

NFI 25-year projection of timber availability in the Argyll and Bute Council Area

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Summary

This report provides a detailed picture of the 25-year forecast of timber availability for the Argyll and Bute Council Area. Although presented for different periods, these estimates are effectively a subset of those published as part of the 50-year forecast estimates presented in the National Forest Inventory (NFI) *50-year forecasts of softwood timber availability (2014)* and *50-year forecast of hardwood timber availability (2014)* reports. NFI reports are published at www.forestry.gov.uk/inventory.

The estimates provided in this report are provisional in nature.

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Approach

The approach taken in the derivation of these results and to be used in their interpretation is described in the full suite of forecast reports which can be found at www.forestry.gov.uk/forecast.

Refer to the *NFI forecasts methodology overview* report for a detailed description and discussion of forecasting future availability of timber from NFI field survey data and from information in the Forestry Commission's sub-compartment database (SCDB).

The methodology and interpretation underlying the forecast in this report are discussed in the NFI reports *50-year forecast of softwood timber availability (2014)* and the *50-year forecast of hardwood timber availability (2014)*. These reports can also be referred to for the wider Scotland and Great Britain context.

The estimates reported here are based upon field samples assessed between October 2009 and August 2013, the results of which have been subjected to rigorous data quality assurance procedures. These field samples constitute approximately two thirds of the sites to be sampled within the first cycle of NFI field sampling. As a consequence, the estimates in this report are described as provisional.

25-year forecast of timber availability

Refer to the NFI report *50-year forecast of softwood timber availability (2014)* for a description of the underlying methodology and interpretation of the softwood forecast, and also for the Scotland and GB context.

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The timber availability estimates for the Forestry Commission are derived using the harvesting regimes described in the Forestry Commission approved forest design plans and thinning plans as of 31 March 2012.

The softwood timber availability estimates for the Private sector are based on a scenario which assumes conifers are felled at age of maximum mean annual increment with moderate wind risk measures being taken. The hardwood timber availability estimates are derived only from those areas where there is evidence of thinning in broadleaves. This is a conservative assumption but more closely reflects current practice than assuming all broadleaved stands will be managed. Those broadleaved stands that are assumed to be subject to future management under this scenario are felled at age of maximum mean annual increment with moderate wind risk measures being taken.

Where standing conifers are already beyond the age of maximum mean annual increment, the forecast assumes that a proportion will be felled during the forecast period. The assumptions can be found in full in **Table D2** of the NFI report *50-year forecast of softwood timber availability (2014)*. Where standing broadleaves are already beyond the age of maximum mean annual increment, the forecast assumes that a proportion will be felled during the forecast period. The assumptions can be found in full in the section 'Overdue timber' starting on **Page 20** of the NFI report *50-year forecast of hardwood timber availability (2014)*.

Restocking assumptions for conifer stands clearfelled during the forecast period have been implemented that provide for:

- a 10% reduction in the area of conifers on the subsequent rotation
- currently clearfelled land is restocked
- a change in the composition of conifer species on restocking

Restocking assumptions for broadleaved stands clearfelled during the forecast period have been included that provide for:

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- No reduction in stocked area
- Like for like species choices
- That 50% of the land associated with the reduction in conifer stocked area after felling of conifers

A full description of the restocking assumptions can be found in **Table D4** of the NFI report *50-year forecast of softwood timber availability* (2014). The same restocking assumptions have been applied to both the FC and Private sector forecasts. Woodland that is classed as currently clearfelled will be restocked according to the restock prescription.

It should be noted that a small amount of thinning volume arising from restocking is included in the timber availability estimates for later periods of the forecast.

