10 Forestry grants

10.1 The forestry sector in Ireland employs approximately 12,000 people and contributes an estimated €2.3 billion to GDP.[1] However, Ireland has one of the lowest levels of forestation in the EU. In 2017, 11%[2] of the total area of the State was forested, compared to an average of 38% for the EU (2015).[3]

10.2 Increasing the amount of land forested provides opportunities for diversification from farming, employment opportunities in local associated industries (such as timber processing) and potentially enhances environmental and recreational benefits to citizens. In addition, forests are increasingly recognised as a means to sequester carbon and help reduce the State's greenhouse gas emissions.

10.3 The Department of Communication, Climate Action and Energy's *National Mitigation Plan 2017* noted that the forestry sector offers considerable scope for climate change mitigation by increasing the amount of land forested and through the use of forest-based biomass and wood products.

10.4 In order to encourage afforestation, Exchequer-funded grants are provided to landowners to cover the cost of initial planting. In addition, an annual premium is provided to assist with the on-going costs of maintenance and to provide an income to the land holder. The grants provided are based on the type of tree planted, with higher grants available for broadleaf trees.

10.5 Since 2007, all new applicants for forestry grants have been fully funded by the Exchequer.[4] The Department of Agriculture, Food and the Marine commenced a new programme, *Forestry programme 2014 – 2020* (the programme) in January 2015. Along with changes to the grant system, the programme contained annual targets for *inter alia* the total land area to be forested each year, and targets for the mix between broadleaf and coniferous trees to be achieved. The programme was subject to a mid-term review in February 2018.

10.6 European Commission State aid approval was required for the Exchequer assistance provided via the programme, and this was received in 2015. A condition of that approval was that Ireland had to aim to achieve 30% broadleaf planting as a percentage of total annual planting.

10.7 The targets set for the programme are the basis for many of the estimates for forestry — and its impact on carbon mitigation — contained in the *National Mitigation Plan*.

1 Department of Agriculture, Food and the Marine, *Ireland's Forests – Annual Statistics 2016*. Includes direct, indirect and induced effects.

2 National Forest Inventory 2017.

3 Eurostat — *Forestry and logging value added per forest area available for wood supply, 2016.*

4 Before 2007, grant payments were part funded by the EU.

Strategic objectives

10.8 The Department's forestry programme is based on the European Commission's *Guidelines for Strategic Programming* for the period 2014 – 2020. Based on these guidelines, the programme focused on four objectives. These were

- to increase the level of forest cover
- to increase supply of forest-based biomass to bridge an expected supply gap by 2020 and beyond
- to support private forest holders in actively managing their forests
- to enhance the environmental and social benefits of new and existing forests.

10.9 The programme devised 11 measures (see Figure 10.1) that would assist in achieving the four objectives. Each measure has a budget and associated performance targets.

10.10 In the period 2015 – 2018, a total of €404 million Exchequer funding was spent on forestry development by the Department. Of this, €225 million related to the 2014 – 2020 forestry programme, with the remainder relating to on-going payments from the previous programmes.

10.11 Although the programme set 11 measures, two measures (one and three) accounted for nearly all (95%) of the spend in 2018.

10.12 The focus of this examination is to review the forestry programme and its targets, and examine the outputs to date. The chapter also looks at how the grant scheme is administered and the changes that were introduced after the mid-term review in 2018.

Figure 10.1 Measures under the Forestry Programme 2014 to 2020

Measure 1	**Afforestation and creation of woodlands**	Afforestation Scheme; Native Woodland Establishment Scheme; Agro-Forestry Scheme and Forestry for Fibre Scheme.
Measure 2	**Investments improving the resilience and environmental value of forestry**	Development of attractive 'close-to-home' woodland amenities for public access, use and enjoyment. This measure is aimed primarily at local authorities.
Measure 3	**Investments in infrastructure: Forest road scheme**	Construction of forest roads for access to forest plantations for thinning and harvesting.
Measure 4	**Prevention and restoration of damage to forests**	Restoration and retention of forests and forest ecosystems following significant damage by natural causes such as diseases.
Measure 5	**Investments improving the resilience and environmental value of forestry woodland improvement**	Woodland improvement of broadleaf forests planted since 1980 and enhancement of environmental qualities of existing broadleaf forests.
Measure 6	**Investments improving the resilience and environmental value of forests**	Application of appropriate restorative management of existing native woodlands.
Measure 7	**Knowledge transfer and information actions**	Development of knowledge transfer groups, continued professional development and providing advisory services.
Measure 8	**Setting up of producer groups**	Assists the establishment of forest producer groups.
Measure 9	**Innovative forest technology**	Development of technologies focused on helping forest owners, producer groups, forest contractors and haulage operators.
Measure 10	**Forest environment and climate services**	Increasing the resilience, productivity and quality of Irish forests, and increasing the self-sufficiency in tree seed production.
Measure 11	**Forest management plans**	Help forest holders devise management plans to assist in the development of forest resources and the protection of the environment.

Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Measure one — afforestation and creation of woodlands

10.13 In order to increase the amount of land forested, the State provides financial assistance to land holders through its Afforestation Scheme. Afforestation refers to the planting of trees at a location that was not previously forested. Afforestation grants account for approximately 91% of the Department's total spend on forestry.

10.14 There are 12 different afforestation grant categories (see Annex 10A) based on the type, and mix, of trees that are planted. Higher grants are paid in respect of broadleaf and native trees.

Broadleaf and native trees

Broadleaves are trees that have flat leaves and produce seeds inside of fruits. In Ireland, the most common broadleaf species include oak, beech and ash.

Conifers are trees with needle or scale like leaves.

Most trees native to Ireland are broadleaf, with some exceptions such as scot's pine and yew.

Broadleaf forests are considered more environmentally desirable as they support a greater diversity of plant and animal life, and have greater amenity value.

While broadleaves are more desirable for the environment and to the public, they are less commercially attractive. A coniferous tree — such as Sitka spruce — matures after about 40 years, while an oak can take over 120 years.

10.15 The highest grants are for the planting of native trees such as alder and oak. The lowest grant categories are for planting on unenclosed land (e.g. open land in upland areas) or for planting made up predominately of coniferous trees. The scheme consists of two different types of payment: an establishment grant and an annual premium.

10.16 The establishment grant is designed to cover 100% of total costs of establishing the afforestation project, subject to a maximum amount (see Annex 10A). The establishment grant ranges from €2,140 to €5,620 per hectare depending on the tree type planted and whether the area is enclosed or not.[1] This grant is paid in two instalments. 75% is payable immediately after planting. The remainder is payable four years after planting. Additionally, an applicant may receive an extra payment of between €350 and €600 per hectare for fencing.

10.17 An annual premium is also payable for 15 years for new forests that qualify for an establishment grant. It is paid to compensate for maintenance costs incurred and income from the land forgone. The annual premium ranges from €185 per hectare to €680 per hectare, depending on the tree type planted.[2]

10.18 All establishment grants applications are subject to a desk review by the Department. Sites above ten hectares are also subject to site inspection prior to payment. These reviews and/or inspections also take place (on the same basis) before the payment of the second instalment. Sites below ten hectares are selected for site inspection on a risk assessment basis at all stages of the payment process.

1 These are the rates set in 2018 following a mid-term review. The range of rates set in 2015 was from €1,665 to €5,250 per hectare.

2 These are the rates set in 2018 following a mid-term review. The range of rates set in 2015 was from €180 to €635 per hectare.

10.19 In 2018, the Department received 1,074 applications for grants in respect of 8,623 hectares. In the same period, 855 applications in respect of 6,964 hectares were approved. In 2017, 1,409 applications for 11,483 hectares were received and 1,243 applications for 9,980 hectares were approved.

10.20 The Government has indicated that it intends to review the grant application process. In July 2019, it commissioned an external party to analyse the process undertaken by the Department in the approval of forestry planting applications.

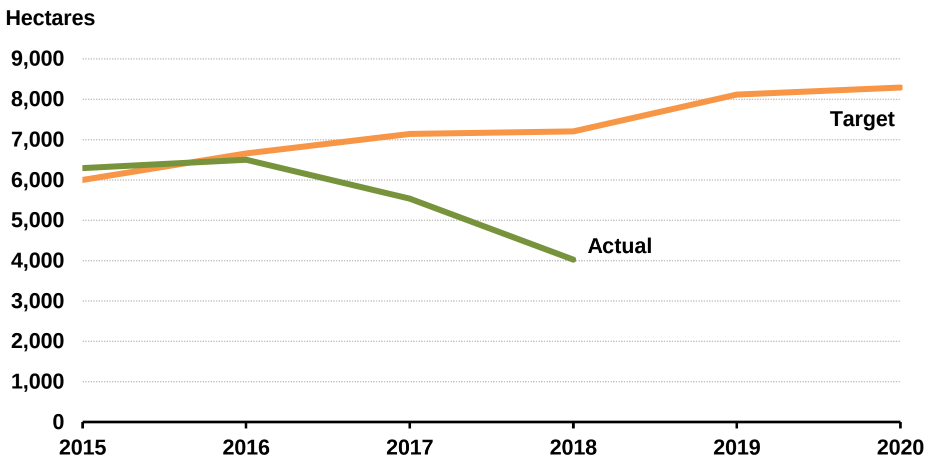
Progress in achieving planned outputs

10.21 The primary aim of the afforestation measure is to increase the amount of land forested. The measures include

- the number of hectares to be planted annually — just over 7,235 hectares per year on average, with a total of 43,410 over period 2015 to 2020, and
- the percentage of broadleaf trees in the mix planted — 30% of planted trees.

10.22 Figure 10.2 shows the actual number of hectares planted from 2015 to 2018 against the targets contained in the programme. Although the target was exceeded marginally in 2015, each subsequent year saw a shortfall. For 2018, a shortfall of 44% was recorded. Since 2015, the total shortfall against target was 4,651 hectares.

