests add value to a property.

The IPD Forestry Index provides an indication of long term returns based on a series of annual valuations and cash flows in private forests. In order to reflect the long-term nature of forestry investment the series is presented on a three-year annualised basis. The Index is calculated on a sample of 144 coniferous plantations of predominantly Sitka spruce in mainland Britain with a total capital value of £121.9m.

The FC Coniferous Standing Sales Price Index tracks the average price received per cubic metre of standing sales timber from Forestry Commission sales.

Source: IPD and Forest Commission

Impact

Some investors target positive social and environmental impact alongside financial returns. General interest in this 'balanced' approach to return on investment has grown rapidly in recent years, although there is little readily available data on its application to forestry.

Box 2: What is Impact Investment?

Impact investing offers an alternative to government resources and charitable donations for addressing social challenges. Increasing numbers of investors are rejecting the idea that they face a straight choice between maximum risk adjusted returns or donating for a social purpose, and are turning to impact investment ('Impact Investing: An Emerging Asset Class' 2010, JP Morgan).

Impact investors range from philanthropic foundations to commercial financial institutions and high net worth individuals, investing in different ways, across regions and business sectors, and with a range of impact objectives. Returns expectations vary dramatically: while some expect to outperform traditional investments, others expect to trade-off financial returns for social impact. Increasingly, entrants to the impact investment market believe they need not sacrifice financial return in exchange for social impact. By way of example the London-based IM Truestone Global Impact Fund offers its investors a return of 5% over US Treasury Bonds after charges and highlights (tropical) forestry as one of the areas it targets for possible investment.

Measuring and monitoring social performance are essential to track progress toward intended impact and to manage the reputational exposure, but are challenging and potentially expensive in practice. Market initiatives are in place to build third party systems to facilitate these efforts.

Source: Global Impact Investor Network

Donor

Donor funding carries no expectation of financial return; social and environmental benefits are sought in line with organisational objectives. A number of individual and business donations have supported woodland creation projects.

Box 3: Philanthropic Wood Creation – the Forest of Dennis

The largest privately planted forest in the UK is the Forest of Dennis in Warwickshire, was initiated in 2001 by philanthropist and publisher Felix Dennis who gifted the land for planting. The Forest consists primarily of native English deciduous trees and currently covers 4.5 square kilometres.

A UK registered charity (Forest of Dennis Ltd) owns and manages the forest attracting corporate sponsorship through its commercial arm (The Heart of England Forest Project). The Forest of Dennis is being expanded by approximately 300 acres per year; over the long term it could expand to covering between 80 and 200 square kilometres, potentially making it the largest deciduous forest in England.

Source: The Heart of England Forest Project

Tax benefits

Income from timber sales in the UK is free of Income and Corporation Tax and growing timber is exempt from Capital Gains Tax. After two years of ownership, commercial woodlands also qualify for 100% Business Property Relief from Inheritance Tax (see section 4.2).

Resource access

Many processors are considering vertical integration by entering the woodland market to purchase growing stock for their own future use.

Good stewardship and conservation

The primary reason that traditional landowners invest in woodland is landscape and conservation (wildlife and shelterbelt), with shooting also a key consideration; production and profit come low in the list of priorities, and provision of public recreation even lower.

Amenity

Investment by individuals and communities can be driven by a range of 'amenity' factors including visual appearance, relaxation, sport and educational experience.

4.2 Types of investor

Figure 4: Investor Types and Impacts

Investor	Description	Impact
Individual	Private individual looking for financial or other return (e.g. amenity value) from woodland	Direct or indirect influence but driven by personal wants and aspirations
UK Trusts & Charities	An entity managing assets for the benefit of other groups (be they a private or public good)	Garner trust and support across large swathes of population for common goal.
Communities	A cohesive group of interacting individuals sharing or with access to a common location (e.g. woodland)	Medium size collectives with aligned motivations and potential for replication
Corporate	A legal entity often with limited liability largely driven by financial profit.	Directed intervention motivated by supply chain or CSR considerations
Bank	An entity providing financial support to groups with capital deficits	Ability to facilitate, initiate and unlock projects through financial support
Institutional	A financial structure or mechanism of cooperation governing the behaviour of individual interests within a community	Provision of long term direction and support

Individuals

The objectives of individual investors typically determine the type of woodland they seek to invest in.

Figure 5: Woodland Investment by Individuals

Objective	Ideal Woodland	Comment
Tax free income Positive cash-flow in early years	Crop near maturity	High competition Lower long term return
Wealth protection / IHT Timber income not so significant	Young or mid-rotation woodland	Lower value timber
Tax protection with amenity Returns less important	Various	Market assessment of amenity and land value

Although tax treatment remains favourable in all cases it relies on interpretation of 'commercial woodland' as defined in legislation (but yet to be tested in the courts). Assuming it does qualify, income arising from timber sales is free of income and corporation tax, as are the grants available to assist in the maintenance and development of the plot⁶. Growth in the value of the timber is also free of capital gains tax (CGT), although increase in the value of land is not.

Qualifying woodland owned for over two year attracts 100% Business Property Relief from UK Inheritance Tax. Moreover CGT liabilities arising from sale of business assets can be 'rolled over' into further commercial woodland purchases.

Woodlands therefore need to be managed in accordance with a commercial 'Forest Management Plan' to avoid putting potential tax protections at risk. In the UK, there are a large number of small (e.g. 40 acres) amenity based woodlands that are not economically viable forestry units, for various reasons, where it might be difficult to demonstrate that commercial forestry is being carried out.

Although only 'commercial forests' receive the tax breaks, private 'non-qualifying' woods can also be attractive to individuals investors for seeking non-financial returns, such as amenity value. However private woodlands are typically offered by brokers in excess of £100-200k, putting them out of reach of smaller investors.

In recent years the UK market has seen an increase in retail forestry investment opportunities, most frequently tree planting contracts focused on tropical hardwood plantations. The projected returns offered are often several multiples higher than those seen in slower growing UK woodland

⁶ Other income from the forest, such as rents from sporting activities (e.g. hunting and fishing), is taxable.

UK Trusts and Charities

Charitable trusts have traditionally been a key source of funding for woodland creation in the UK, the most notable ones being the Woodland Trust, RSPB and the Tree Council.

The Woodland Trust is funded predominantly by public donations. The Trust aims to raise sufficient funds to cover the cost of the purchase and at least the first five years management, before proceeding with the purchase of new sites. One of its largest projects is the Heartwood Forest near St Albans which will cover approximately 347 ha. The cost of the project including the purchase of the land, surveys, planting, site infrastructure and maintenance for the first five years amounts to £8.5m⁷.