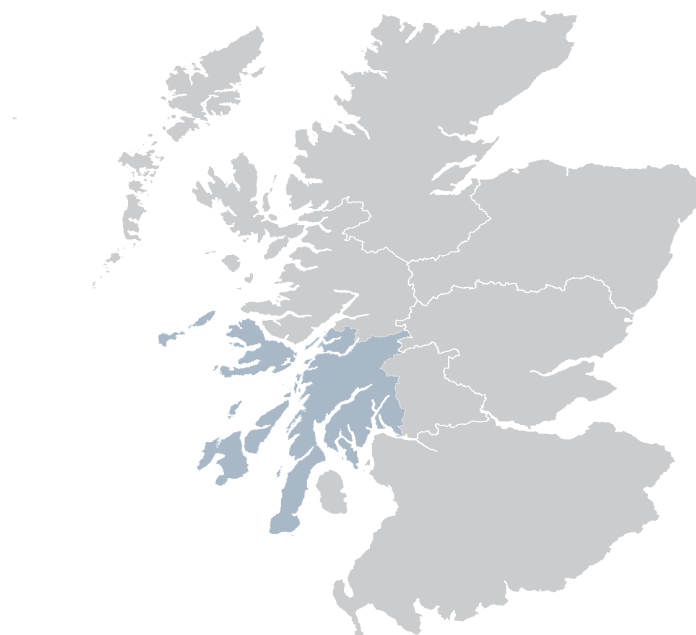
Results

The results presented in this report are estimates of the 25-year forecast of softwood and hardwood availability under the harvesting scenario as described, for the Argyll and Bute Council Area.

The values in the tables have been independently rounded, so may not add to the totals shown. In some breakdowns of Private sector estimates, the estimates in the body of the table may not sum to the quoted total because each individual value, including the total, has been independently generated by the estimation procedure used for generating results from the NFI sample survey. Sampling standard errors (SE) attached to Private sector estimates are expressed in relative terms (%) to the right of the relevant estimate.

Results for the Argyll and Bute Council Area

Map 1 Argyll and Bute



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Table 1 Summary of stocked area 31 March 2012 – Argyll and Bute

	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers	68.3	60.5	2	128.8
All broadleaves	6.8	29.6	4	36.3
All species	75.1	90.1	2	165.2

Tables A1 and A2 showing the 25-year forecast broken down by time period, top diameter class and principal species groups can be found in the associated spreadsheet.

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Figure 1 Summary of 25-year forecast of annual softwood timber availability – Argyll and Bute