Figure 10.2 Hectares afforested in year, target against actual



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

10.23 The Department has stated that the reasons for this shortfall in afforestation may include the following

- As more landowners participate in the afforestation scheme, remaining farmers are more difficult to convince and there is less land available for planting each year. Therefore, as the years progress, it becomes more challenging to attract new entrants.
- Negative publicity in relation to coniferous planting damages the perception of and participation in the scheme.
- There is competition for land for other agricultural enterprises e.g. dairy expansion.
- Forestry is viewed as a permanent land-use change, whereas competing agri-schemes do not require permanent land-use change.
- There are increased areas of environmental sensitivity. For example, no planting in special protection areas for hen harriers has been allowed since 2012; and there are new restrictions on planting in areas near curlew nesting sites.
- The high price of land discourages purchase of land specifically for planting.

10.24 In order to comply with the conditions of State aid (which includes habitat protection), the Department agreed to meet a national target of at least 30% for broadleaf planting each year. To date, this target has not been met. Between 2015 and 2017, 20% of the trees planted were broadleaf. However, the broadleaf planted percentage increased to 27% in 2018.

10.25 In addition to the number of hectares planted, another objective of the programme was to increase the size of new and existing forests. A target of 7.2 hectares was set for the average size of a plantation in the programme. The average size achieved for 2015 to 2018 was 6.5 hectares, a shortfall of 10%.

Current afforestation rates

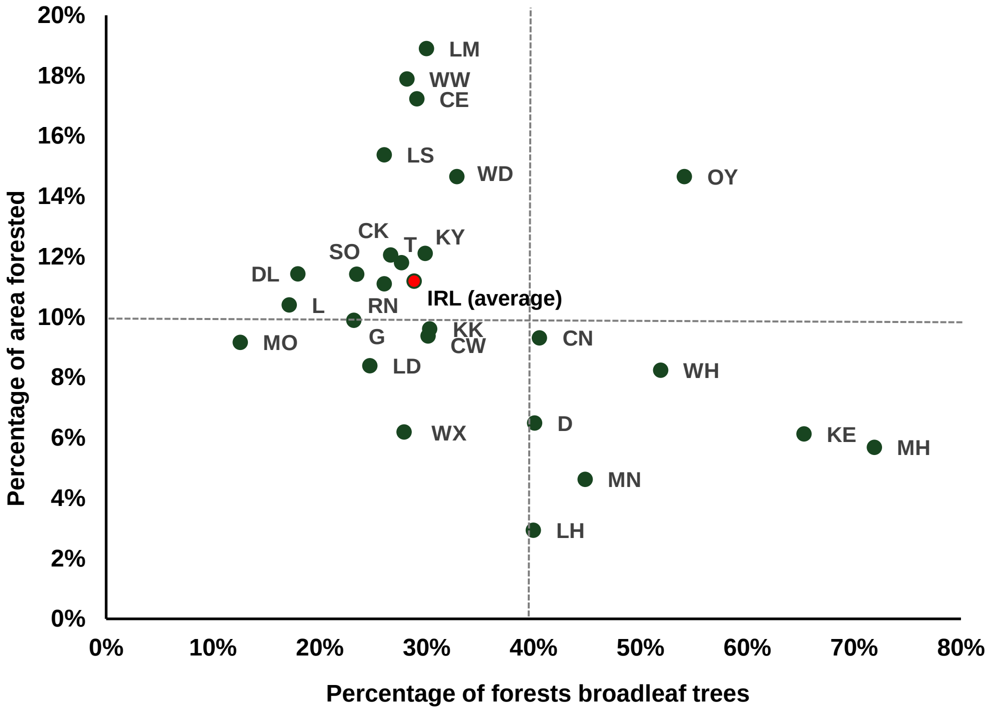
10.26 The State has achieved a marginal improvement in its level of forestation and proportion of broadleaf trees in the past decade.[1] There was an increase in the level of forestation from 10% in 2006 to 11% in 2017. The proportion of broadleaf species in the forest estate increased from 25% in 2006 to 29% in 2017.

10.27 Figure 10.3 analyses the amount of forested land in each county against the proportion of broadleaf trees. The average for the State is indicated in red.

10.28 The three counties with the greatest level of forest cover are Leitrim with 19%, Wicklow with 18% and Clare with 17%. Meath and Kildare have the highest proportion of forested land that is broadleaf with 72% and 65%. However, Offaly achieved the best mix of the two objectives, with a forest cover rate of 15%, and a mix of 54% broadleaf trees.