The RSPB owns and manages about 8,800 hectares of woodland on its UK nature reserves, all certified against the UK Woodland Assurance Standard⁸.

The Tree Council, a registered charity in 1978, acts as an umbrella organisation for local groups involved in the planting, care and conservation of trees throughout the United Kingdom. Tree Council corporate partners who, as a necessary part of their business, are unavoidably required to trim back or remove trees and disturb or build on green spaces, can deposit funds in a Green Credit Scheme which reinvests in planting schemes in the affected areas⁹.

Communities

Communities, rather than wealthy individuals or corporate interests, have supported woodland creation through a number of funding structures. UK legislation provides for two legal entities: Industrial and Provident Societies (IPS) and Community Interest Companies (CIC).

An Industrial and Provident Society (IPS) is a legal form open to any UK trading business or voluntary organisation not involved in investment for profit. They typically fall into two categories: co-operative ('co-op') IPS, which trade for the mutual benefit of their members, and community benefit ('ben-comm') IPS. The latter can include an 'asset lock' which legally prevents specified assets, such as woodlands, being used for unintended purposes.

Community Interest Companies (CIC) are a new type of limited company designed specifically for those wishing to operate for the benefit of the community rather than for the benefit of the owners of the company. They can be limited by shares, or by guarantee, and have a statutory "asset lock" that prevents assets and profits being distributed, except as permitted by legislation.

⁷ <http://www.woodlandtrust.org.uk>

⁸ <http://www.rspb.org.uk>

⁹ <http://www.treecouncil.org.uk>

The asset lock ensures assets and profits are retained within the CIC for community purposes, or transferred to another asset-locked organisation, such as another CIC or charity.

Box 4: Who Buys Community Shares?

Four categories of investor buy community shares:-

- Local community investors - an individual who wants to create or maintain local facilities for social return, can also include those with connections to, but no longer living in the area (e.g. investing in a community owned shop or pub);
- Community of Interest Investors - an individual who wants to create or maintain facilities they have an interest in for social return (e.g. investing in a community owned railway)
- Impact Investors - an institution or high net worth individual interested in receiving a blend of social and financial return, possibly impact investment is only a small part of a larger investment portfolio
- Ethical Investors - an individual with no obvious connection to a Society other than approving of its social aims, sometimes motivated by democratic structures and ideology, and wishing to invest as a means of receiving primarily a social return (but not foregoing financial compensation – a small amount of interest or a tax incentive)

Shareholding gives them influence, information and a sense of belonging. Community investors are either local to the Society (within 10 miles) or 50 miles away and further and there is a trend for more distant members to be investing larger sums. In general investors don't use financial advisors when they decide to buy community shares, placing a great responsibility on societies to detail risks clearly in any share offer documents. When asked what would encourage investment, investors identify making investing easier e.g. through service to match investors with projects they would be interested in.

Source: 'Who is Buying Community Shares: Key Findings' Wessex Community Assets

The potential of community forestry is perhaps best highlighted by reference to its role in continent Europe and Scandinavia. France, for example, has over 11,000 forest communes – 30% of all communes in the country – owning around 3 million hectares of forest - about 20% of the total forest area of France. The legislation governing French communal forests is based on usage rights dating back to Roman times and to the Middle Ages. These forests play a vital role in local economic development supporting small business activities, tourism and providing employment¹⁰.

¹⁰ 'French forest communes and sustainable development in mountain areas' (1998) FAO

Banks

Across Europe, agriculture and forestry businesses represent the third largest share of core SME lending (European Central Bank €4.4bn or 13pc of loans outstanding in 2010), although this figure predominantly reflects agriculture.

In the UK several banks and other institutions provide special loan schemes for woodland, e.g. to bridge a gap between early outgoings and later income, and many others may consider applications for forestry loans as part of their agricultural service.

Box 5: The Green Investment Bank and Woodland Creation

At present the operational remit of the Green Investment Bank centres around energy and transport. There is however a strong case for considering natural infrastructure – woodland and other green spaces – with the remit of the Bank, especially in urban areas where native deciduous trees provide shading during summer months, reducing the need for air conditioning, whilst allowing solar gain to buildings during the winter, reducing the need for heating.

Source: The UK low carbon transition plan – national strategy for climate and energy (2009)

Institutional investors

Institutional investors, including pension funds, insurance companies and sovereign wealth funds, tend to invest via intermediary fund managers.

The basic attributes of forest management, including the steady physical growth of trees over time, the performance of timber markets relative to domestic economies and the ability of managers to respond (or not) to prevailing market conditions, give timber focused forestry investment a number of attractive characteristics for institutional investors.

However, the asset class suffers two big draw backs – its limited scale relative to institutional investment requirement, and its lack of liquidity. Institutional investors draw comfort from liquidity – the ability to sell (or buy) assets freely and efficiently at short notice. The only market to have reached ‘critical mass’ in this regard is the US, where over 35 specialist TIMO and tREIT managers operate (see section 4.4).

At present just a handful of investment consultants offer advice on forestry to UK based institutional investors. Allocation to UK focused fund managers is believed to have been minimal, although fund managers offering exposure to forests on a global basis have fared a little better.

According to Mercer Investment Consultants just 1.2% of UK pension schemes are planning to increase their exposure to forestry globally as compared 5.2% in continental Europe¹¹.

4.4 Non-UK experience

Timber Investment Management Organisations (TIMOs)

TIMOs evolved in the US, during the 1980's and 90's, in response to institutional investor interest in timberland investments. The groundwork for TIMOs was laid in the 1970s after the US Congress passed legislation that encouraged institutional investors to diversify their portfolios.

A TIMO effectively acts as a broker to institutional clients and has primary responsibility to source, analyse and acquire investment properties that would best suit their clients. Once an investment property is chosen, the TIMO is then given the responsibility of actively managing the timberland to achieve adequate returns for the investors. A number of internationally focused TIMOs have been launched in recent years, such as DASOs capital which gained crucial backing from the European Investment Bank. Many (although not all) of these international forestry funds focus on non-traditional revenue generating opportunities, such as carbon sequestration and provision of ecosystem services, alongside traditional timber sources.

As the capital invested in forestry is increasing, the number of TIMOs worldwide has now reached about 55, with nearly two-thirds being US based. Capital and area under management varies considerably.