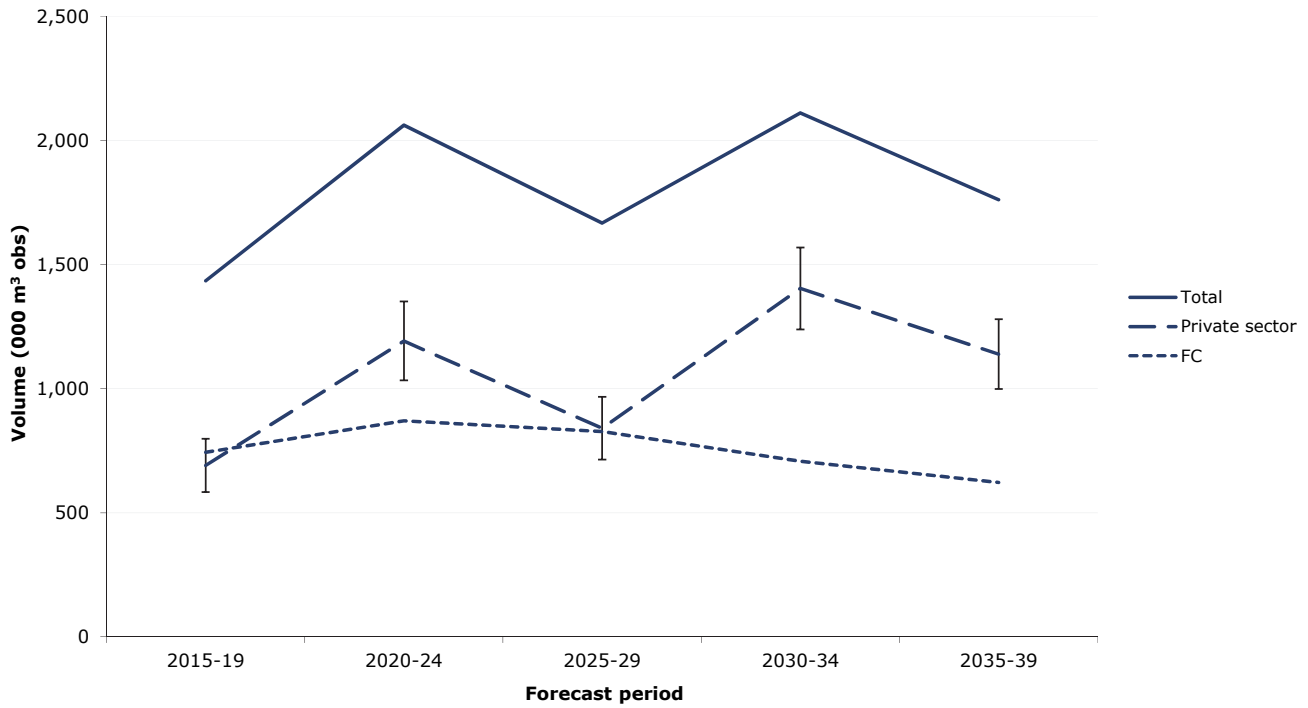


Table 2 Summary of 25-year forecast of average annual timber availability – Argyll and Bute

Forecast period	FC	Private sector		Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Softwood				
2015-19	744	691	16	1,435
2020-24	870	1,192	13	2,062
2025-29	827	841	15	1,667
2030-34	708	1,404	12	2,111
2035-39	622	1,139	12	1,761
Hardwood				
2015-19	0	9	29	9
2020-24	0	17	26	17
2025-29	0	16	15	16
2030-34	0	20	15	20
2035-39	1	29	23	30
Total				
2015-19	744	699	15	1,443
2020-24	870	1,209	13	2,079
2025-29	827	857	15	1,683
2030-34	708	1,423	12	2,131
2035-39	623	1,169	12	1,791

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Figure 2 Cumulative softwood timber availability over the 25-year forecast – Argyll and Bute

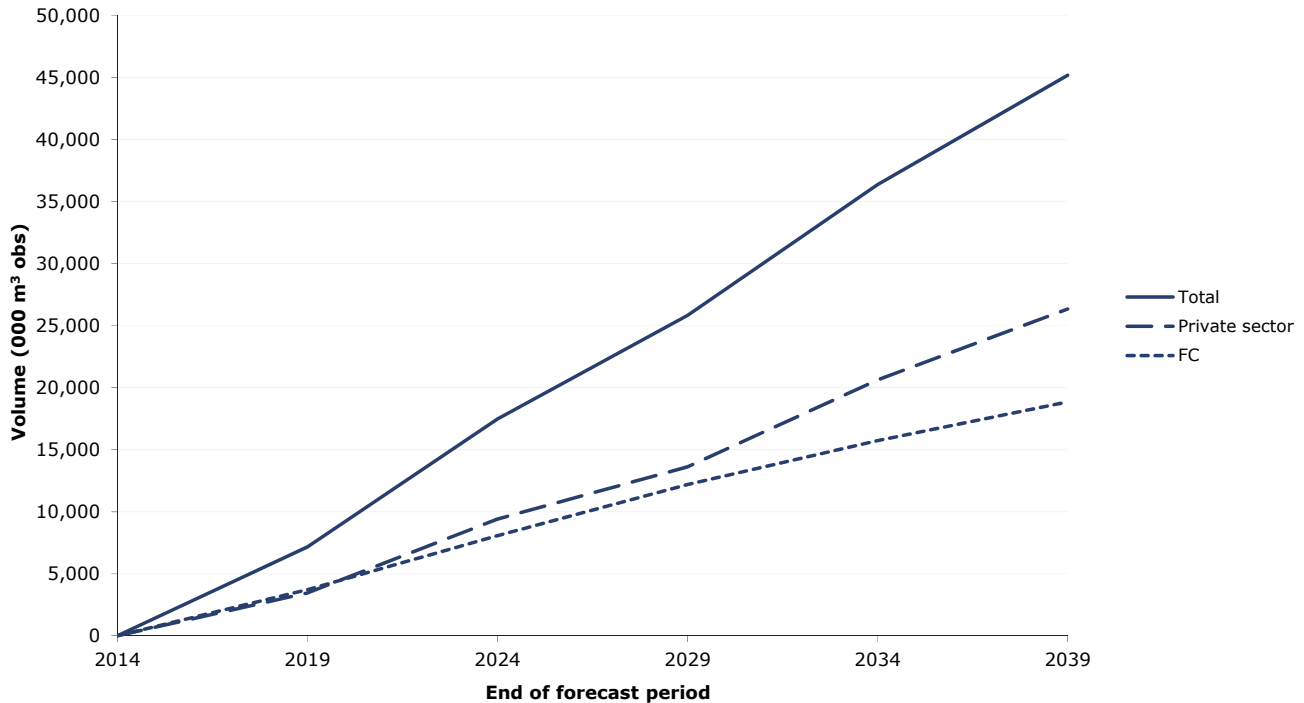
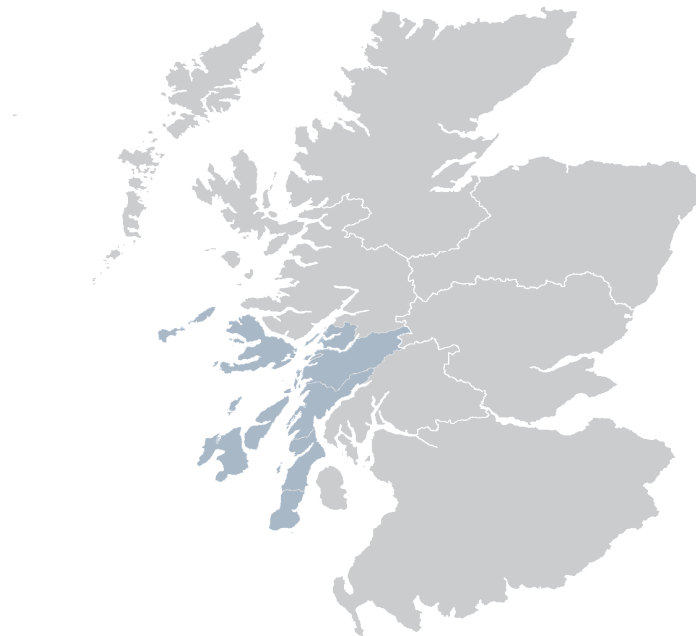