1 National Forestry Inventory 2006, 2012 and 2017.

Figure 10.3 Level of forestation, and proportion of forested land that is broadleaf, for each county, 2017



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Planting rates

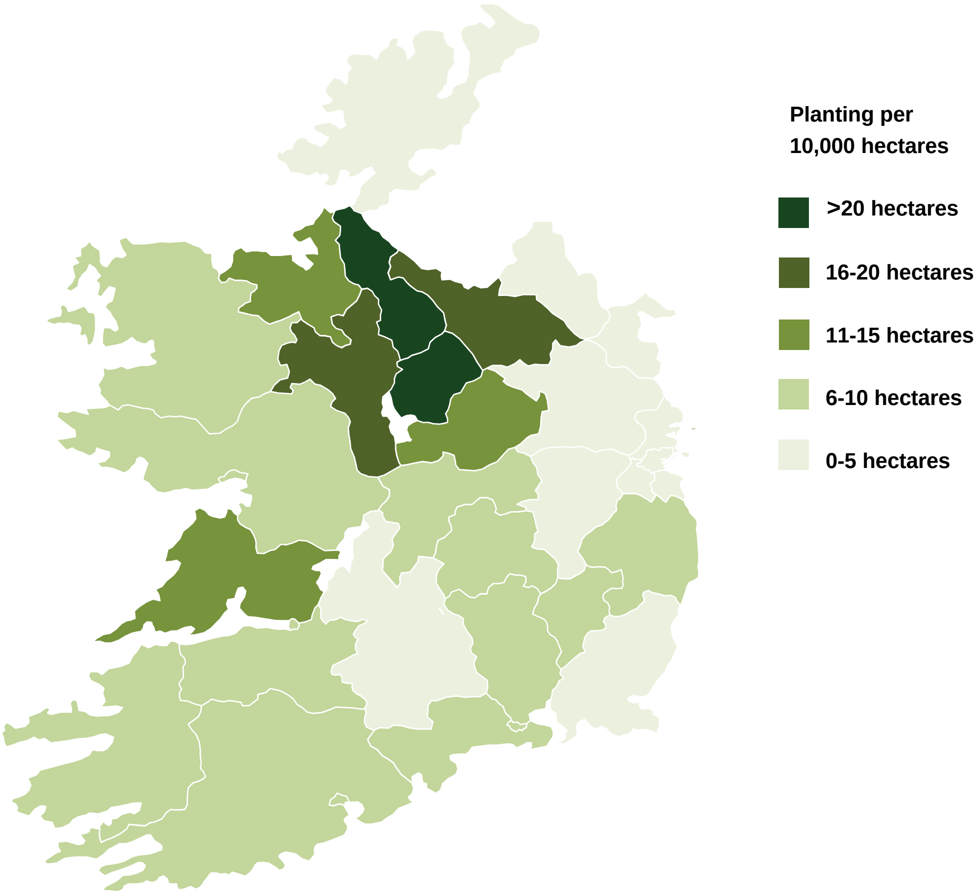
10.29 There are no regional targets for the afforestation programme, but the Department publishes annual statistics on the levels of afforestation in each county. Annex 10B details the breakdown by county for 2018.

10.30 Figure 10.4 analyses the relative intensity of afforestation for each county since the commencement of the programme. The map shows the average number of hectares afforested, from 2015 to 2018, per 10,000 hectares in the county. There was a significant divergence in activity between counties. The rate of afforestation in Leitrim (28 per 10,000 hectares) was almost 40 times the level in Dublin (0.7 per 10,000 hectares) and just over 24 times the level in Donegal (1.16 per 10,000 hectares).

10.31 The two counties with the greatest levels of activity in the period were Leitrim (28 per 10,000 hectares) and Longford (21 per 10,000 hectares). The counties with the least activity were Dublin, Donegal, Kildare, Louth, Wexford, Meath, Monaghan and Tipperary with less than six hectares per 10,000.

10.32 The counties with the lowest levels of broadleaf planting in 2018 were Sligo at 12% of total planting, and Wexford at 13%. The highest levels of broadleaf planting were achieved in Louth and Carlow, with rates of 60% and 48% respectively.

Figure 10.4 Average afforestation activity by county 2015 – 2018, hectares planted per 10,000 hectares in county



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Measure three — investments in infrastructure: Forest Road Scheme

10.33 In order to maintain and harvest forest plantations in a sustainable and efficient manner, access to and within the forest plantation is required. For example, the construction of forest roads allows machinery the access required to thin and harvest trees. There are significant construction costs associated with the building of forest roads.

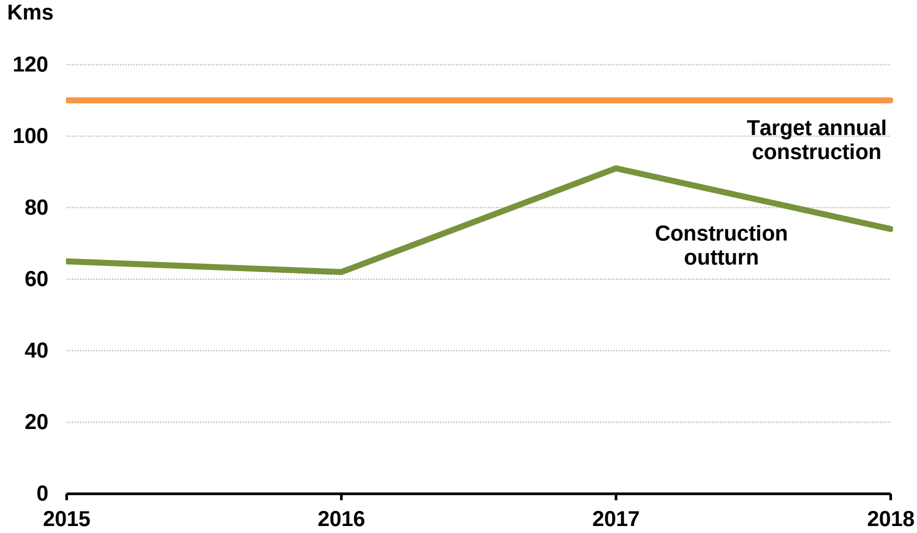
10.34 In 2014, the Forest Policy Review Group outlined the lack of forest roads in private forests in Ireland and the associated impact on the private forestry sector. Measure three was designed to address this concern, with the Department assisting in the provision of this infrastructure through its Forest Road Scheme.

