

Research Briefing
**Woodland creation in
European countries**

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National Assembly for Wales
Research Service

The National Assembly for Wales is the democratically elected body that represents the interests of Wales and its people, makes laws for Wales, agrees Welsh taxes and holds the Welsh Government to account.

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Research Briefing

Woodland creation in European countries

Woodland cover in Europe ranges from 1% in Malta to 75% in Finland, with an average of 44% (or 37% within the EU). This briefing provides information on woodland creation policies in European countries with low woodland cover, focusing in particular on the UK and near neighbour countries.



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1. Woodland creation in the UK

UK forestry policy is devolved – this means that Wales, England, Scotland and Northern Ireland are able to set their own aims and objectives for woodland creation and management, and to fund this independently of the other UK nations. In Wales, forestry policy is set by the Welsh Government, and in England it is the responsibility of the Department for Environment, Food and Rural Affairs (Defra). Policy in Scotland is set through Forestry Commission Scotland on behalf of the Scottish Government. In Northern Ireland, this role is performed by the Forest Service, an agency of the Department of Agriculture, Environment and Rural Affairs.

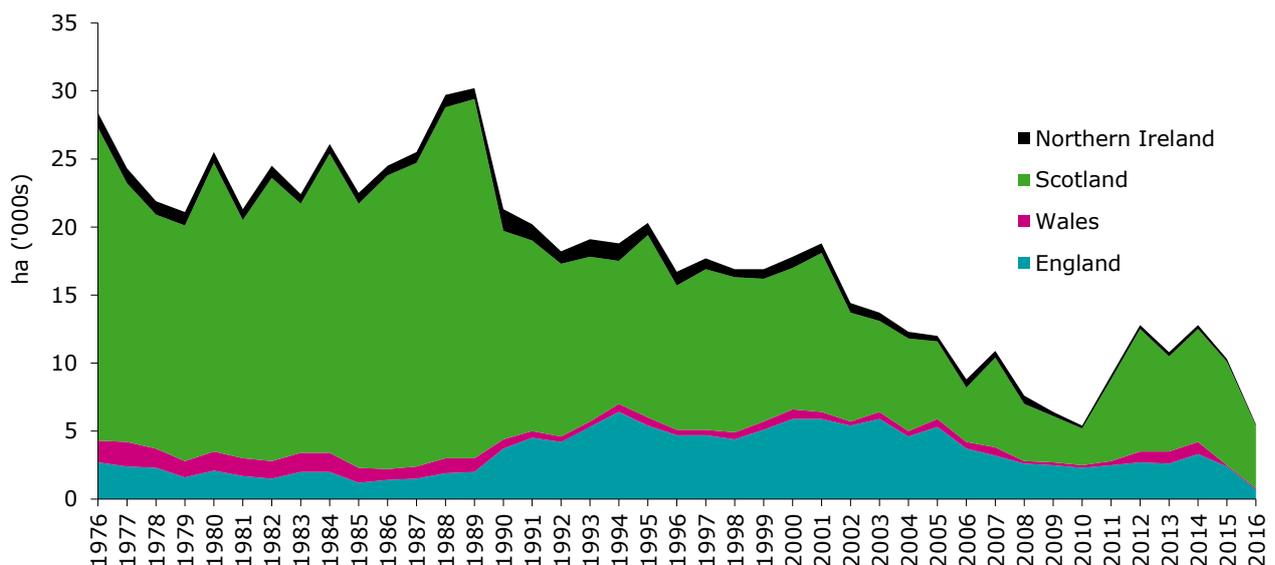
A recent [Forestry Commission report](#) states that:

The area of woodland in the UK at 31 March 2016 is estimated to be 3.16 million ha. This represents 13% of the total land area in the UK: 10% in England, 15% in Wales, 18% in Scotland and 8% in Northern Ireland.

The report shows that woodland area has risen by around 240,000 ha since 1998, an increase of 8% over the period. However it also states that new planting rates actually decreased by 82% between 1988-89 and 2009-10 due to unfavourable changes to the tax benefits from owning forestry in the UK, introduced in the *Finance Act 1988*.

Planting levels picked up again after 2010, with the area of new planting in the UK in 2014-15 around double that reported for 2009-10. As shown in the chart below, this increase was largely attributable to Scotland, which the report states is down to the country's introduction of Rural Development Contracts (see below). New planting in the UK decreased to a new low in 2015-16, at just 5,500 ha, which the report suggests "is likely to have been influenced by recent changes in grant schemes across the UK."

Area of new woodland planting by country, 1976 to 2016



Source: Forestry Commission, June 2016

Recent [Forestry Commission statistics](#) show that only Scotland continues to plant conifers in significant numbers, while broadleaf planting has declined rapidly across the UK since 2013-14.

Area of new conifer and broadleaved planting by country, 2011 to 2016

Nation	Planting type	ha ('000s)				
		2011-12	2012-13	2013-14	2014-15	2015-16
England	Conifers	0	0	0	0.1	0
	Broadleaves	2.7	2.6	3.3	2.3	0.7
Wales	Conifers	0.1	0.1	0.1	0	0
	Broadleaves	0.6	0.8	0.8	0.1	0.1
Scotland	Conifers	3.3	1.7	2	2.5	1.9
	Broadleaves	5.7	5.3	6.3	5.1	2.7
N. Ireland	Conifers	0	0	0	0	0
	Broadleaves	0.3	0.2	0.3	0.2	0.1
UK	Conifers	3.5	1.9	2.2	2.6	1.9
	Broadleaves	9.3	8.9	10.7	7.7	3.6

Source: Forestry Commission, September 2016

Wales

The Welsh Government's strategy for woodlands and trees is contained within **Woodlands for Wales**, published by the Welsh Government in 2009. Detail on implementation of the strategy is contained within subsequent five-year plans; the first was published by Forestry Commission Wales in 2010, and the second by the Welsh Government in 2015. The current Action Plan runs until 31 March 2020.

In February 2017, the National Assembly launched an **inquiry into the delivery of the government's Strategy for Woodlands and Trees**. The single biggest issue raised by respondents to the inquiry's consultation is the lack of new woodland creation. The Welsh Government's **Climate Change Strategy (2010)** called for the "expansion of woodland in Wales by increasing the average planting rate from about 500 ha to 5,000 ha per annum maintained over 20 years." This equates to 100,000 ha of new woodland creation between 2010 and 2030. However, the **Woodland For Wales Action Plan (2015-2020)** states that only 3,203 ha of new planting had taken place between 2010 and 2015.