Timberland Real Estate Investment Trust (tREIT)

A Real Estate Investment Trust is a tax designation that enables a corporate entity investing in real estate to reduce or eliminates corporate income taxes. In return, REITs are required to distribute 90% of their income, which may be taxable, into the hands of the investors. Like other corporations, REITs can be publicly or privately held. In the US Timber REITs (tREITs) have traditionally been more accessible to the smaller investor seeking income (given the dividends received) than TIMOs that often require investors to tie up larger sums over longer periods of time.

UK legislation enabling the creation of REITs was included in the Finance Act 2006 and came into effect in January 2007. Under the legislation a UK REIT must be structured as a close-ended investment trust, domiciled in the UK and publicly listed on a stock exchange recognised by the Financial Services Authority.

¹¹ 'Mercer European Asset Allocation 2010' available at <http://www.mercer.com/articles/1376545>

Bonds and asset-backed securities

Major pulp and paper groups, amongst the largest private owners of commercial forest globally, can issue corporate bonds and asset backed securities as a cheaper alternative to borrowing from commercial banks. In general the use of bonds and asset back securities is restricted to these operators: (i) investors favour issuers with substantial collateral and track record, and (ii) high fixed costs associated with issuing bond and asset backed securities favours large scale funding requirements.

Recent deals in the US have highlighted wider potential for the use of bonds in conservation if and where favourable tax treatment is granted (see box 6 below).

Box 6: US Qualified Forest Conservation Bonds

The US Food, Conservation and Energy Act of 2008 (the 'Farm Bill') authorized the issue of \$500m in tax-credit bonds ('Qualified Forest Conservation Bonds') by state or local units of government, or 501(c)(3) organizations, for the acquisition of forest land. Instead of the issuer paying interest on the bonds, the bond holders receive a quarterly tax credit. The bonds themselves are repaid with a balloon payment from a sinking fund which the issuer is required to pay into over the life of the bond. The US Inland Revenue Service.

Qualified Forest Conservation Bonds faced significant criticism since restrictions on their issue appeared to limit their use to one transaction – the purchase of 320,000 acres of western Montana forestland by The Nature Conservancy and The Trust for Public Land from Plum Creek Timber Company for US\$510million. Montana Senator Max Baucus, who helped facilitate the deal, described it as 'the most significant land conservation project in the state's history, by far...'

Source: The Nature Conservancy and www.timbertax.org

4.5 Summary

Increasing the future flow of private funds into UK woodland creation is less about access to finance than it is access to financeable woodland creation opportunities.

Capital is available from a range of sources. Aside philanthropic and donor based funding individual 'retail' investors and impact investors could play an increased role in future. A range of systemic changes and enabling actions can be considered to catalyse the flow of funds from these sources e.g. Investor focused frameworks measuring social and environment benefit delivered by 'non-timber' woodland creation. These are outlined in Section 7.

5. Demand for UK Woodland Products and Services

This chapter outlines key long term demand side trends that look likely to influence the viability of future woodland creation in the UK. In addition it should be noted that general economic factors, such as fluctuations in exchange rates, have a powerful impact on competitive position of UK woodland over the short term.

5.1 Woody biomass

Renewable energy

Rapid expansion of biomass generating capacity could double UK demand for wood fibre over the next few years, reaching 50 million tonnes per annum in 2017.

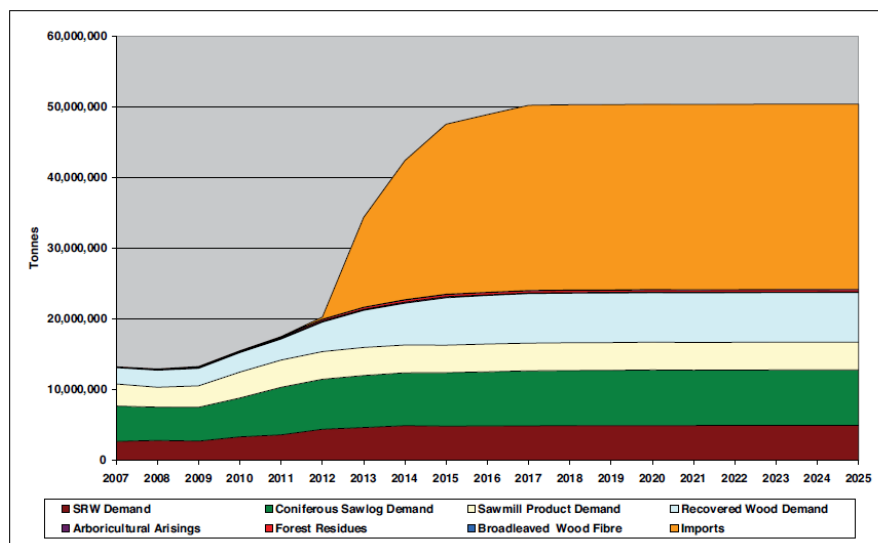


Figure 6: Potential Coniferous Small Roundwood Supply and Demand 2007 – 2025¹²

As of 2010, a total of 33 companies were operating, or had plans to operate, 63 wood energy plants and of these, of which 16 were larger scale commercial operations.

Renewable heat

The UK Renewable Energy Strategy targets 12% of heat from renewable sources such as sustainable biomass, biogas, solar and heat pumps. On 10th March 2011 the UK Government announced the details of a Renewable Heat Incentive which provides long-term financial support to renewable heat installations.

¹² 'Wood Fibre Availability and Demand in Britain 2007 to 2025' (2010) John Clegg Consulting Ltd

In the first phase, long-term tariff support will be targeted at large non-domestic sectors heat users - the industrial, business and public sector – which contribute 38% of the UK's carbon emissions. Under this phase there will also be support of around £15 million for households through the Renewable Heat Premium Payment to help with the upfront capital cost of installing renewable heating technology .

The second phase will see households moved to the same form of long-term tariff support offered to the non-domestic sector in the first phase. This transition will be timed to align with the Green Deal which is intended to be introduced in October 2012.

Boilers using solid biomass, such as wood pellets, are included in the scheme. RHI payments will be made on a quarterly basis over a 20 year period at levels calculated to bridge the financial gap between the cost of conventional and renewable heat systems. Also of note, installations of 1 MWth capacity and above are required to report quarterly on the sustainability of their biomass feedstock for combustion and where they are used to produce biogas.

Long term supply contracts

At present the relatively small and fragmented wood fibre supply chain in Britain makes it difficult for biomass energy developers to secure long term feedstock supply contracts. The existing supply chain in the UK tends to favour smaller developments, ones that can use a mix of wood fibre sources in the case of wood energy plants, or the expansion of existing plants.