10.35 The scheme provides grants to forest owners at a fixed rate per metre of road constructed — a rate of €40 per metre was set in 2015. In 2018, €3 million or around 3% of the Department's spend on forestry was for this scheme.

Progress in achieving planned outputs

10.36 A target of 110 kilometres of roads constructed per annum was set for the Forest Road Scheme. Figure 10.5 details the outturn for this scheme for the period 2015 to 2018. The total distance of roads constructed over this period was approximately 66% of the targeted level.

Figure 10.5 Roads constructed, target against actual, kilometres



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

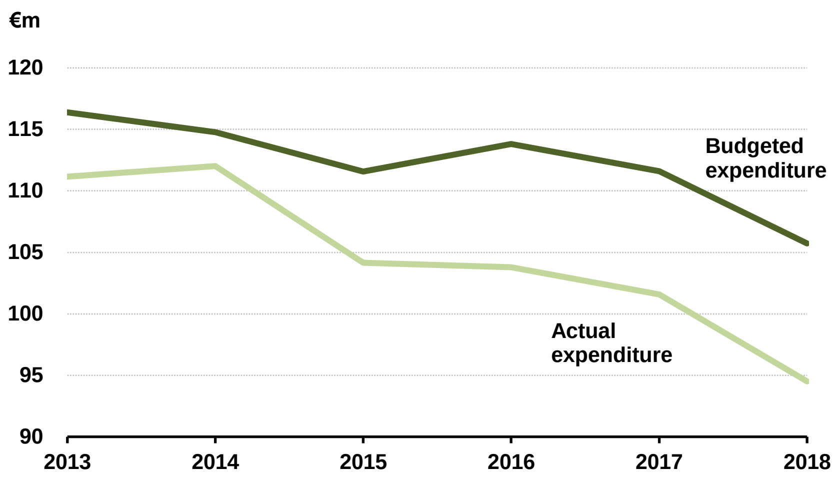
10.37 The mid-term review concluded that one of the main reasons for the shortfall in forest road construction is the requirement to seek planning permission from local authorities where the forest road application includes an exit onto a public road.

10.38 The Department has stated that it is working with the Department of Housing, Planning and Local Government and that regulations should be in place shortly to ensure that the Department is the single consent authority for forest road works, where the exit is onto a public road.

Financial outturn

10.39 In 2018, the Department spent just over €11 million less than budgeted. As Figure 10.6 shows, there has been a consistent underspend in this vote sub-head over recent years.

Figure 10.6 Programme expenditure budgeted vs. actual, 2013 to 2018[a]



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Note: a Includes deferred surrender.

Administration of grants

10.40 The Department is responsible for the development of forestry within Ireland delivered across three divisions

- the Forestry Division which *inter alia* administers grant payments
- the Forestry Inspectorate which is responsible for the environmental and technical aspects of forestry and
- the Forest Sector Development section which deals with the development of the sector.

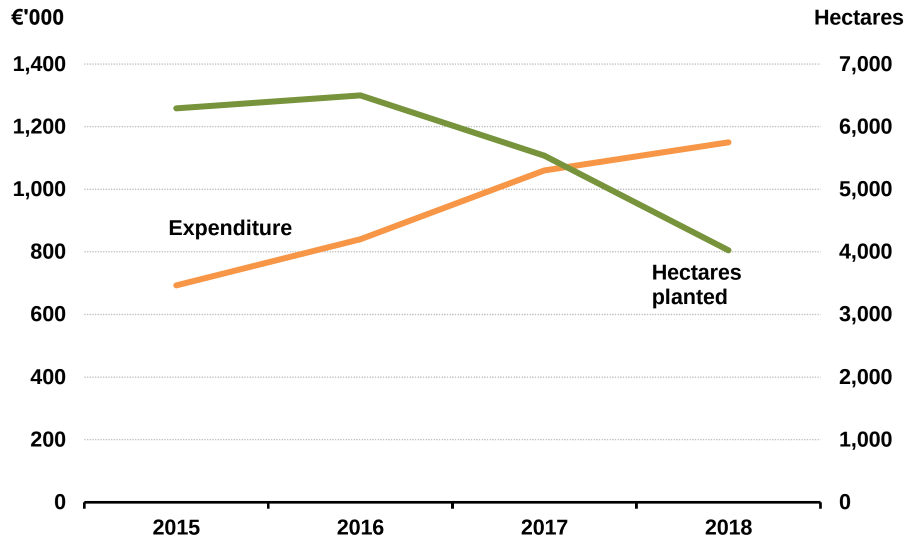
10.41 Teagasc, which operates under the auspices of the Department, has a role in providing research, promotion, training and information for the farm forestry sector. In 2018, it received approximately €670,000 from the Department to promote the programme.