Table 3 Cumulative timber availability over the 25-year forecast – Argyll and Bute

Forecast period	FC	Private sector	Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	volume (000 m ³ obs)
Softwood			
2015-19	3,719	3,454	7,173
2015-24	8,069	9,413	17,482
2015-29	12,203	13,616	25,819
2015-34	15,741	20,634	36,375
2015-39	18,852	26,329	45,182
Hardwood			
2015-19	1	44	44
2015-24	1	129	130
2015-29	1	209	210
2015-34	2	308	310
2015-39	5	455	460
Total			
2015-19	3,720	3,497	7,217
2015-24	8,070	9,543	17,612
2015-29	12,204	13,826	26,030
2015-34	15,743	20,943	36,687
2015-39	18,857	26,787	45,644

Results for Argyll and Bute North

Map 2 Argyll and Bute North



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Table 4 Summary of stocked area 31 March 2012 – Argyll and Bute North

	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers	52.8	42.5	2	95.3
All broadleaves	5.1	20.2	5	25.3
All species	57.9	62.8	2	120.7

Tables A3 and A4 showing the 25-year forecast broken down by time period, top diameter class and principal species groups can be found in the associated spreadsheet.

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Figure 3 Summary of 25-year forecast of annual softwood timber availability – Argyll and Bute North

