UNECE Forestry & Timber Market Report for Ireland 2017

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1.0 Irish economy-an overview

1.1 2016

The Irish economy saw significant growth in 2016 with improvements observable across a broad set of key indicators. Gross Domestic Product (GDP) and Gross National Product (GNP) increased by 5.2% and 9.0% respectively while unemployment fell to 7.9%¹.

In summary²:

- At market prices, Gross Domestic Product (GDP) in 2016 was €268 billion, an increase in volume of 5.2% over 2015.
- Gross National Product (GNP), increased by 9.0% over 2015 to €227 billion.
- Export growth has been strong, thanks partly to improved cost-competitiveness since 2009.
- In 2016, the volume of exports grew by 2.4% over 2015.
- At the end of 2016, unemployment stood at 7.9%, below the European average of 11%.
- Inflation as measured by the Consumer Price Index (CPI) was 0.0% for 2016.
- Personal consumption, which accounts for nearly two thirds of domestic demand, grew by 3.0% while Government expenditure increased by 5.3% over 2015.
- In 2016, €4.6 billion was invested in the Irish housing sector and an estimated 14,932 homes were completed, an increase of 18% over 2015³. However, completion numbers are subject to further scrutiny (see construction activity; section 2.1).

1.2 2017-2018

The Irish economy is expected to continue to grow, driven by strong domestic demand. Improving household balance sheets and falling unemployment are expected to support solid consumption growth over the forecast horizon. The expansion in underlying investment activity, particularly construction, looks set to continue into 2017 and 2018, according to a variety of indicators⁴.

The Irish labour market continued to exhibit strong growth into 2017. The improvements in the labour market appear to be quite broad, both regionally and by sector, with almost all sectors registering employment growth. The unemployment rate is forecast to average 5.4% in 2018. Positive projections for inflation may also support moderate rises on wages over the period.

Brexit continues to pose a substantial risk for the Irish economy. New estimates provided by the Irish Economic and Social Research Institute (ESRI) suggest that a hard Brexit could have significant implications for discretionary spending in annual government budgets. This comes at a time when taxation revenue growth in 2017 has slowed down considerably as income, corporation and excise duties have all taken in less revenue than expected.

- Economic growth is projected to be robust and broadly based in 2017 and 2018.
- However, it is likely Brexit will constrain Irish growth prospects in the short term⁵. In the short-term the key issues of concern include a slowdown in the UK economy and a further weakening of sterling⁶.
- GDP is forecast to grow by 3.8% in 2017 and 3.6% in 2018.
- GNP is forecast to grow by 3.5% in 2017 and 3.3% in 2018'.
- Exports are expected to remain strong: the volume of exports of goods and services are expected to increase by 5.9% in 2017 and by 8.7% in 2018¹⁰.
 - o Irish exports have made a very strong start to 2017, with nominal merchandise (goods) exports increasing by 7% year-on-year in the year to June⁸.

¹ https://www.esri.ie/pubs/QEC2017SUM_2.pdf

https://www.esri.ie/UserFiles/publications/QEC2015AUT_ES.pdf

³ http://www.housing.gov.ie/housing/statistics/house-building-and-private-rented/construction-activity-esb-connections

https://www.esri.ie/news/economic-growth-set-to-remain-solid-in-2017-and-2018/

⁵ http://www.ntma.ie/business-areas/funding-and-debt-management/irish-economy/

https://www.friendsfirst.ie/wp-content/uploads/Economic-Outlook-Report-Aug.16-VF.pdf

https://www.esri.ie/pubs/QEC2017SUM_2.pdf

⁸ www.cso.ie

The Programme for Government, which was published in May 2016, addresses a number of key policy challenges. A significant amount of attention is devoted to the housing issue with commitments given to have 25,000 new housing units per annum up to 2020, with additional undertakings provided on the provision of social housing.