Plans to increase the amount of woody biomass supplied from UK forests focus on better management of existing forests¹³. For foresters willing to expand into pellet production, investors may be willing to accept biomass supply contracts as collateral.

Existing forest owners and managers are well placed to deliver or support woodland creation in the UK. An optimised supply of biomass from existing forests could potentially unlock a significant source of funding for future woodland creation.

¹³ 'A Woodfuel Strategy for England' (2007) Forestry Commission

Box 7: The Role of Biomass Contracts in Securing Finance

Silvapower Ltd specialises in the production and supply of biomass fuel to boilers in the South Yorkshire region and is the main supplier in the area. Their focus is small scale fuel supply (i.e. not power stations) and they provide a range of services from sourcing feedstock, providing contract chipping services, storage and drying, and selling fuel by the kilowatt hour to providing training and consultancy on biomass fuel production and infrastructure.

In 2006 the company won contracts to supply biomass fuel to a number of local council's properties in Sheffield and Barnsley. The company needed to purchase a large amount of feedstock in order to meet these orders. Collateral offered by council contracts enabled the Silvapower to raise the necessary working capital from South Yorkshire Investment Fund. The biomass was sourced from the National Trust, the RSPB and the Peak District National Park, providing each of these organisations with additional income. The project won Barnsley Council a 1st prize in the Ashden Awards for Sustainable Energy in 2006.

Source: Barnsley Metropolitan Borough Council

5.2 Carbon sequestration

Increased woodland creation could sequester and retain large amounts of carbon. Potential is significant; a 40 year planting programme of 23,000 ha per year has the potential to deliver annual abatement equivalent to 10% of emissions in the 2050s¹⁴.

Box 8: The Woodland Carbon Code

The Woodland Carbon Code is a voluntary standard for UK woodland creation projects currently being developed by the Forestry Commission and stakeholders in the private and voluntary sectors. It incorporates core principles of good carbon management including additionality, permanence, carbon measurement and leakage. The Code encourages a consistent approach to woodland carbon projects, providing stakeholders with assurance that woodland projects:-

- Are responsibly and sustainably managed under the UK Forestry Standard;
- Can provide reliable estimates of carbon that will be sequestered;
- Are publicly registered and independently verified;
- Meet transparent criteria and standards to ensure real carbon benefits

Source: Forestry Commission

¹⁴ 'Combating climate change – a role for UK forests: An assessment of the potential of the UK's trees and woodlands to mitigate and adapt to climate change' (2009) Read, D.J., Freer-Smith, P.H., Morison, J.I.L, Hanley, N., West, C.C. and Snowdon, P. (eds). The Stationary Office, Edinburgh.

To date the only developed world country to have integrated forestry into a Kyoto compliant regulated carbon market is New Zealand. The recently created Emission Trading Scheme (NZ ETS) allows for landowners to generate forestry credits under Article 3.3 of the Kyoto Protocol, including domestic avoided deforestation projects. Credits generated in NZ can be converted into internationally tradable Assigned Amount Units (AAUs).

Globally the majority of forest carbon offsets are traded in voluntary markets – the US especially has seen strong growth (see box below). Although interest in UK generated forest carbon benefit has increased steadily in recent years the UK has determined that woodland creation cannot generate an offsets per se as this would conflict with national carbon accounting rules under the Kyoto Protocol.

Box 9: Catalysing Forest Carbon through Partnerships – Experience from US

The US is not a signatory to the Kyoto Protocol and forestry carbon offsets feature in both voluntary and emerging state level compliance markets. However lack of familiarity and high upfront cost remain significant barriers to entry for prospective suppliers. The Forest Stewardship Council (FSC) faces similar challenges in encouraging certification amongst forest owners.

Leading US environmental NGO, The Nature Conservancy (TNC), partnership with carbon project develop and broker Blue Source LLC, has launched a programme called Working Woodlands to directly address both of these challenges. The programme uses an innovative combination of working forest conservation easements, FSC forest management certification and forest carbon payments to make conservation more attractive and relevant for private landowners.

In April 2011 the City of Bethlehem in Pennsylvania became the first land owner to enrol in the scheme, protecting 22,000 acres of watershed properties that provide drinking water to the City and surrounding properties, and simultaneously securing wildlife, recreation and a supply of certified sustainable timber for the local forest products industry.

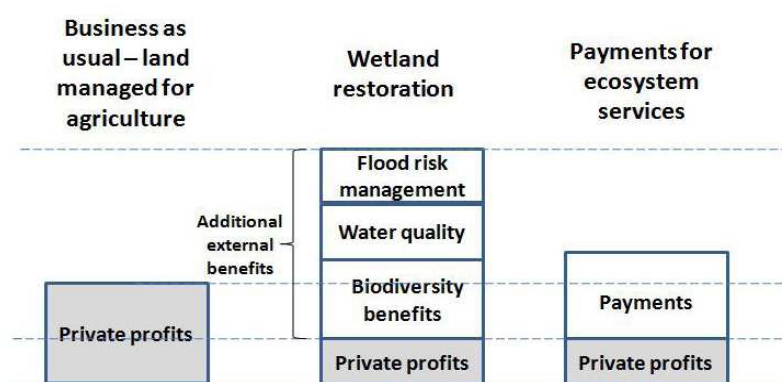
Source: www.nature.org

Woodland creation in the UK remains an effective and attractive action for individuals and groups interested in taking action on climate change ‘beyond offsetting’. The Woodland Carbon Code, currently being developed by Forestry Commission and stakeholders in the private and voluntary sector, will provide investors with independent assurance on the quality and credibility of UK woodland creation-based climate change mitigation projects.

Future demand for non-offset based climate mitigation is difficult to predict. One area of opportunity would appear to be the role that woodland creation might play as an 'Allowable Solution'¹⁵ under zero carbon standards applied to buildings.

5.3 Ecosystem services

Ecosystem services are the benefits mankind derives from ecosystems, covering everything from access to freshwater to climate regulation and enjoyment of a view. Payments for Ecosystem Services (PES) alter economic incentives for land managers or others who can affect delivery of such services.



Source: DEFRA

Figure 7: Economic Benefits via PES

Initiatives such as The Economics of Ecosystems and Biodiversity (TEEB) have boosted understanding and awareness of economic benefits that ecosystems and biodiversity deliver and the economic case for investment in natural capital.

PES is being actively considered as a means of addressing these market failures in the UK. The National Ecosystem Assessment (NEA), expected spring 2011, will provide the first comprehensive analysis of the UK's natural environment in terms of the benefits it provides to society and continuing economic prosperity.