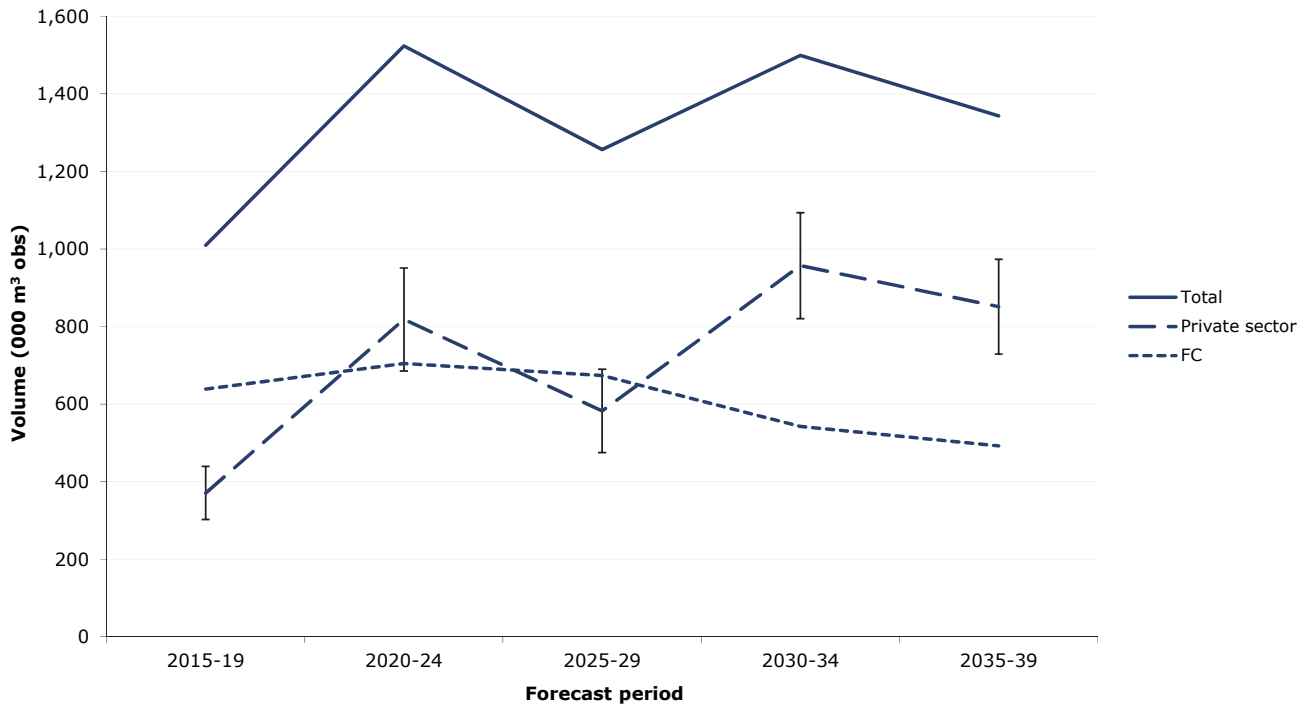


Table 5 Summary of 25-year forecast of average annual timber availability – Argyll and Bute North

Forecast period	FC	Private sector		Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Softwood				
2015-19	639	371	18	1,009
2020-24	705	818	16	1,523
2025-29	674	582	18	1,256
2030-34	542	957	14	1,499
2035-39	492	851	14	1,343
Hardwood				
2015-19	0	7	34	8
2020-24	0	14	30	14
2025-29	0	12	18	12
2030-34	0	14	19	15
2035-39	0	22	31	22
Total				
2015-19	639	378	18	1,017
2020-24	705	832	16	1,537
2025-29	674	594	18	1,268
2030-34	543	972	14	1,514
2035-39	493	873	14	1,366

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Figure 4 Cumulative softwood timber availability over the 25-year forecast – Argyll and Bute North