- Investment in the Irish house building sector is estimated to increase to €7.6 billion in 2017 and €9.0 billion in 2018, year-on-year increases in value terms of 17.1% and 19.2% respectively.
- For the first two months of 2017, completions were up on an annual basis following the trend set in 2016. The total number of houses built was just under 15,000 in 2016; it is expected that this will increase to 18,500 units in 2017and to 23,500 units in 2018.
- The rate of unemployment is set to decline to 6.1% in 2017 and 5.4% in 2018.
- Further increases in employment, rising real disposable incomes and gradually strengthening consumer confidence are projected to support a pick-up in the growth of consumer spending over the remainder of 2017 and 2018. Private consumer expenditure is forecast to rise by 3.1% in 2017 and 3.0% in 2018.
- Inflation as measured by the Consumer Price Index (CPI) is forecast to be 0.6% in 2017 and 1.1% in 2018.
- In 2017, the Government budget deficit is expected to fall to 0.3% of GDP and the debt/GDP ratio to 72%.
- The actual and expected growth in the GDP contribution of Ireland's export markets is shown in Table 1¹⁰.

Table 1: Actual and estimated GDP gr	rowth in key markets (20	012-2018f).
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Region	2012	2013	2014	2015	2016	2017f	2018f
			Real ar	nnual g	rowth %	6	
World	3.9	3.3	3.3	3.1	3.1	3.5	3.6
United States	2.2	1.9	2.6	3.0	1.6	2.3	2.5
Euro area	-0.6	-0.5	0.8	1.5	1.7	1.7	1.6
EU28					2.0	2.0	1.8
United Kingdom	0.0	1.7	2.6	2.2	1.8	2.0	1.5

1.3 Brexit

The UK is the key market for forest product exports from Ireland. As such, Brexit poses challenges for the Irish forest sector, as it is one of the most heavily dependent sectors on the UK market. It is still too early to assess the likely impact on the UK economy of its leaving the EU or the extent to which any possible fall in investment and a potentially softer housing market could impact employment and household spending. It is expected to take at least two years to conclude negotiations on the UK's exit from the EU. The uncertainty during this period and beyond could negatively impact the UK economy and reduce demand in the housing and repair, maintenance and improvement (RMI) sectors 11.

2.0 Market drivers

2.1 Construction activity

The demand for forest products is closely related to the level of house building, including timber frame and to demand in key export markets¹². The investment climate for building and construction is increasingly positive. Residential building is leading the recovery, followed by civil engineering and non-residential building.

In 2016, the output of the Irish construction industry was \in 14.2 billion, an increase of 12.4% over 2015. The recovery in is expected to continue during 2017 and 2018, to \in 17.0 billion and \in 19.5 billion respectively. These projections represent increases of almost 15 percent per annum. However, even with these sizeable growth rates,

⁹ https://static.rasset.ie/documents/news/davy.pdf

¹⁰ https://www.esri.ie/pubs/QEC2017SUM_2.pdf

¹¹ http://www.graftonplc.com/~/media/Files/G/Grafton/ANNUAL%20REPORT%202016%20-%20FINAL.pdf

http://www.coillte.ie/fileadmin/templates/pdfs/BaconReport.pdf

the output in 2018 will still only be at 2001 levels and approximately half of the 2007 peak output of over €38 billion. While this peak output was unsustainably high, the predicted output level for 2017 represents just 7.5% of GNP, which is well below the recognised European sustainable level of between 10- 12% ^{13,14}.

The output of the Irish construction sector continues to improve. On an annual basis, the volume of output in building and construction increased by 13.5% in the second quarter of 2017 when compared with the second quarter of 2016. Output volumes increased by 21.4% and 20.5% respectively in non-residential and residential building work¹⁵.

Recent analysis by the Economic and Social Research Institute (ESRI) has estimated that, in coming years, increases in population will result in the formation of at least 20,000 new households each year, each requiring a separate dwelling. In addition, a number of existing dwellings will disappear through redevelopment or dilapidation. The results suggest an ongoing need for at least 25,000 new dwellings a year over the coming fourteen years¹⁶.

In addition, the Government has committed to achieving, by 2020, a 20% reduction in energy demand across the whole of the economy through energy efficiency measures. It is expected that the residential sector will contribute 35% of the targeted savings, thus generating opportunities for improving the energy efficiency of the residential building stock.

2.1.1 Irish housing output

In 2016, housing completions increased by 18% over 2015 to 14,932 (Table 2)^{17,18}. However, the estimated demand for new housing was 25,000.

Table 2: Actual and	forecast house com	nletions in the	Republic of	f Ireland (2012-2018f)
1 auto 2. Actual alla	TOTCCAST HOUSE COIL	picuons in uic	IXCDUDITE OF	i iicianu (2012-20101).