Already a number of PES schemes are financed voluntarily by private companies and individuals. The development of private PES has been supported by the emergence of valuation frameworks, such as the World Business Council for Sustainable Development Guide to Corporate Ecosystem Valuation.

¹⁵ Allowable Solutions refer to a range of additional, mostly off site solutions made available to developers as ways to meet the zero carbon standard

Box 10: WBSCD Guide to Corporate Ecosystem Valuation

Over time it is expected that ecosystem valuation will be more consistently incorporated into public policies, regulations, and political decisions, and increasingly considered by the finance sector and business-to-business customers as they assess the ecosystem-related risks and opportunities of investments and supply chains.

In April 2011 the World Business Council for Sustainable Development (WBSCD) will release the Guide to Corporate Ecosystem Valuation (CEV), which has been developed over an 18-month process of collaboration amongst member organisations including Lafarge, Rio Tinto and Veolia to provide a framework for improving corporate decision making through valuing ecosystem services, and a set of resources to navigate through jargon and techniques.

Source: WBSCD

To date the best examples of voluntary PES in the UK relate to downstream water users paying for watershed management on upstream land.

Box 10: The Sustainable Catchment Management Project (SCaMP)

United Utilities (UU) owns over 500 square kilometres in northwest England, including nationally significant habitats for animals and plants, with around 30% designated as Sites of Special Scientific Interest (SSSI). SCaMP addresses land management issues that negatively affects both wildlife and water quality. In the next ten years, water treatment facilities for UU need upgrading; improved water quality at reservoirs may make this process cheaper. When setting up the project in 2004, the economic benefits to UU in terms of water colour were estimated at between £1.21 million and £2.42 million a year.

To date SCaMP has resulted in the planting of over half a million deciduous trees on stream sides and steep cloughs – the next phase of the project, SCaMP 2, plans to plant over one million trees across nearly 600 hectares in the West Pennines and Lake District catchments. Funding has been sourced from UU and various agricultural-environment schemes.

Source: RSPB

Private PES schemes are often catalysed by the presence of a single financially strong ecosystem service beneficiary – in the case of SCaMP this was United Utilities. In the absence of such a group however a range of methodologies exist for valuing healthy ecosystem in terms of the benefits they deliver to the public at large.

A recent study analysing the social, economic and environmental contribution to public benefit of forests management by Forest Commission England¹⁶ focused on five key attributes:-

Attribute	Indicator
Forest/woodland ecology	Broadleaved/Mixed Coniferous Open habitat
Proximity to users	Urban community Peri-urban Rural
Management	Low intensity management Managed primarily for timber Managed for multiple objectives
Access	No public access Access encouraged with low level of facilities Access encouraged with high level of facilities
Biodiversity	BAP priority habitat Not BAP priority habitat

Figure 8: Social, Economic and Environmental Attributes of UK Public Forest Estate

For each possible combination of these characteristics the study calculated estimates of management cost on a per hectare basis. Benefits per hectare are estimated for five key services:-

Service category	Valuation
Timber / woodfuel	Market price
Greenhouse gas regulation	Official government values
Recreation	A review of values from travel cost and stated preference studies
Aesthetic values	Visual impact based on previous studies using hedonic or stated preference methods
Biodiversity	Approximation based on literature values - different forest types are clearly linked to defined biodiversity outcomes

Figure 9: Valuation of Social, Economic and Environmental Attributes

¹⁶ 'The Economic Contribution of the Public Forest Estate in England' (2010) EFTEC Ltd

5.4 Summary

Demand for renewable energy and heat, driven by regulation that is either in place, or being put in place, will create a major additional opportunity for timber focused (i.e. larger scale) woodland creation in England. The extent to which this potential can be realised depends on access to planting opportunities, the national biomass supply chain, regulatory environment and global competition.

Although demand for carbon and ecosystem services could also open up investment in woodland creation the ability to leverage significant funds depends on the emergence of stronger demand for the services in question. Lack of demand could impact smaller scale woodland creation more than it does larger scale projects – commercial timber production becomes an economic option on plots of 50 hectare and over.

Opportunities related to carbon and ecosystem service need to be proactively sold if they are to have an impact especially at smaller scale; not only are these new markets unfamiliar to landowners, smaller scale woodland creation is rarely viewed as a commercial undertaking in the first place.

Whilst market based incentives are key, framing the social and economic benefits the woodland creation could also improve access to 'impact investors' – an emerging group who specifically set out to achieve positive social returns through their investments.

7. Models

This chapter scopes out a range of suggestions for catalysing the flow of private funds into UK woodland creation. Each addresses one or more of the potential limitations to funding woodland creation identified during the course of the research.

7.1 Simplify financial regulations for community interest companies

Barrier: FSA requirements currently extend to funds being raised for community projects, creating a major burden and disincentive for investors. Regulations around social funding operate as either “full on” (very demanding and geared to sophisticated investors) or as “charitable donations”. Investment vehicles built on IPS and CIC structures are caught in between.

Suggestion: Create exemptions from the Financial Promotions Market Order (FPMO) for community and social investors i.e. relax existing restrictions

Rationale: Community groups could play a key role in smaller scale woodland creation. Simplifying regulations around fund raising around IPS and CIC would make it easier for these groups to attract funding.

7.2 Introduce a ‘social’ Enterprise Investment Schemes (EIS)

Barrier: Existing tax incentive schemes such as the EIS are closed to forestry.

Suggestion: Extend EIS relief to non-qualifying investments such as forestry via a Social EIS, possibly linked to a distinct legal form (e.g. CIC),

Rationale: Individual investors are familiar with forestry as a tax mitigation strategy. This would enhance the relative attractiveness of community forestry.

7.3 Widen scope of existing community interest tax reliefs to include forestry

Barrier: Community Interest Tax Relief (CITR) does not extend to woodland creation.

CITR is a tax relief available to individuals and corporate bodies investing in CITR accredited institutions called Community Development Finance Institutions (CDFI). The scheme is little known and currently very narrowly prescribed – it does not extend to activities such as forestry. CDFI provide finance to qualifying profit-distributing enterprises, social enterprises or community projects in disadvantaged communities that are excluded from mainstream sources of finance.

Suggestion: Amend CITR legislation to include forestry

Rationale: This would enhance the attractiveness of community forestry for both private and corporate investors.