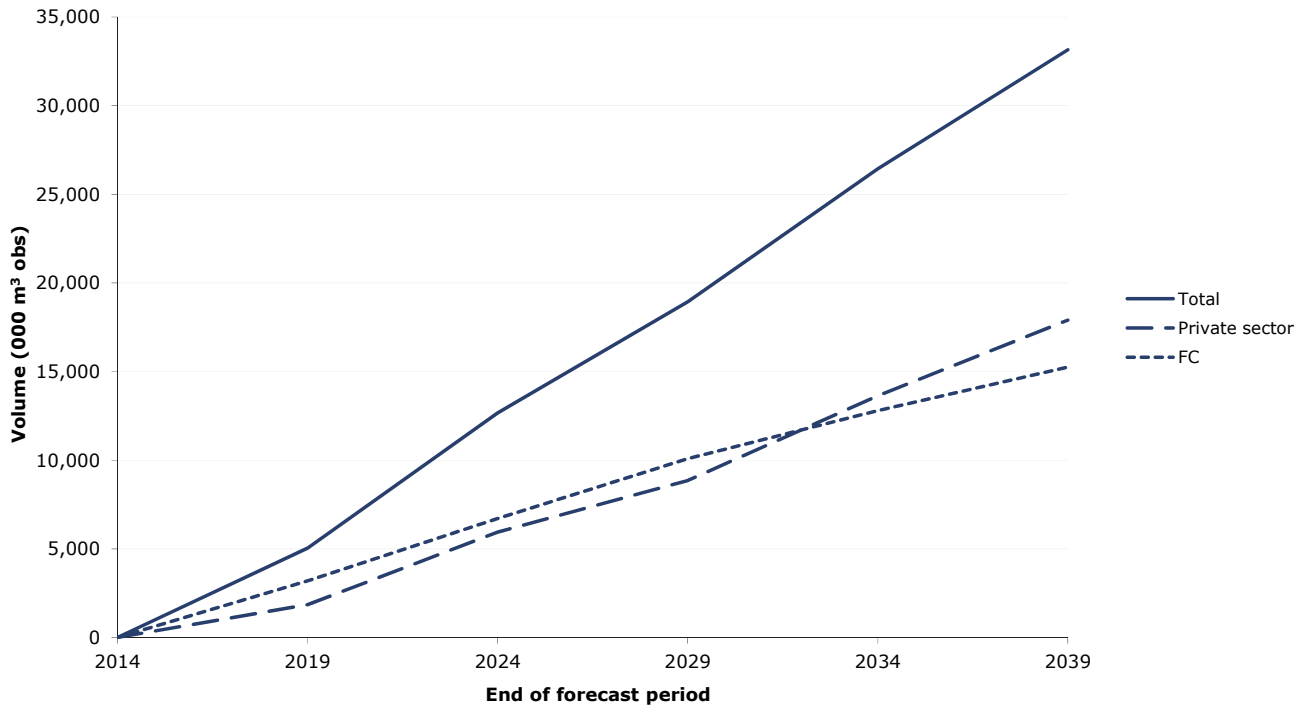


Table 6 Cumulative timber availability over the 25-year forecast – Argyll and Bute North

Forecast period	FC	Private sector	Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	volume (000 m ³ obs)
Softwood			
2015-19	3,193	1,854	5,046
2015-24	6,716	5,946	12,662
2015-29	10,086	8,857	18,943
2015-34	12,798	13,642	26,440
2015-39	15,259	17,898	33,157
Hardwood			
2015-19	0	37	38
2015-24	1	106	107
2015-29	1	164	165
2015-34	2	237	238
2015-39	4	345	348
Total			
2015-19	3,193	1,891	5,084
2015-24	6,717	6,052	12,769
2015-29	10,086	9,022	19,109
2015-34	12,799	13,880	26,679
2015-39	15,262	18,245	33,508

Results for Argyll and Bute South

Map 3 Argyll and Bute South



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Table 7 Summary of stocked area 31 March 2012 – Argyll and Bute South

	FC	Private sector		Total
	area (000 ha)	area (000 ha)	SE%	area (000 ha)
All conifers	15.5	17.9	4	33.4
All broadleaves	1.6	9.3	6	11.0
All species	17.1	27.3	3	44.4

Tables A5 and A6 showing the 25-year forecast broken down by time period, top diameter class and principal species groups can be found in the associated spreadsheet.

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Figure 5 Summary of 25-year forecast of annual softwood timber availability – Argyll and Bute South