Year	House completions	Growth rate 1990 = 100
2012	8,488	43.44
2013	8,301	42.48
2014	11,016	56.38
2015	12,666	64.84
2016	14,932	76.43
2017f	18,500	94.68
2018f	23,500	120.27

However, the figures for household completions include an element of previously unfinished units which having commenced several years ago, were stalled during the construction downturn only to be finished out more recently. In addition, units which were disconnected from the network for more than two years and then reconnected are also included. As such, the housing completions figures are most likely an overestimation, but are the best currently available data¹⁹.

In May 2014, the Government launched its Construction 2020 Strategy to address constraints on housing supply²⁰. This provides measures which aim to resolve the constraints currently facing the construction sector²¹.

The Irish Programme for Government also commits to delivering 25,000 new housing units per annum between now and 2020. There is also a renewed commitment to expedite the delivery of social housing units, with the pledge that 18,000 additional housing units will be supplied by 2017, and 17,000 additional housing units by the end of 2020. Overall, however, despite a number of initiatives cited in the programme, it is not clear how the supply of housing will be particularly accelerated from its present low base ²².

In May 2017, housing commencements showed a 35% increase on the same period for 2016²³.

14 https://www.linesight.com/knowledge/2017/ireland/ireland-market-review-2017

¹³ http://kmcs.ie/kmcs-construction/

¹⁵ http://www.cso.ie/en/releasesandpublications/er/pbci/productioninbuildingandconstructionindexquarter22017/

http://www.merrionstreet.ie/wp-content/uploads/2014/05/Construction-Strategy-14-May-20141.pdf

¹⁷ This data is subject to verification. See the note under Table 2.

¹⁸ http://www.housing.gov.ie/housing/statistics/housing-statistics

http://www.housing.gov.ie/sites/default/files/publications/files/monthly_housing_activity_report_-_jan_17.pdf

http://www.merrionstreet.ie/en/wp-content/uploads/2014/05/Construction-Strategy-14-May-20141.pdf

²¹ http://www.taoiseach.gov.ie/eng/Publications/Publications_2014/Construction_Strategy_-_14_May_2014.pdf

https://www.esri.ie/pubs/QEC2016SUM.pdf

²³ Lhttp://www.housing.gov.ie/housing/statistics/house-building-and-private-rented/construction-activity-starts

2.1.2 Repair, Maintenance and Improvement (RMI)

In 2016, expenditure on RMI grew by 12.4% over 2015 to reach €4.8 billion, with 79% being spent in the residential sector^{24,25}.

Table 3: Output of the Repair, Maintenance and Improvement (RMI) sector (2012-2016).

Year	Residential	Private non- residential	Social	Civil works	Total	% change year-on-year
			€ billion			
2012	2.80	0.08	0.23	0.57	3.68	
2013	2.75	0.09	0.24	0.46	3.54	-3.8
2014	2.94	0.10	0.26	0.50	3.80	+73
2015	3.31	0.11	0.29	0.56	4.27	+12.4
2016	3.77	0.10	0.34	0.59	4.80	+12.4

2.1.3 **Construction inflation**

In 2016, the wholesale price index for building materials showed a 0.7% increase on 2015 (Table 4)^{26,27,28,29}

Table 4: Wholesale price index for building materials (2012-2016).

Item	2012	2013	2014	2015	2016
Index $(2005 = 100)$	122.6	123.6	126.3	127.6	128.5
% change year on year	2.5	0.8	2.2	1.0	0.7

2.2 **UK** construction market

The UK construction market is the key export outlet for forest products manufactured in Ireland. The number of houses built across the UK, has fallen from 378,000 in 1969/70 to an average of 153,000 for the period 2014- $2016 (Table 5)^{30}$.

Moreover, a recent report has shown that there is a continual need for new homes within the UK, with the UK Parliament stating a need for at least 300,000 homes a year to meet demand. At present the demands for housing outstrip the current levels of supply³¹.

Table 5: House starts and completions in the UK (2012-2016).