Funding

Glastir is the sustainable land management scheme through which the Welsh Government provides farmers and land managers with financial support. One element of this is the **Glastir Woodland Management and the Glastir Woodland Creation schemes**, introduced to replace the Better Woodlands for Wales (BWW) scheme which ran from 2006 until 2010/11. These were funded initially through the Rural Development Plan 2007-2013, and then through the Rural Development Plan 2014-2020. Glastir Woodland Creation became operational from November 2010; the fourth window for grants under this scheme was between March and May 2017. Glastir Woodland Management was launched in April 2013, however, no new applications for funding have been permitted since 2015; the government has no plans to reopen the scheme. There is also a Glastir Woodland Restoration scheme, launched in 2015 to enable woodlands infected by **Phytophthora ramorum (larch tree disease)** or areas of larch felled to help slow the spread of the disease, to be replanted. The fifth window for applications was open during June 2017.

In 2015, the Welsh Government commissioned a **survey to investigate farmers' motives for the uptake (or not) of Glastir Woodland grants**, particularly those who had previously received funding through the BWW scheme. Interviews with 1,005 farmers in Wales with woodland on their land (420 of which had received a woodland grant) revealed the following:

- 36% of the 1,005 farmers planted new woodland in the past 10 years, and of these, 85% used grants to fund this.
- Reasons for planting new woodland included: for the benefit of wildlife (95%); to help improve the local landscape (82%); to provide shelter or screening (71%); to provide wood fuel for personal use (55%); to provide a place for personal recreation/relaxation (54%); to provide timber (46%); for flood management (25%); to provide public access/recreation (20%); for game shooting (16%); and to provide wood fuel for sale (13%).
- Of the 53 farmers who planted new woodlands without grant support, 27% mentioned that they were not aware of the grants; 27% were put off by grant application requirements; and 24% claimed that they were not eligible to apply for grants.
- For those that participated in BWW but did not transfer to Glastir Woodlands, reasons included: no more spare land was available (16%); the application process of Glastir is too complicated (15%); not aware of the Glastir Woodlands schemes (14%); and not eligible for the Glastir Woodlands schemes (13%).
- Improvements suggested for Glastir Woodlands schemes included: better support/advice (37%); better administration of the grant scheme (27%); higher/more flexible grant payments (24%); and better marketing of the scheme (21%).
- Finally, when asked what would encourage them to plant new or larger areas of woodland in future, 44% of respondents said 'nothing would', 37% said 'higher grant payments', 5% said 'higher price for timber or woodfuel', and another 5% said 'higher and quicker returns on investment'.

England

England's woodland policy is set out in the **Government Forestry and Woodlands Policy Statement**, published by Defra in 2013 in response to a 2012 **inquiry by the Independent Panel on Forestry (IPF)**. The IPF recommended that the UK Government commit to increasing woodland cover in England from 10% to 15% by 2060. The UK Government rejected the 2060 15% ambition as unfeasible, on the basis that:

The recent rate of progress has been between 2,000 and 3,000ha per annum, which would reach 11% woodland cover by 2060. The Panel's recommendation implies a 500% increase on this rate sustained for the next 47 years. This is unlikely to be achievable or affordable. We, therefore, agree that 15% is a reasonable level of woodland cover to aim for although not within a specified timescale.

The UK Government instead committed to a 12% level of woodland cover in England by 2060, implying planting rates of at least 5,000 ha per annum. However, planting rates remain significantly below this, with just 700 ha planted in 2015-16.