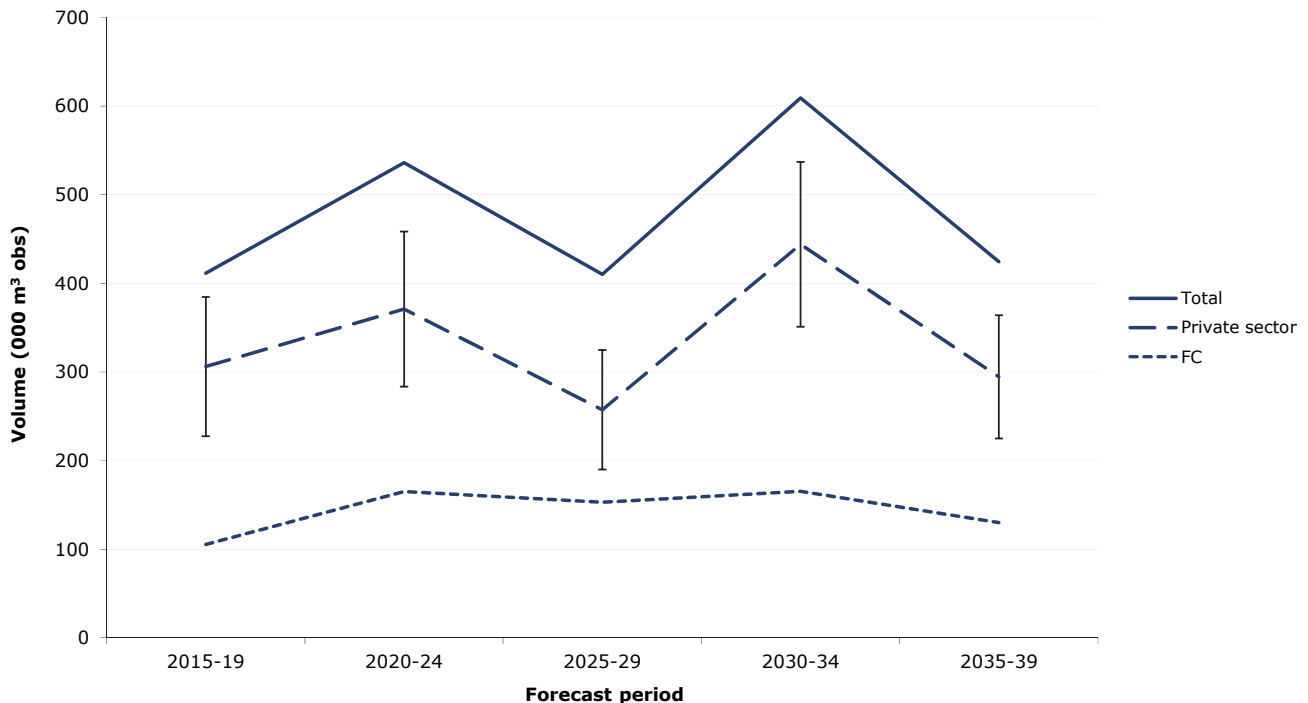


Table 8 Summary of 25-year forecast of average annual timber availability – Argyll and Bute South

Forecast period	FC	Private sector		Total
	volume (000 m³ obs)	volume (000 m³ obs)	SE%	volume (000 m³ obs)
Softwood				
2015-19	105	306	26	411
2020-24	165	371	24	536
2025-29	153	257	26	410
2030-34	165	444	21	609
2035-39	130	294	24	424
Hardwood				
2015-19	0	1	41	1
2020-24	0	3	33	3
2025-29	0	4	27	4
2030-34	0	5	23	5
2035-39	0	8	23	8
Total				
2015-19	105	307	26	413
2020-24	165	374	23	539
2025-29	153	262	26	415
2030-34	165	449	21	614
2035-39	130	302	23	433

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Figure 6 Cumulative softwood timber availability over the 25-year forecast – Argyll and Bute South