7.4 Showcase new forestry ownership and business models

Barrier: Insufficient investor awareness of different forestry ownership models

Suggestion: Create an online resource and support service enabling prospective foresters and investors to explore different woodland creation ownership models. The service could be delivered in partnership with a charity focused law firm, such as Bates Wells Braithwaite. The law firm would develop a set of legal templates for community forests - tax-optimised ownership models that support community woodland creation based on existing tax legislation, minimise tax burden and maximise social return¹⁷. FC could provide frontline engagement with prospective foresters; partner law firm would provide ongoing legal advice needed to successfully establish woodland enterprise.

Rationale: Clarification of investment options and models by an independent source will improve transparency, enhance confidence and ensure investors target models that meet their objectives.

7.5 Woodland creation franchise package

Barrier: Many groups and individuals that might consider embarking on woodland creation lack the experience, the skill set, and support and confidence required to embark on and run successful projects. Lack of investible projects is reported as a barrier to increased investment in forestry elsewhere in the world.

Suggestion: Launch a woodland management franchise package providing all round support from a single authoritative source. The package would include technical and business support, access to legal advisers, suppliers, woodland product and service buyers such as B&Q and financiers such as Coop Bank. The package would broaden active participation in woodland across the UK – including improved management of existing woodland as well as woodland creation. In addition to the high sustainability attributes that woodland enterprise can offer, the generation of a ‘pipeline’ of investment opportunities in a standard format simplifies process and reduces cost for prospective investors and lenders.

Rationale: A woodland creation franchise could make the sector more appealing to investors; standardized investment or lending opportunities reduce origination and due diligence costs.

¹⁷ By way of example, charities have a fiscal advantage in that they enjoy an 80% mandatory rate relief whereas community interest companies do not qualify for tax breaks or rate relief. The Charities Commission is presently renewing its guidance for charities relating to “mixed return” investments.

7.6 Community woodland share exchange

Barrier: Unless they live locally potential investors in community woodland may find it difficult to identify prospective investments¹⁸. Once invested their ability to exit is also likely to be limited. Communities interested in woodland creation often lack skill set and experience, yet this may exist elsewhere in the country.

Suggestion: A community woodland exchange linking (a) investors and foresters and (b) foresters and foresters. The exchange would be a web-based and operate on a 'matched bargain' basis i.e. it would hold a list of people interested in buying or selling shares, and match then accordingly. Woodland businesses would agree a formula for pricing shares with the exchange prior to listing. The FC would act as a liquidity provider, stepping in to buy or sell shares after a period of time if no counterparty emerges to complete a trade. Each business would have its own 'home page' on the exchange, providing key details and background; businesses would be encouraged to share ideas and experiences via a bulletin board or chat room.

Rationale: Improved access to community forestry investments for larger investors increases the likelihood of investment. Better communication between community forestry groups increases the number of successful enterprises likely to develop.

7.7 Woodland creation 'impact' rating

Barrier: Impact investors focus on generating measurable improvements in environmental and social performance alongside financial returns. A variety of approaches exist to validating sustainability in UK forests but no clarity exists on which (if any) of these provide a useful indicator for impact investors.

Suggestion: Launch an authoritative 'impact' rating for woodland creation, providing impact investors with a way of measuring social and environmental returns related to woodland investment. The rating would be validated by a multi-stakeholder process including forestry, economic, science and community experts – metrics that could inform the rating include potential or target levels of biodiversity, or level of use by local communities etc. Once established an independent service could be set up to provide rating on an ongoing basis.

Rationale: The introduction of a woodland creation impact rating could catalyse a flow of finance from an alternative investment sector estimated to be worth [\$]

¹⁸ People don't tend to use financial advisors when they decide to buy community shares so Societies have a great deal of responsibility to clearly detail risks.

7.8 Demand for UK forest carbon 'units' via the planning system

Barrier: Carbon markets are a key incentive for climate change mitigation. UK woodland creation offers cost effective mitigation of climate change, but does not generate carbon offsets, which restricts its appeal to carbon focused investors.

Suggestion: Proactively market UK woodland creation as a valuable 'beyond-offset' contribution to UK climate change mitigation and create a new brand to capture this e.g. 'forest carbon unit'. To create demand local authorities planning legislation should require infrastructure developers to purchase a fixed % of emissions generated to the point of completion (embedded emissions¹⁹) as forest carbon units.

Rationale: Creating an additional source of demand for 'non-offset' carbon units increases the appeal of woodland creation to carbon investors. Applying the proposed system nationwide would overcome concerns amongst local authorities that developers may locate elsewhere. Setting the requirement pro-rata to emissions ensures incentive to minimise embedded emissions is maintained.

7.9 Woodland creation land fund

Barrier: Investment in woodland creation for timber production is constrained by access to land, not access to capital.

Suggestion: Seed a woodland creation land fund to acquire land and secure permissions for planting. The fund would bring key together representatives of different stakeholders with the aim of identifying, leasing or buying land in order to gain permission for large scale woodland creation. Land would then be sub-leased, leased or sold to forest funds for woodland creation. Capital for the fund would be raised from private sources.

Rationale: Forestry Commission is the largest land owner in the country; leverage this position, experience and contact network to proactively identify and secure large areas of land suitable for woodland creation.

7.10 Community forest catalyst fund

Barrier: Local authorities control the planning process, and are major land owners in their own right. They could play a powerful role in catalysing private woodland creation, but few have the resource needed to realise this potential.

¹⁹ Net emissions generated in building the infrastructure e.g. on site emissions, emissions unaccounted for in production and distribution of construction materials and components etc

Suggestion: Seed a Community Forest Catalyst Fund linking local authorities with private investors interested in woodland creation in and around urban areas. The fund would champion community forestry amongst local authorities, and identify and develop opportunities that leveraging significant private investment in suitable urban and community woodland creation opportunities through local authority intervention to e.g. provision of senior or mezzanine debt, long term purchase contracts for woody biomass and forest carbon units or fast track planning. The fund would be advised by leading proponents of forest finance, community forestry, green infrastructure and planning.

Rationale: Leading examples of community forestry e.g. Mersey Forest and National Forest demonstrate powerful social and economic returns. Local authorities benefit not just from green space but also, in future, access to woody biomass for energy. Local authorities are able to access capital at 1% over the rate paid by central government. If carefully deployed local authority funds could play a powerful role in leveraging private investment in community woodland creation – co-financing with a local authority would also support the planning process – providing comfort to private investors.

7.11 Woodland creation Real Estate Investment Trust (REIT)

Barrier: Institutional investors could fund UK woodland creation but struggle with the relatively small scale of the financing opportunity.

Suggestion: A REIT that co-invests in sustainable infrastructure (zero carbon buildings etc) and woodland creation. The REIT would be launched by a leading institutional investor with FC as an adviser.