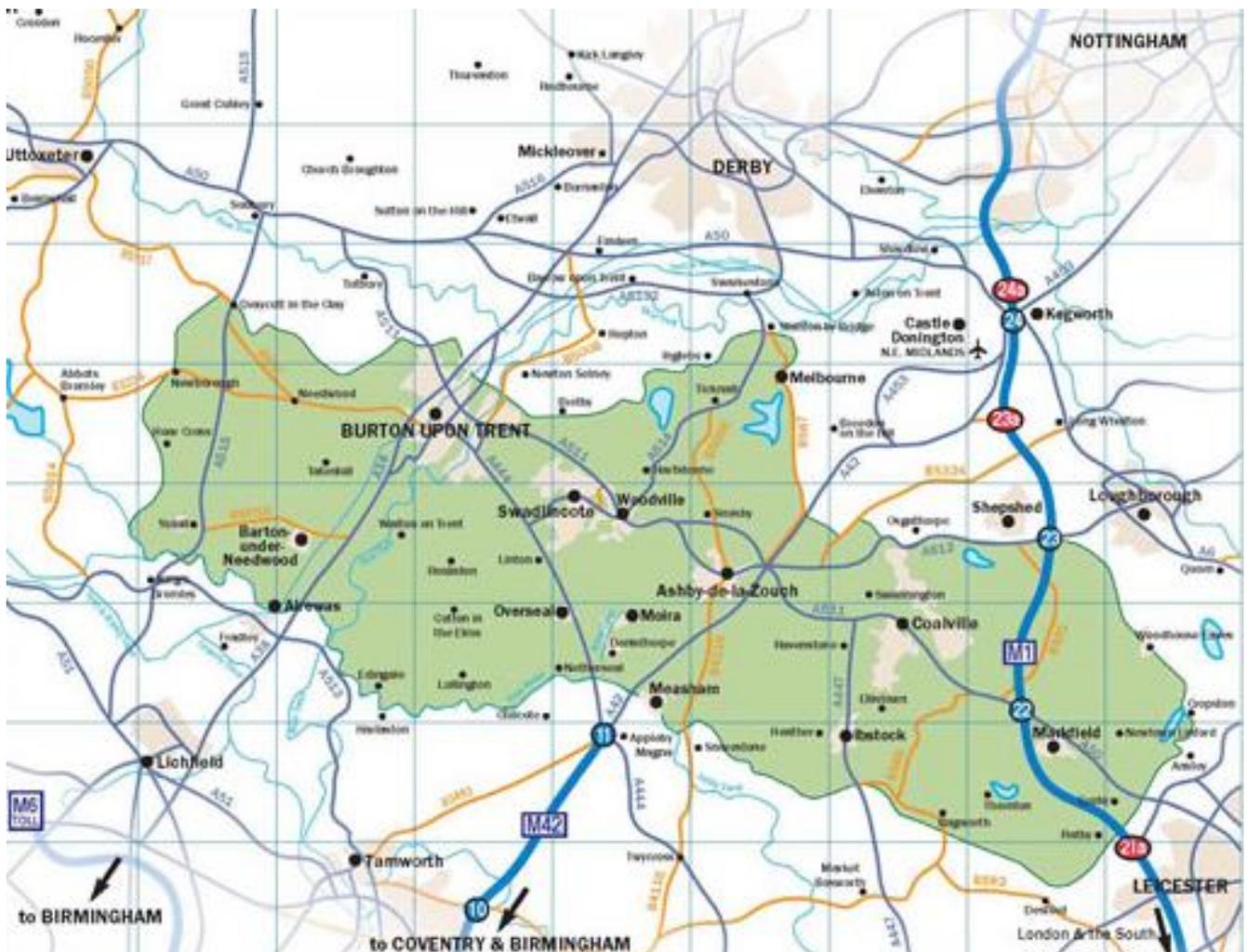
Funding

Funding for woodland creation or improvement in England is provided under the **Countryside Stewardship: woodland support** scheme. Funding for woodland creation through the supply and plant trees (TE4) scheme closed to new applicants on 1 March 2017, whilst applications for woodland improvement closed on 5 May 2017. Prior to this, funding for woodland creation was provided through the **English Woodland Grant Scheme**, which closed to new applications on 30 September 2014. Separate to this, England has two largescale woodland creation projects – the National Forest and 12 Community Forests. These are described below.

England's National Forest

The **National Forest Company** (NFC) is a charity created by the UK Government and sponsored by Defra. It leads the creation of the National Forest, a new, wooded landscape across 200 square miles of central England (see map below). This specific area was chosen as there was a great need for regeneration after the end of mining, and since 1995 over eight million trees have been planted. This has increased woodland cover from a baseline of 6% in 1991, to 13% by 2003, 19% by 2013, and more than 20% by 2016. This has made large swathes of countryside more accessible for local people and visitors, with 86% of woodlands in the National Forest area having public access.

England's National Forest



Source: The National Forest Company, 2017

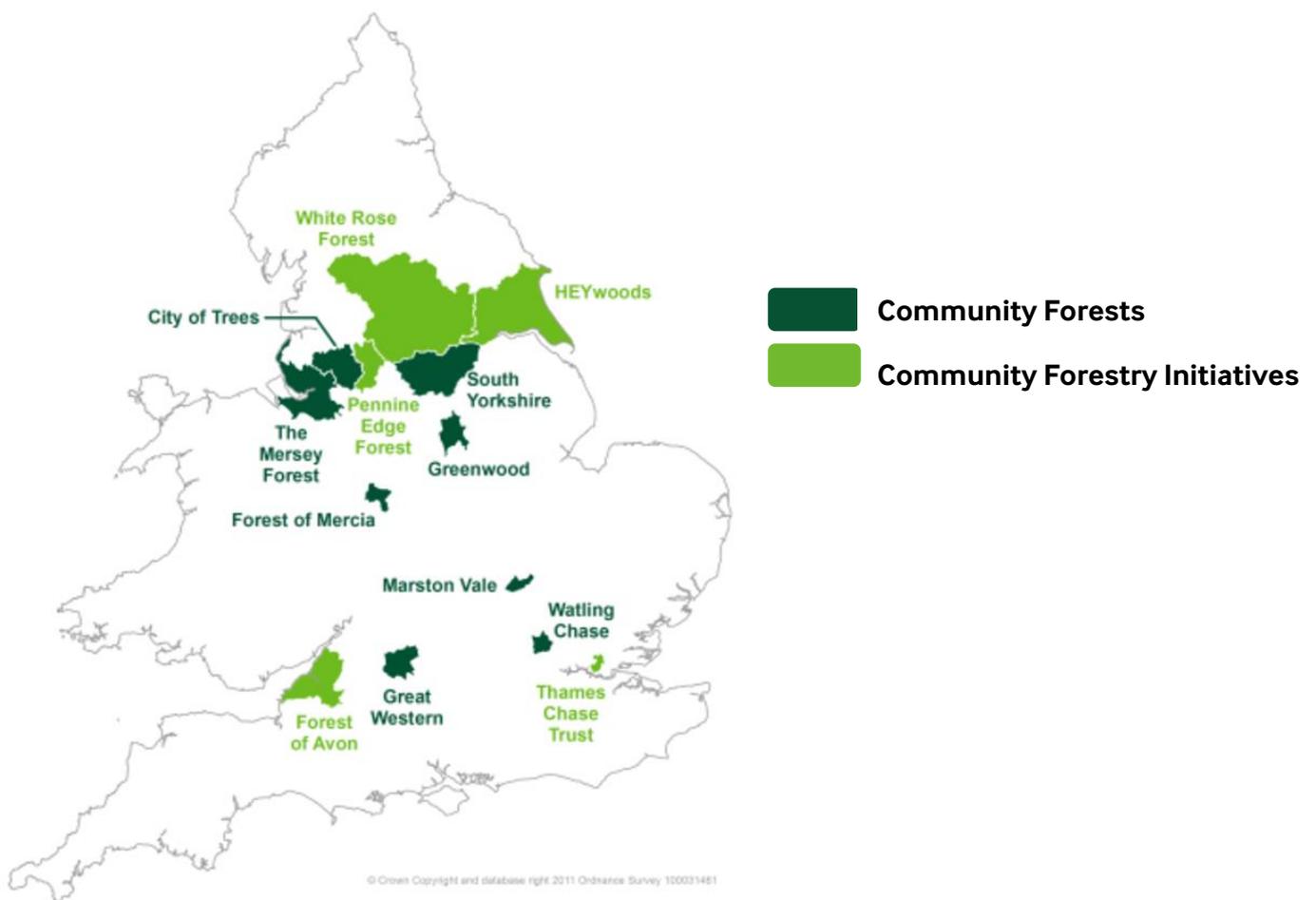
Whilst further forest creation remains a priority, the **2014-2024 Strategy** acknowledges that this will be at a lower rate (up to 150 ha per annum) than in earlier years but with greater targeting of where new planting should occur, taking into consideration connectivity of sites and beneficial impact on the landscape. Nevertheless, there remains a broad target of one third woodland cover for the area.

Financially, the NFC continues to increase its own income generation through business and individual sponsorship, whilst maintaining its grant support from Defra. The NFC's **Annual Accounts 2015-16** show that grant aid of £2.531 million was received from Defra (to be maintained for 2016-17). Additional income of £470,364 was received from a number of other sources.