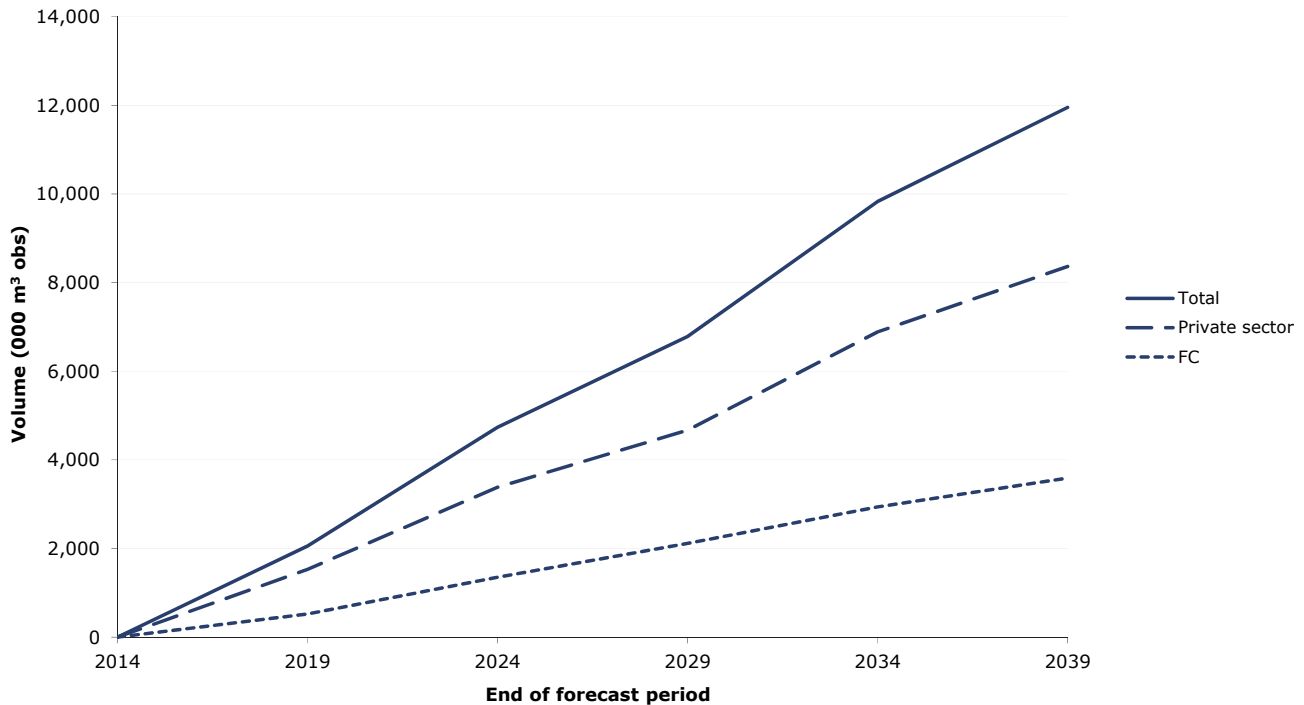


Table 9 Cumulative timber availability over the 25-year forecast – Argyll and Bute South

Forecast period	FC	Private sector	Total
	volume (000 m ³ obs)	volume (000 m ³ obs)	volume (000 m ³ obs)
Softwood			
2015-19	527	1,530	2,057
2015-24	1,353	3,385	4,737
2015-29	2,117	4,671	6,788
2015-34	2,943	6,890	9,833
2015-39	3,593	8,363	11,956
Hardwood			
2015-19	0	6	7
2015-24	0	23	23
2015-29	0	45	45
2015-34	1	71	72
2015-39	1	111	112
Total			
2015-19	527	1,537	2,064
2015-24	1,353	3,408	4,761
2015-29	2,117	4,716	6,833
2015-34	2,944	6,962	9,906
2015-39	3,595	8,474	12,069

NFI national reports and papers

The principal themes reported on for the 2011 woodland profile and future forecasts are:

- GB 2011 preliminary estimates of broadleaved species
- GB 2011 standing coniferous timber volume
- UK 25-year forecast of softwood availability
- GB 25-year forecast of coniferous standing volume and increment
- Biomass in live woodland trees in Britain
- Carbon in live woodland trees in Britain

The principal themes reported on for the 2012 woodland profile and future forecasts are:

- 50-year forecast of softwood timber availability
- 50-year forecast of hardwood timber availability

Each theme has a series of reports, papers and data, tailored for different audiences and uses. All the documents and data can be found on the NFI website www.forestry.gov.uk/inventory.

Glossary

A glossary of terms is presented in the full suite of forecast reports which can be found at www.forestry.gov.uk/forecast.

Official Statistics

This is an Official Statistics publication. More information about Official Statistics and the UK Statistics Authority is available at www.statisticsauthority.gov.uk

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