Rationale: Institutional investors could be attracted to woodland creation by packaging the opportunity with other asset classes in a more familiar format. The REIT is tax efficient investment vehicle, popular in the US but relatively new to the UK.

8. Analysis

8.1 Analysis of Background

Drivers and barriers for investment in woodland creation drawn from research:-

- Private woodland in England is overwhelmingly small scale 75% < 2ha
- Woodland creation possible on poor quality or non-agricultural land
- Range of investors and motivations for woodland creation
- Tax treatment key to value proposition for 'money' investors
- Institutional investors active globally through TIMO and tREIT
- Demand for woody biomass quickly outstripping UK supply
- Material demand for carbon and ecosystem services driven by regulation
- Public forest estate delivers excellent social and environmental 'returns'
- Principal challenges to large scale woodland creation appear non-financial
- Planning = Lack of joined up 'holistic' decision making
- Regulations = Lack of clarity on demand for carbon and ecosystem services
- Climate change = prospect of new diseases – drought - flood

8.2 Analysis of Models

Suggestions are grouped into four categories for analysis:-

Regulatory improvements

- Simplify financial regulations for community interest companies
- Introduce a 'Social' Enterprise Investment Schemes
- Widen scope of existing community interest tax reliefs to include forestry

Government and financial regulators could improve flow of funding to community woodland; many of these make sense beyond forestry.

Each of these suggestions is relatively simple conceptually. Scalability is limited since they solely benefit community and socially orientated woodland. Measures seem to be in keeping with Big Society philosophy – theoretically a plus point in marketing. Changes in financial regulations appear the most cost effective – difficult to gauge tax based proposals on anything more than an intuitive basis.

Unclear how amenable the UK government might be - one question could be economic 'efficiency' of smaller community woodland creation in meeting the 23,000 ha afforestation target relative to alternatives.

Enabling mechanisms

- Showcase new forestry ownership and business models
- Woodland creation franchise package
- Community forestry share exchange
- Woodland creation 'impact' rating

Showcasing emerging forestry ownership and business models is a simple and flexible tool for engaging prospective woodland entrepreneurs and investors. Scalability of such a service maybe limited since (by definition) it targets a subset of potential investors – farmers, community woodland start-ups, financial advisers and local authorities unfamiliar with opportunity. A web-based service could be backed up by qualified advisors and incorporate an online exchange for sharing experiences and ideas.

Woodland creation franchise package would also have simplicity and flexibility as key design aspirations. Scalability is probably limited, but a well designed franchise package could provide additional support and confidence to would-be foresters, enabling woodland creation to properly 'take root' where it otherwise might not! A template

A community woodland share exchange appears feasible. Matched bargain exchanges already exist for socially orientated businesses, and a fully fledged social stock market is under development. The model is limited to community woodlands, although amongst these groups it should prove highly marketable. Efficiency would depend on cost and resources needed to establish the market; trading volumes and subsequent potential to generate income from transactions, would likely be quite low.

A woodland creation 'impact' rating would have simplicity and flexibility as key design aspirations. Such a rating could also draw on the Woodland Carbon Code. Accessibility would depend on manner in which subsequent rating service is provided. Efficiency would depend on credibility amongst target investors, and delivery cost – data gathering would likely be a significant overhead. Consideration of data should be starting point in assessing this option.

Market-based incentives

- Generate demand for UK forest carbon 'units' via the planning system

Government and local authorities could establish a mechanism that generates funds to pay for UK forest carbon 'units', such as a local levy on the carbon emissions embedded in large infrastructure developments, perhaps assigning woodland creation as an 'Allowable Solution' within the context of the zero carbon building initiative.

Recent rapid growth in activity around community energy projects is largely attributed to introduction of Feed-In Tariffs. A system of payment for carbon sequestration in woodland creation could generate similar interest.

The suggestion offers a simple alternative to the system of offsetting – at present some confusion exists on the validity of UK forest carbon for offset purposes; the basic value proposition needs rebranding. Payments could be made across a range of forest types. Scalability and accessibility would depend on scheme design; scalability would also be influenced by political will and rate of infrastructure development. Efficiency would depend on factors such as sequestration rates and transaction costs.

Funding mechanisms

- Woodland creation land fund

The model is conceptually simple but geared to larger 'timber-focused' woodland creation – operational flexibility would be needed to successfully navigate challenges associated with gaining planning permission. The model is limited in scope rather than scale. Marketability is uncertain - may be difficult to avoid being seen as 'pro-industry' rather than 'pro-woodland'. Geared to larger groups, but if successful has potential to be highly efficient.

- Community forest catalyst fund

The concept is relatively simple, although it primarily proposes a system for identifying funding opportunities and linking investors, and hence is not a source of funding in its own right. Operational remit and good design should assure flexibility and accessibility. It does offer scalability – opportunities for woodland creation in and around cities vary widely. It should be marketable - the initiative seeks to deliver win-win solutions for stakeholders. Potential efficiency is high, but further work needed to gauge this.

- Woodland real estate investment trust (REIT)

Although conceptually simple – many REIT exist around the world - establishing and formalising the connection between infrastructure and woodland may be complex. REIT legislation has existed in the UK for several years - although few have yet been launched interest is high – several low carbon property funds have been launched, demonstrating potential marketability. Accessibility and efficiency would depend on link between infrastructure developers and woodland projects.

8.3 Summary

Comparison of Models

	1 Simplify financial regulations	2 Social Enterprise Investment Schemes	3 Showcase woodland models	4 Widenscope of existing CTR	5 Community woodland share exchange	6 Demand for forest carbon via planning	7 Woodland impact rating	8 Woodland creation franchise	1 Woodland creation land fund	2 Community wood and catalyst fund	4 Woodland REIT
Simple	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■
Flexible	■	■■■■	■■■■	■	■	■■■■	■■■■	■■■■	■	■	■
Scalable	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■
Marketable	■■■■	■■■■	■■■■	■■■	■■■■	■■■■	■■■■	■■■■	■■■	■■■	■■■
Accessible	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■■	■■■	■■■	■■■
Efficient	■■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■