England's Community Forests

The Community Forest programme was established in 1990 by the then Countryside Commission as a pilot project to demonstrate the potential contribution of environmental improvement to economic and social regeneration. The three initial pilots quickly grew to a national programme, with twelve **Community Forests** being established. Each Community Forest is a partnership between local authorities and local, regional and national partners including the Forestry Commission and Natural England. The founding basis for each forest is a government-approved forest plan, a 30-year vision of landscape-scale improvement. Removal of government funding in 2004 meant that only eight of the Community Forests were able to continue functioning, however five Community Forestry Initiatives have since been established (although these operate with far fewer resources than the Community Forests). The eight remaining Community Forests and five Community Forestry Initiatives are shown in the Figure below.

England's Community Forests



Source: England's Community Forests, 2005

The Mersey Forest is one of the largest of England's community forests, covering 1,100 km². The Mersey Forest is a network of woodlands and green spaces being created across Merseyside and North Cheshire by a wide-ranging partnership of different organisations including seven local authorities, Natural England, the Forestry Commission, the Environment Agency, landowners, businesses and local communities.

The Mersey Forest Plan states that around 3,000 ha of woodland (more than nine million trees) have been planted since the Mersey Forest was established in 1991. With planting occurring at a rate

over three times higher than the national average, this has enabled woodland cover in the area to double, from 4% in 1991 to 8% by 2012. However, there is still a long way to go to meet the target of 20% woodland cover (equivalent to planting another 15,000 ha of woodland).

The local authority partners contribute core funding to the Mersey Forest, however, for every £1 contributed by local authorities, £10 of additional funding is secured from other sources. These include grants, consultancy work, corporate social responsibility, unrestricted donations, and other mechanisms such as the Community Infrastructure Levy, and the Payments for Ecosystem Services (PES) approach. The Mersey Forest Plan states that the success in bringing in external funding is down to the Mersey Forest's use of an investment model rather than a traditional funding model. This involves strategic capacity building activities such as partnership development and policy influencing, matching and attracting new funding (through bringing different funds together), and re-investing funds earned through consultancy work.

Scotland

Scotland's Forestry Strategy (2006) has a target to increase woodland cover from 17.1% to about 25% by the second half of the 21st century. The Scottish Government published its rationale for woodland expansion in 2009, stating that environmental, economic and social benefits "would be delivered progressively through a sustained annual planting programme of around 10,000–15,000 ha." This was firmed up by a more specific target of creating 100,000 ha of new woodland over the period 2012-22 (i.e. 10,000 ha per annum), as set out in the Land Use Strategy documents published in 2011 and 2016.

Finally, in January 2017, the Scottish Government revealed plans to increase its tree planting target from 10,000 ha per annum to 15,000 ha per annum by 2025 as part of the Draft Climate Change Plan. This new target is to be realised through a stepped approach, of 12,000 ha of new woodland from 2020-21, 14,000 ha from 2022-23, and 15,000 ha from 2024-25. The target has a particular focus on commercial timber crops to sustain the processing sector.

The new target is particularly ambitious, given that Scotland has not once reached the 10,000 ha per annum target in the last decade. An average of 4,200 ha were planted each year in Scotland during 2006-10, rising to an average of 7,600 ha annually during 2010-15 (peaking at 9,000 ha in 2012), before falling to 4,600 ha in 2015-16. However, the proposals include Forest Enterprise Scotland contributing towards the target by creating new woodland on the national forest estate.

Funding

The increase in woodland planting in Scotland after 2010 has been attributed to Rural Development Contracts (RDCs) which were introduced through the Scottish Rural Development Programme (RDP) 2007-13 to improve the competitiveness of the agricultural and forestry sectors. The scheme closed to new applications in May 2016.

RDCs were a mechanism aimed at delivering targeted environmental, social and economic benefits and were open to farmers, crofters, forest and estate managers and community groups. Take up was initially slow, but by 2012 woodland planting was close to the target of 10,000 ha per annum, with about 75% using the native woodland planting option. Some changes were made from May 2012 in order to encourage creation of productive conifer and broadleaf woodlands, however planting rates have since been lower than they were in 2012.

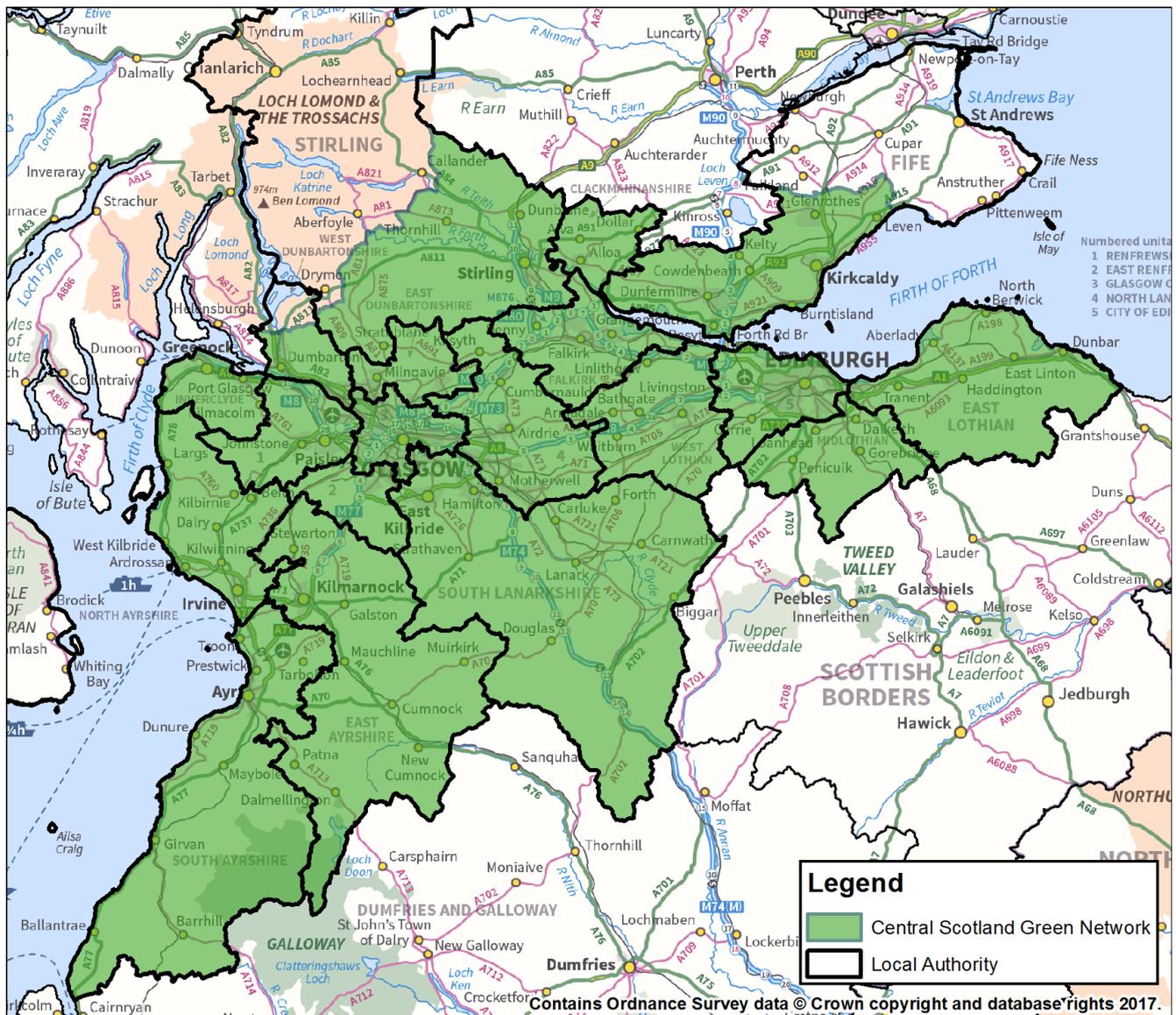
The current Forestry Grant Scheme, under the RDP 2014-20, has similar objectives, including helping to achieve the target of an extra 100,000 ha of woodland by 2022.