10.42 In 2018, the Department spent around €1.8 million on administrative support (such as promotion, training and knowledge transfer) for the programme. This does not include the Department's staffing costs which it has estimated at around €6 million per annum.

10.43 Expenditure on promotion includes money spent on training, knowledge transfer groups and advisory services. This annual budget has almost doubled since the start of the programme. Figure 10.7 compares the amount spent by the Department on promotion of the programme against the number of hectares planted each year.[1]

1 The Department noted that not all promotion and advisory spending is aimed at new planting. Increasingly, advice and training on the management and mobilisation of timber from existing private forests needs to be supported as the forest estate matures.

Figure 10.7 Promotion and advisory expenditure against hectares planted, 2015 to 2018



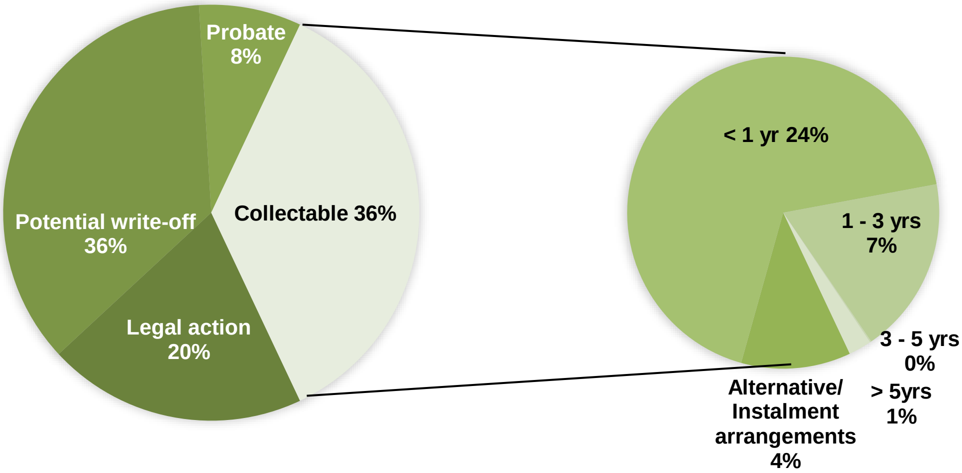
Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Non-compliance with scheme conditions

10.44 Where conditions of the grant have not been met, payments to the applicant will be immediately suspended. The applicant is notified of the reason for the suspension. They are given three months to repay any overpayments. No grants or premiums will be paid during this three-month window. If the overpayment is not repaid, the amount owed will be deducted from subsequent grant and premium payments. In these cases, or where the landholder decides to revert to the previous land use, establishment grants and premiums are repayable to the Department.

10.45 At the end of 2018, the Department was owed €952,000 (2017: €939,000) for the repayment of forestry grants and premiums. As Figure 10.8 shows, over half of this figure (56%) represented amounts either expected to be written off or subject to legal action, and 8% was owed by the estates of deceased individuals. The remainder (€342,000) was deemed collectable by the Department. Figure 10.8 also age-analyses this amount, with the largest element (€232,000, 24% of the overall total) aged less than one year. The Department wrote off €99,660 in 2018.

Figure 10.8 Moneys owed to the Department due to non-compliance with forestry grant conditions



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Economic basis for programme

10.46 In 2014, the Department completed a cost-benefit analysis prior to the commencement of the programme. A number of cost factors, while noted, were not included in the analysis due to the difficulty in quantifying a figure. These included the tax treatment of forestry, the cost of agricultural supports, and the displacement of other activities.

10.47 The cost to benefit ratio was calculated as 1:1.18 for the programme (based on the assumed planting of 7,500 hectares per annum).[1] Around 39% of the benefit was calculated to come from carbon sequestration based on an assumed value of €39 per tonne of carbon dioxide.