Figure 10: Comparison of Models against Key Performance Indicators

Relative Influence of Stakeholders

Relevance of options to key investor groups...		NGO	Philanthropy	Individual	Corp. CR	Corp. Supply	Fund	Bank	Institutional
Systemic	1 Simplify financial regulations	x	x	x					
	2 Social Enterprise Investment Schemes								
	3 Showcase woodland models	x	x		x	x		x	
	4 Widenscope of existing CTR	x	x	x					
	5 Community woodland share exchange		x	x	x				
	6 Demand for forest carbon via planning		x	x	x		x	x	
	7 Woodland impact rating	x	x		x		x		x
	8 Woodland creation franchise	x		x					
Mech.	1 Woodland creation land fund			x		x	x		x
	2 Community woodland catalyst fund	x	x	x	x	x	x	x	x
	3 Woodland REIT						x		x

Figure 11: Relative Influence of Stakeholders on Models

Relevance of Models to Investors

Relevance of options to key stakeholder groups..		Forest Com.	NGO	Local Auth.	Central Gov.	Forest Users	Forest Mngrs	Investors	Fin. Reg.
Systemic	1 Simplify financial regulations				X				X
	2 Social Enterprise Investment Schemes		X		X			X	
	3 Showcase woodland models	X	X	X		X	X	X	
	4 Widen scope of existing CTR				X			X	
	5 Community wood and share exchange	X		X			X	X	
	6 Demand for forest carbon via planning	X		X	X	X	X		
	7 Woodland impact rating	X	X			X	X	X	
	8 Woodland creation franchise	X	X				X	X	
Mech.	1 Woodland creation land fund	X	X	X			X	X	
	2 Community wood and catalyst fund	X	X	X	X		X	X	
	3 Woodland REIT		X			X	X	X	

Figure 12: Relevance of Models to Different Investor Groups

9. Recommendations

This report makes the following recommendations:-

i. Improve access to land for large scale 'timber-focused' woodland creation

This is likely to offer the quickest and most economically attractive route for new woodland creation.

Further options for achieving this should be scoped out and feasibility studies undertaken in conjunction with relevant stakeholders. Success here will increase the flow of capital into woodland creation from wealthy individuals and those with self invested pensions.

ii. Develop broader engagement in 'non-timber' woodland creation

Broadening engagement in smaller scale and community forestry offers incremental growth in woodland creation, and is less attractive economically (based on timber benefits alone) but has important co-benefits e.g. gaining support for a drive towards greater woodland creation (thus potentially making the planning process easier for larger schemes).

Existing woodland creation advisory and outreach packages should link small producers to major buyers. Success here will increase the flow self-investment, community investment, impact investment, and corporate responsibility based investment.

iii. Catalyse demand for non-timber woodland products and services

Improving economic incentives will encourage self- and community investment into smaller scale woodland creation (and management of existing forests).

Efforts to develop new ecosystem service markets should be intensified and commercial demand for woodland products (e.g. charcoal) leveraged to support access to finance.

iv. Develop an investor-focused framework for social and environmental impact

Developing an investor-focused framework for monitoring the economic and social performance of woodland creation could catalyse impact investment in smaller scale and community woodlands, reducing reliance on demand side measures outlined in 8.3 above.

A review of available social and economic data, and data gathering techniques, together with an assessment of requirements amongst emerging impact investors should be undertaken.

v. Catalyse local authority engagement in, and support for, woodland creation

Local authorities should fast track access to land for planting, provide stable long term demand for sustainable biomass (and potentially ecosystem services) and use public funds to leverage private investment in woodland creation. A fund should be established to channel stakeholder interest, and to identify, explore and catalyse development.

A review of potential should be undertaken based on case studies of existing woodland in and around leading cities.

Glossary

Asset: A resource with economic value that an individual, corporation or country owns or controls with the expectation that it will provide future benefit

Asset Class: A group of securities that exhibit similar characteristics, behave similarly in the marketplace, and are subject to the same laws and regulations

Asset Back Securities: a security whose value and income payments are derived from and collateralized by a specified pool of underlying assets.

Bond: A form of loan. A legal agreement between the issuer and the purchaser which usually states the amount of interest to be paid on set dates on the loan and when the loan will be repaid in full.

Community Interest Companies (CICS): Limited companies, with special additional features, created for use by people who want to conduct a business or other activity for community benefit, and not purely for private advantage.

Collateral: Properties or assets that are offered to secure a loan or other credit. Collateral becomes subject to seizure on default.

Counterparty: The other party that participates in a financial transaction.

Community Investment Tax Relief (CITR): A scheme that encourages investment in disadvantaged communities by giving tax relief to investors who back businesses and other enterprises in less advantaged areas.

(Senior) Debt: A bond or other form of debt that takes priority over other debt securities sold by the issuer.

(Mezzanine) Debt: A form of debt that gives the lender the rights to convert to an ownership or equity interest in the company if the loan is not paid back in time and in full.

(Junior) Debt: A form of debt that is either unsecured or has a lower priority than of other debt claims on the same asset or property

Equity: A share or any other security representing an ownership interest

Liquidity: The degree to which an asset or security can be bought or sold in the market without affecting its price. Liquidity is characterized by a high level of trading activity. Assets that can be easily bought or sold, are known as liquid assets.

Matched Bargain Market: An order driven market in which offers to buy and sell securities are directly matched, as opposed to a market maker driven system, where investors buy and sell to market makers.

Impact Investment: Investments which aim to solve social or environmental challenges while generating financial profit - impact investors actively seek to place capital in businesses and funds that can harness the positive power of enterprise

Industrial Provident Society: An Industrial and Provident Society (IPS) is a legal form open to any UK trading business or voluntary organisation not involved in investment for profit.

Institutional Investors: A non-bank person or organization that trades securities in large enough share quantities or cash amounts that they qualify for preferential treatment and lower commissions. Institutional investors include pension funds, insurance companies and sovereign wealth funds.

Retail Investors: Individuals who buy and sell securities on their own account

Real Estate Investment Trust (REIT): A security that trades like a share on the major exchanges and invests in real estate directly, either through properties or mortgages. REITs receive special tax considerations (and are therefore subject to national legislation) and typically offer investors high yields, as well as a highly liquid method of investing in real estate.

Risk Adjusted Returns: A concept that refines an investment's return by measuring how much risk is involved in producing that return, which is generally expressed as a number or rating.

Sovereign Wealth Funds: Pools of money derived from a country's reserves, which are set aside for investment purposes that will benefit the country's economy and citizens. The funding comes from central bank reserves that accumulate as a result of budget and trade surpluses, and even from revenue generated from the exports of natural resources. The estimated value of all such fund is estimated at \$2.5 trillion.

Timber Investment Management Organisation (TIMO): A management group that aids institutional investors in managing their timberland investments. A TIMO acts as a broker for institutional clients and once an investment property is chosen, manages it to achieve adequate returns for the investors.