Scotland has two large-scale schemes seeking to increase tree and woodland cover: the Central Scotland Green Network and the Woods In and Around Towns initiatives are described below.

Central Scotland Green Network

The **Central Scotland Green Network (CSGN)** is a long-term initiative which aims to restore and transform the landscape of Central Scotland and to promote environmental quality, woodland cover and recreational opportunities. It covers an area stretching from Ayrshire and Inverclyde in the west to Fife and the Lothians in the east (see Figure below).

Central Scotland Green Network



Source: Forestry Commission Scotland, 2016

Woodland creation is being taken forward by Forestry Commission Scotland (FCS) through its CSGN Woodland Creation Programme, which is supported by the CSGN Woodland Expansion Steering Group (formed in 2012). The programme aims to:

- Deliver a CSGN Woodland Creation Action Plan that presents key parts of the Forestry and Woodland Strategies for the CSGN area and analyses the difficulties that the project might face;

- Identify and review new and innovative ways to develop woodland creation within the CSGN area; and
- Achieve a step change in the rate of woodland creation (compared to the 2010 baseline).

To help deliver the CSGN vision and to support new woodland planting, a CSGN Contribution is available under the **Forestry Grant Scheme's Woodland Creation options**.

Woods In and Around Towns

Though focused more on woodland management than creation, the Forestry Commission Scotland initiative **Woods In and Around Towns** (WIAT) has nevertheless created 1,400 hectares of new urban woodland since 2005. With the aim to improve quality of life in Scotland's urban and post-industrial areas through community access to new or regenerated woodland, WIAT has also brought 11,000 hectares of neglected woodland back into active management, and created or upgraded over 300 miles of footpaths. The fourth stage of WIAT, from 2015-20 is specifically focusing on enhancing areas of high social deprivation.

Northern Ireland

The NI Forest Service published **NI Forestry - a strategy for sustainable growth** in 2006. It stated:

Within NI we should aim over the next 50 years to double the area of forest largely through transfer from agricultural use to forestry. The current rate of afforestation of 500 ha per annum is not sufficient to meet the demand for new afforestation.... We will therefore optimise funds available under the NI Rural Development Regulation Plan... To encourage afforestation the Department will revise the Woodland Grant Scheme. The Scheme will continue to provide support for all afforestation projects but will also encourage an increased rate of new planting in locations where certain types of forestry seem particularly desirable.

There has been no update to this strategy in the intervening years, though the **2014 – 2020 Rural Development Programme** mentions a need to increase woodland cover to 12% by the middle of the 21st century. This is particularly for flood management benefits and mitigating the effects of climate change, and was intended to be led largely by the private sector.

As revealed by the Forestry Commission statistics shown earlier in this briefing, though annual afforestation in Northern Ireland improved from the 2006 baseline, it amounted to only 1,000 ha in 2015-16.

Funding

Following publication of the Forestry Strategy, funding for woodland creation was provided through the **Woodland Grant Scheme (WGS) – part of the Rural Development Programme 2007-2013**. This included funding of £1,600/ha for conifers, and £2,400/ha for broadleaves, with a £1,000/ha supplement for woodlands created in "locations which have a demonstrable potential to be used for informal public recreation".

Forestry grants available through the 2014 – 2020 Rural Development Programme include the Forest Expansion Scheme for new woodland planting of at least 5 ha, and the Woodland Expansion Scheme for smaller woodlands. Support is available to cover establishment costs, maintenance costs for the first five years, and income foregone for up to ten years. Applications for the 2016-17 planting season closed on 30 September 2016.

2. Woodland creation elsewhere in Europe

The Food and Agriculture Organisation (FAO) of the United Nations has been monitoring the world's forests at five to ten year intervals since 1946. The Global Forest Resources Assessments are now produced every five years in an attempt to provide a consistent approach to describing the world's forests and how they are changing. The assessment is based on two primary sources of data: country reports prepared by national correspondents and remote sensing that is conducted by FAO together with national focal points and regional partners.

According to the most recent [Global Forest Resources Assessment](#), conducted in 2015, the UK is one of the least wooded countries in Europe. Europe's other sparsely wooded countries include Ireland (at 11% forest cover), the Netherlands (also 11%), Moldova (13%) and Denmark (15%). Whilst Ireland and Moldova have seen large increases in woodland cover over the period 1990-2015, progress in the Netherlands (and to a lesser extent in the UK and Denmark) has been much slower. This information can be seen in the table below.