1 The analysis concluded that the State would derive €1.18 in benefit for every €1 in cost.

Changes to programme

10.48 A mid-term review of the programme took place in 2018 as required under the approval for State aid. The purpose of the mid-term review was to

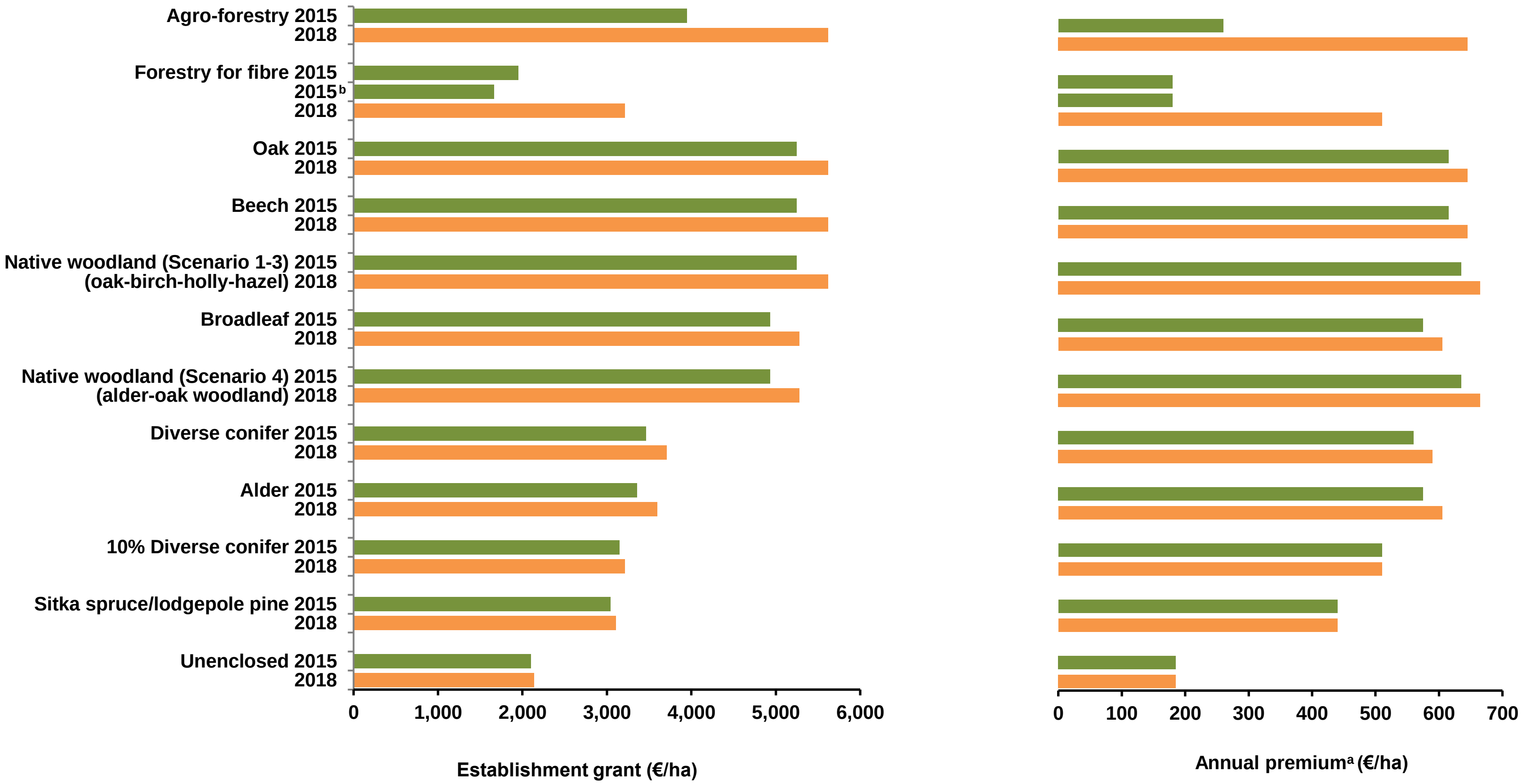
- compare targets against outturn
- where targets were not achieved, identify why this was so
- introduce measures that will help address barriers to achieving future targets
- ensure these proposals are consistent with State aid approval for the forestry programme.

10.49 As a result of the 2018 mid-term review, a number of changes were introduced in February 2018 in order to improve the future performance of the programme and ensure compliance with the conditions of the State aid. These changes were to encourage *inter alia* greater broadleaf planting and larger plantation sizes. Figure 10.9 shows the original and post review grant entitlements. The key changes included increases in grants payable in respect of forestry for fibre and agro-forestry.

10.50 In addition, other changes were made to afforestation grants such as improvements in the funding available for forest fencing, and an increase in the number of premiums available for the forestry for fibre scheme from 10 to 15.

10.51 The Department estimated that the total cost of the changes over the remaining period of the programme was €15.7 million versus the “no change scenario”. This funding was not deemed to be additional funding as it is not over and above what was originally sought for the programme.

Figure 10.9 Forestry grant payment categories, original (green) vs post review (orange)



Source: Department of Agriculture, Food and the Marine. Analysis by the Office of the Comptroller and Auditor General.

Notes:
a The 2018 mid-term review increased these annual premiums by between €5–€15 per hectare for plantations >10 hectares.
b A reduction of €285 per hectare was applied to the Forestry for fibre establishment grant if only aspen was planted.

Conclusions and recommendations

10.52 Up to the end of 2018, there has been a consistent underspend on the Forestry Programme 2014 – 2020. The shortfall in 2018 between the annual estimate and the actual spend was €11 million or 10.6% of the amount provided. The underspend was mainly due to the lower than anticipated take up of grants by land holders.

10.53 The primary focus of the programme is to increase the amount of land forested. The programme set a target of just over 27,000 hectares in the period 2015 to 2018. Over that period, almost 22,500 hectares was afforested — a shortfall of around 17%.

10.54 The Department is required to target at least 30% broadleaf planting, and grant rates were structured to encourage this. The average achieved for the period 2015 to 2017 was 20% broadleaf. This increased to 27% in 2018. The Department attribute the increase to the higher grant rates introduced in February 2018.

10.55 Forest road construction achieved only two thirds of the target of 110 kilometres per year. In February 2018, the Department also increased the amount of road eligible per hectare from 20 metres to 25 metres to encourage participation in the scheme.

10.56 The Department conducted a cost benefit analysis in respect of the programme in 2014. This showed a cost to benefit ratio of 1:1.18 based on the planting of 7,500 hectares per annum. The values associated with a number of assumptions used in the cost benefit analysis have changed since then, in particular the amount of the grants and the value of the savings made in the expected cost of EU carbon dioxide emission credits. A number of cost factors were also not included in the original analysis due to the difficulty in quantifying them.

Recommendation 10.1

Where significant programme changes are being considered, a revised and updated cost benefit analysis should be undertaken. The analysis should take account of any revised targets and consider the alternative methods to achieving those targets.

Response of Accounting Officer

Agreed.

A cost benefit analysis will be undertaken as part of the development of the new Forestry Programme 2021 – 2027, in line with the *Public Spending Code*.

10.57 The forestry programme has national targets for afforestation and broadleaf/conifer mix. Grant rate differences are the mechanism designed to achieve the planting mix targets. In practice, the programme is demand led. As well as a shortfall in broadleaf planting, there is significant divergence in activity between counties — for example, in the period 2015 to 2018, the rate of afforestation in Leitrim was just over 24 times the level in Donegal.

Recommendation 10.2

The Department should review the impact of changes to grant payment rates to ensure that continuation of the programme (as amended in February 2018) represents good value for the State.

Response of Accounting Officer

Agreed.

Grant and premium rates for afforestation are set in accordance with EU regulatory requirements. Grants cover establishment costs and premiums cover income forgone, all of which comply with State aid rules on proportionality. The development of the new Forestry Programme 2021 – 2027 will include an analysis of the State's total investment in forestry since 1980 and the value of timber produced from this investment. It will also include an estimate of the value of carbon based on the new shadow price of carbon as provided for in the revised *Public Spending Code* (see Department of Public Expenditure and Reform circular 18/2019).

Annex 10A

Figure 10A.1 Afforestation grants and premium 2018 and 2015

GPC category		Establishment grant[a] €/ha		Annual premium (€ per ha)	
2018		**1st instalment**	**2nd instalment**	**<10ha**	**>10ha**
1	Unenclosed	1,605	535	185	190
2	Sitka spruce/lodgepole pine	2,330	775	440	450
3	10 % diverse conifer	2,410	805	510	520
4	Diverse conifer	2,785	925	590	600
5	Broadleaf	3,960	1,320	605	620
6	Oak	4,215	1,405	645	660
7	Beech	4,215	1,405	645	660
8	Alder and birch	2,695	900	605	620
9	Native woodland establishment (oak-birch-holly-hazel)	4,215	1,405	665	680
10	Native woodland establishment (alder-oak woodland)	3,960	1,320	665	680
11	Agro-forestry	4,215	1,405	645	660
12	Forestry for fibre	2,410	805	510	520
2015					
1	Unenclosed	1,575	525	185	
2	Sitka spruce/lodgepole pine	2,310	735	440	
3	10% diverse conifer	2,360	790	510	
4	Diverse conifer	2,625	840	560	
5	Broadleaf	3,780	1,155	575	
6	Oak / beech	3,990	1,260	615	
7	Beech	3,990	1,260	615	
8	Alder	2,520	840	575	
9	Native woodland establishment (Scenario 1-3)	3,990	1,260	635	
10	Native woodland establishment (Scenario 4)	3,780	1,155	635	
11	Agro-forestry	2,960	990	260	
12a	Forestry for fibre	1,460	490	180	
12b	Forestry for fibre - aspen	1,245	420	180	

Source: Department of Agriculture, Food and the Marine

Note: a Excludes payment of between €350 and €600 for fencing.

Annex 10B

Figure 10B.1 Land afforested in 2018, by county in hectares

County	Hectares
Carlow	26
Cavan	321
Clare	262
Cork	297
Donegal	64
Dublin	4
Galway	287
Kerry	332
Kildare	79
Kilkenny	136
Laois	71
Leitrim	299
Limerick	81
Longford	171
Louth	10
Mayo	256
Meath	106
Monaghan	87
Offaly	72
Roscommon	399
Sligo	139
Tipperary	128
Waterford	43
Westmeath	175
Wexford	60
Wicklow	121

Source: Department of Agriculture, Food and the Marine