Forest cover in a selection of European countries, 2015

Country	Forest cover in 2015 (ha '000s)	Land area in 2015 (%)	Change in forest cover 1990-2015 (%)
Least wooded countries in Europe			
Ireland	754	11	62
Netherlands	376	11	9
Moldova	409	13	28
UK	3,144	13	13
Denmark	612	15	13
Ukraine	9,657	17	4
Selection of other western European countries			
Belgium	683	23	1
France	15,954	29	18
Italy	9,149	31	22
Switzerland	1,240	31	9
Germany	11,076	32	1
Norway	10,065	33	0
Spain	18,173	36	33
Portugal	3,456	38	-7
Austria	3,887	47	2
Europe averages			
EU-28	161,081	37	9
Europe	1,015,655	44	2

Source: Food and Agriculture Organisation of the United Nations, 2015

On 20 September 2013 the European Commission adopted a new [EU Forest Strategy](#) in response to the increasing demands put on forests and to significant societal and political changes that have affected forests over the preceding 15 years. The strategy identifies the key principles needed to strengthen sustainable forest management and improve competitiveness and job creation (especially in rural areas), while ensuring forest protection and delivery of ecosystem services. The strategy also specifies how the EU wishes to implement forest-related policies.

The following sections provide detail on forest policy and afforestation in Europe's other sparsely wooded countries – Ireland, the Netherlands, Moldova, Denmark and Ukraine. Additionally, forest policy and afforestation in Belgium and France is discussed, as close neighbours to the UK.

Ireland

Though still the least wooded country in Europe, Ireland has significantly increased its forest cover in recent decades. FAO figures suggest a 62% increase during 1990-2015, with 289,014 ha being planted over the period (28,381 ha of which since 2010). [Ireland's Forest Policy Review Group](#) reported a 27% increase in forest cover during 1996-2012.

In 1996, the Irish Government published [Growing for the Future](#), an ambitious strategy for the development of the forestry sector in Ireland to 2035. The report concluded that, in order to reach a scale of timber production large enough to support a range of processing industries, the national forest estate would need to increase to 1.2 million ha (17% of total land area) by 2030. It aimed to achieve this by increasing afforestation levels to 25,000 ha per annum up to the millennium, and 20,000 ha per annum from 2001 to 2030.

The [Forest Policy Review Group's report \(2014\)](#) states that afforestation averaged only 53% of this ambitious annual target, however, with a cumulative shortfall of 143,952 ha by 2009. The report attributes the shortfall to a number of factors, including:

- Reduced funding in 2003 which undermined confidence in afforestation;
- A rapid increase in land prices;
- The success of competing land schemes;
- The progressive withdrawal of Coillte (Ireland's state-sponsored commercial forestry company) from afforestation since 1997 following reduced eligibility for premium payments; and
- Constraints on land availability due to increased regulatory requirements.

The increase in land prices and lack of available land, coupled with the significant funding differential (whereby farmers receive on average three times more premium funding than non-farmers), have meant that private non-farmer investment in afforestation has fallen significantly in recent years. The report adds that, from a high of over 20,000 ha in 1996, annual afforestation has decreased to just over 7,000 ha since 2010.

As such, the key strategic action proposed by the Working Group is an afforestation target of 10,000 ha per annum up to 2015 and 15,000 ha per annum for the period 2016 to 2046, with the aim of reaching forest cover of 18% by this date. However, these ambitious planting targets have not been taken on board by the government: [Ireland's Forestry Programme 2014 – 2020](#) instead sets out an annual planting rate of 6,000 ha in 2015 rising to 8,290 ha in 2020.

Nevertheless, funding for the 2014-2020 period remains similar to that in 2007-2013, covering establishment costs of up to €5,750/ha, plus maintenance costs of up to €635/ha for 15 years. Importantly, private non-farmers are now offered the same incentives as farmers. Three separate funding schemes are offered, focusing on afforestation, native woodland establishment, and agroforestry.

The Netherlands

According to the FAO's 2015 Global Forest Resources Assessment, the Netherlands has planted 31,000 ha of woodland over the period 1990-2015, with just 3,000 of this planted since 2010. Since 1990, the country's forest cover has risen by 9%, which equals the average increase across the 28 member states of the EU.

The Dutch Government has been conducting inventories of the country's woodlands since 1938; the sixth and most recent inventory was completed in 2013. This information feeds into a website, [Environmental Data Compendium](#), containing statistics about the environment of the Netherlands. A webpage on [Development of the Dutch forest, 2001-2013](#) states that forest cover in the Netherlands has increased only slightly (and at a declining rate) over this period, from 370,000 to 373,000 ha, though in this time the forest has become "older, better structured and more mixed". Another webpage on [Balance for wood and wood products for the Netherlands, 2000 -2014](#) states that only 10.4% of the wood used in the Netherlands in 2014 was sourced from Dutch forests, though this has increased from 2013 due to a small rise in roundwood production.

In July 1961, the Dutch Parliament passed the [Forestry Act 1961](#) which contained provisions for the conservation of the Netherlands' forests and smaller stands of trees (excluding those on private land such as gardens, and along streets). This required all woodland felled to be replanted within three years. This Act was replaced by the broader [Nature Conservation Act 2017](#).

In 1985, the government published the 'Multiannual Plan for Forestry', which, according to a recent [Dutch magazine article \(PDF 2,498KB\)](#), contained policy goals about self-sufficiency in the use of wood products, and expansion of the forest area. However, the vision for expansion was vague: "in terms of size and quality, the forest area in the Netherlands, to the best of its ability, meets the needs of society in terms of the fulfillment of the forest now and in the future, at a cost level that is accepted by society."

In 2000, forest policy was incorporated into the vision [Nature for People, People for Nature](#). Associated goals for [Dutch Forest Policy \(PDF 558KB\)](#) include:

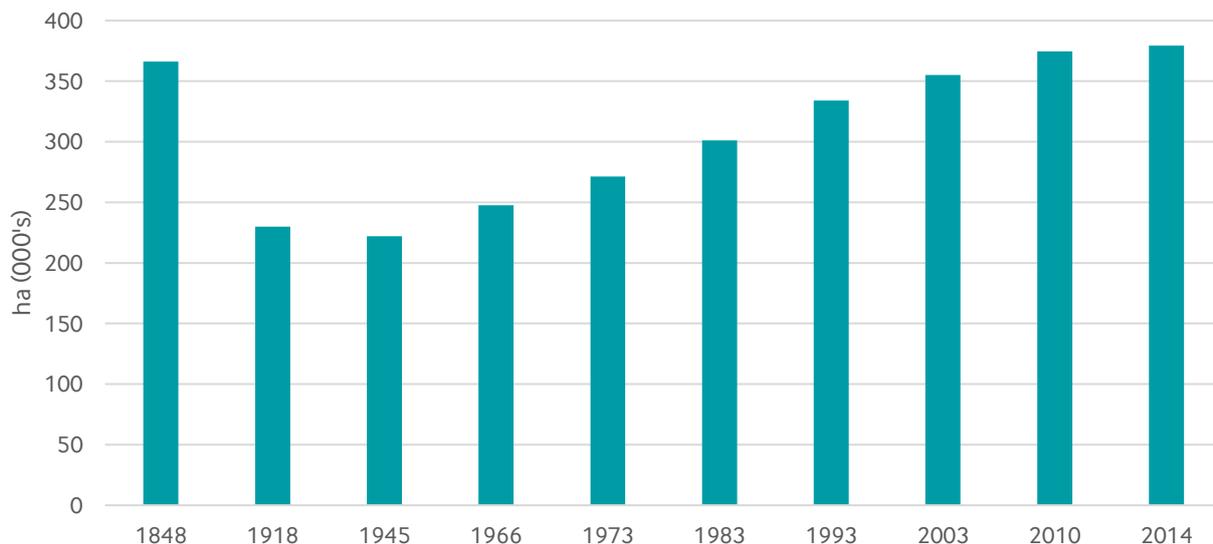
- Protect the forest;
- Ensure that the forest fulfills as many functions as possible and meets the needs of people;
- Plant new forest; and
- Increase the proportion of natural forest.

The publication states that to increase the amount of privately-owned woodland, subsidies are provided, whilst developers are required to plant trees for each new building constructed. Since 2000, subsidies have become output rather than input focused, with different rates available depending on the species planted. However, no numerical woodland creation targets are mentioned.

Moldova

Sandwiched between Romania and Ukraine, Moldova emerged as an independent republic following the collapse of the Soviet Union in 1991. Moldova is one of the poorest countries in Europe, with its economy relying heavily on agriculture. As reported by the FAO, forest cover in the country has increased by 90,000 ha over the period 1990-2015, with 23,000 ha of this planted since 2010. The figure below provides an historical indication of the gradual rise in afforested land in the country since 1945. However, forest cover remains one of the lowest in Europe, at just 13%.

Afforested land in Moldova, 1848-2014



Source: World Bank Group, December 2014

In December 2014, the World Bank Group published a detailed [Forest Policy Note \(PDF 1,766KB\)](#) for Moldova. It states that in 2012, preparation of a national Strategy for Institutional Reform of the Forestry Sector in Moldova (FIRSM) was launched with support from the EU, however it did not receive final government approval. The report also states that high levels of unregulated and uncontrolled harvesting (with wood consumption estimated at almost three times higher than the official harvest figures) are likely to result in forest degradation, reduced production capacity and biodiversity loss.

The Forest Policy Note thus recommends the establishment of fast growing energy plantations in the short term (currently only 2% of Moldova's forests are planted conifers, and just 0.6% are in private ownership), and increased afforestation in the longer term. The Moldovan Government has, however, approved a national plan on extending forest cover during 2014-2018 which, according to the World Bank Group's report, envisages the afforestation of 13,050 ha of degraded lands and water protection forest belts. This is to be funded by the National Environmental Fund and other donors.

Denmark

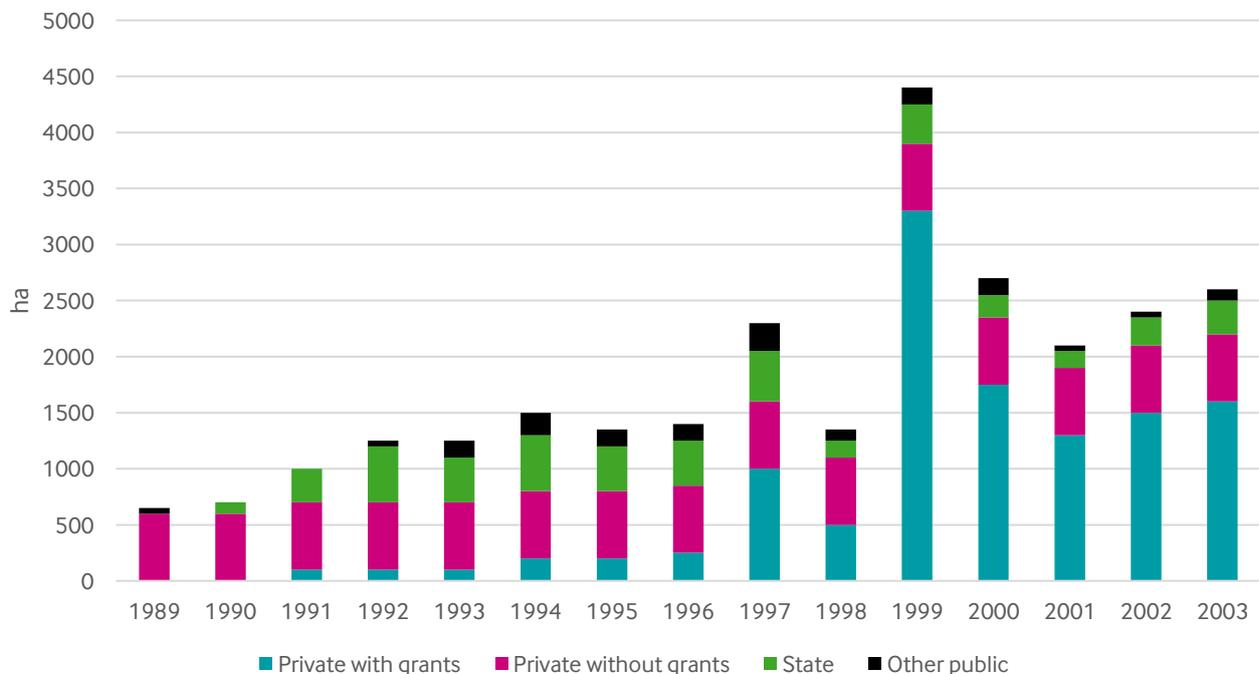
FAO figures show that Denmark's forest cover has risen from 12.6% in 1990 to 14.6% in 2015, representing a 13% increase. Over the period, 69,000 ha of new woodland has been planted; 25,100 ha of which since 2010. [Denmark's Tree Portal](#) provides additional information on the country's woodland creation. It states that in 1989, a broad majority in the Danish Parliament set the goal that Denmark's forest area should be doubled over the next 100 years, with the [Danish Forestry Act 1989 \(PDF 918KB\)](#) aiming "to preserve and protect the forests of the country and thereby increase the forest area".

This goal was explicitly included in the government's [National Forest Program \(PDF 556KB\)](#), launched in 2002: "The forest area must be increased so that forest landscapes cover 20-25% of Denmark's area during a tree generation (80-100 years)". Denmark's Tree Portal additionally states that there has been a significant shift in the purpose of afforestation in recent decades, towards improving recreational opportunities and environmental benefits such as clean groundwater, biodiversity, and storing carbon dioxide.

However, an [evaluation of the first 10 years of afforestation](#) by the Forest and Nature Agency in 2000 revealed that, whilst the forest area had risen by approximately 1,800 ha per annum over the

decade to 1998, this was far from the 4,000-5,000 ha per annum needed to double the forest area in 100 years. As such, in 1998 it was decided that the state funding for afforestation should be increased by DKK 60 million annually until 2003, with a new target of 20,000 ha to be planted during this period (equating to 4,000 ha per annum). This funding was initially intended to encourage private landowners to plant hardwood species, however after the storm of 1999, the state supported the planting of more native species. As shown in the graph below, though planting levels did increase after 1998, the target of 4,000 ha per annum was met only in the first year.

Afforestation in Denmark, 1989-2003



Source: Danish Government, 2005

Subsidies for private afforestation continue to be offered – up to DKK 32,000/ha for new deciduous forest, and DKK 12,000/ha for pine forests. The aim of these subsidies, according to the Danish **Ministry of Environment and Food**, is to establish new forests in order to improve the aquatic environment (by reducing nitrogen run-off to lakes, fjords and inland waters). However, it is acknowledged that forests can accommodate a wide variety of other interests, such as wood production, nature conservation, groundwater protection and recreation.

Ukraine

Ukraine is the continent’s largest country (being based entirely within Europe). A document published by the Ukrainian Research Institute of Forestry and Forest Melioration in 2003 states that forests cover 15.6% of Ukrainian territory, with 42% being coniferous, and less than 1% in private ownership. According to this document, the Land Code of Ukraine 2001 enabled forest plots of up to 5 ha to become privately owned, and allowed the planting of private forests on land with low productivity. Perhaps due to this low private ownership, the document states that the main functions of Ukrainian forests are recreation and nature conservation.

In 2002, the Forests of Ukraine 2002-2015 state program was adopted by the government. This national forest strategy set out a number of priorities, including “increase of forest coverage in the country up to optimal scientifically-founded level”. This level was set at 16.1% forest cover to be achieved by 2015, requiring an additional 500,000 ha of woodland to be planted by the state,

averaging at just under 35,000 ha per annum. According to FAO figures, though Ukraine's percentage increase in forest cover has been one of the lowest in Europe (at just 4% during 1990-2015), the country nevertheless achieved forest coverage of 16.7% by 2015, beating the target set in 2002.

The **World Bank stated in 2015** that it has been working together with the EU, the International Union for Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF) to help the forestry agencies in Ukraine and six other eastern European countries design and implement much-needed reforms, based on the sustainable use of forest resources. However, despite several attempts to change the forest management system in Ukraine to bring it in line with best practice, the country's outdated model has prevailed. Nevertheless, the World Bank article suggests that forest management reform is among the new government's priorities. This is likely to improve the distinctions between political, operational, control and managerial functions of the state forestry agency, and establish a state holding company to unite the existing state-owned forestry enterprises.

Belgium

According to FAO figures for 2015, Belgium has a fairly low forest cover of 23%, and has increased forest cover by just 1% over the period 1990-2015 (or 2% over the period 2000-2015, following a decline in the 1990s).

Since the *Special Law on Institutional Reforms 1980*, matters of forestry and nature conservation have been the full responsibility of the regions (Flanders, Wallonia and Brussels) - no national forest legislation or coordinating laws remain. According to a 2013 report on **Integration of Nature Protection in Forest Policy in Flanders (PDF 1,289KB)**, forest cover in Flanders is particularly low, at 11%. Coniferous plantations make up around half of this, and native broadleaves around one-third. The majority (65%) of woodland in Flanders is privately owned, with much of this in plots of less than 1 ha, whilst the state owns 13%. In contrast, the less urbanised region of Wallonia has forest cover of over 30%, with around half of this being native broadleaves.

Further information on Belgium's forests is contained within a **report produced for the United Nations Forum on Forests (PDF 631KB)**, held in 2002. This reveals that in 1988, the fifth Congress on Public Green Facilities set a target for Flanders to increase its forest area by 1,000 ha per annum. The Flemish forest service's strategic plan of 1993 specified that such afforestation must occur in the vicinity of existing forests, and/or in close proximity to the region's larger cities and towns. The Flemish Government then designated 10,000 ha as 'forest expansion areas' in the 1997 Spatial Structure Plan Flanders, to be planted by 2007 (an increase of 7%). The report does not mention whether there were any woodland creation targets in Wallonia.

In 2008, a journal article was published on the **Implementation failure of the forest expansion policy in Flanders**. This states that the policy goal of 10,000 ha forest expansion by 2007 failed due to inadequate implementation and engagement with private land owners, conflicts with the agricultural sector, and subsidies that were too low compared to the high financial support given to farmers to keep unproductive land in production.

France

According to FAO figures, France is one of three European countries to have added a consistent 3-4% to their forest cover in each of the five year periods 2000-2005, 2005-2010 and 2010-2015, along with Italy and Greece. This has resulted in an additional 2.6 million ha of woodland being planted in France since 1990, with forest cover now standing at 29% of land area.

A 2013 report looking at the [Integration of Nature Protection in Forest Policy in France \(PDF 5,329KB\)](#) states that the increase in forest cover since the beginning of the 19th Century is mainly due to land abandonment in mountainous areas and afforestation on former agricultural land. The latter has been directly supported (up until 2000) by the National Forestry Fund, established in 1946 specifically to assist individuals and communities with such afforestation, along with the creation of nurseries and forest roads to facilitate logging. Conifer plantations thus became much more dominant in the landscape, though still represent only 37% of France's forest cover. Three-quarters of France's forest is in private ownership.

The report states that the current motto of French forest policy is to "harvest more while better protecting the French forest". The French Government has recently decided to increase timber harvesting and to develop the wood processing and forest biomass industries, though the annual harvest is only around 57% of the annual forest increase. Funding for France's forests comes from a range of sources, including community federations, a contribution paid by the wood industry, the 'tax on non-built land', provincial and regional councils, the national government, and EU funds. The report suggests that carbon trading could potentially be used to support forest creation in future.

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