Year	Starts	1998 = 100	Completions	1998 = 100
2011	138.230	0.70	136,010	0.71
2012	136,200	0.69	145,780	0.76
2013	127,010	0.64	133,000	0.70
2014	162,100	0.82	138,350	0.73
2015	171,850	0.87	152,520	0.80
2016	174,520	0.88	168,600	0.89

²⁴ https://www.scsi.ie/documents/get_lob?id=538&field=file

²⁵ http://dkm.ie/en/news/report_on_the_construction_industry_in_ireland

http://www.cso.ie/en/releasesandpublications/er/wpi/wholesalepriceindexmarch2015/ http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=WPM18&PLanguage=0

http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/saveselections.asp

²⁹ http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/saveselections.asp

³⁰ https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building

https://publications.parliament.uk/pa/ld201617/ldselect/ldeconaf/20/20.pdf

2.2.1 UK housing outlook

In the year to Q2 2017, the UK economy was delivering low and sluggish growth with a quarter-on-quarter growth in Q1 2017 of 0.2% and Q2 2017 of 0.3% 32 .

Despite the better performance in the private sector in 2016, there is much ground to recover if output is to return to the most recent peak year of 2006. In 2016, UK housing output was 33% below the 2006 level. In the larger housing repair, maintenance and improvement (RMI) sector, volume remained 10% below 2006.

Over the period 2015-2019, construction output in the UK has been forecast to grow by 2.7% per annum³³ (Table 6)³⁴.

Table 6: Estimated	construction ou	tput in the UK	(2014-2019f).

Construction type	2014	2015	2016	2017	2018	2019	2015-2019
	£ million 2010 prices	Forecast annual change					Average annual %
Public housing	5,635	5	0	2	3	2	2.4
Private housing	20,121	10	5	3	3	2	4.6
Housing R & M ³⁵	21,862	3	1	3	2	1	2.0
Non housing R & M	23,621	2	3	2	1	1	1.7
Total	71,239						2.7

There is recent evidence to suggest that the UK construction sector has experienced a slowdown over summer 2017, likely linked to a lack of new projects resulting in a seeming stagnation in commercial activity³⁶.

A number of other indicators also point to softening activity in in 2017. Mortgage approvals for house purchase have edged down to date in 2017 and are running below year-earlier levels. The Royal Institute of Chartered Surveyors (RICS) surveys report lacklustre market conditions, with a fall in new buyer enquiries recently and sales expected to be flat over the coming months³⁷.

Whilst the UK construction industry plays a vital role in driving sawn softwood consumption and imports, domestic producers play a dominant role in the pallet, packaging, fencing and outdoor products markets³⁸.

2.2.2 Demand for timber packaging in the UK

The UK timber packaging market is showing signs of recovery. In 2013, the quantity of both newly manufactured and repaired pallets increased by just over 1%, to 66.2 million; while the quantity of newly manufactured pallets rose from 31.4 million in 2013 to 32.5 million in 2014, an increase of 3.5% ^{39,40}.

A report by the Timber Packaging and Pallet Confederation (Timcon)⁴¹ showed that in 2013, homegrown UK softwood had a 74% share of the UK pallet/packaging sector. Over the period 2012-2013 exports of pallet/packaging timber from the Republic of Ireland grew by 60% to reach a market penetration of 5.5%.

³² http://www.unece.org/fileadmin/DAM/timber/country-info/statements/unitedkingdom2017.pdf

https://www.citb.co.uk/documents/research/csn%20reports%202015-2019/construction-skills-network-uk-2015-2019.pdf

³⁴ https://www.gov.uk/government/organisations/department-for-communities-and-local-government

³⁵ R & M: repair and maintenance

³⁶ https://www.markiteconomics.com/Survey/PressRelease.mvc/6f309877a6bb48249674b76204ae6b30

https://corporate-economy.bankofireland.com/wp-content/uploads/2017/07/BOI_UK_OUTLOOK_JULY_2017.pdf

³⁸ http://www.unece.org/fileadmin/DAM/timber/country-info/statements/unitedkingdom2017.pdf

³⁹ http://www.forestry.gov.uk/pdf/WoodPackagingStudy2013.pdf/\$FILE/WoodPackagingStudy2013.pdf

⁴⁰ At the time of writing, data for 2015 -2016 was not available.

⁴¹ https://www.timcon.org/

2.2.3 The UK market for forest products

The UK is a significant importer of sawn timber and panel products. In 2016, 6.62 million m³ of sawn timber products were imported (Table 7) ⁴², an increase of 4.6% over 2015. Over the same period, imports of woodbased panels increased by 6.6%.

Table7: UK imports of sawn timber and wood-based panel products (2012-2016).

Year	Sawn timber imports	Panel imports	Total
		Thousand cubic metres/annu	um
2012	5,100	2,700	7,800
2013	5,500	2,962	8,462
2014	6,425	3,260	9,685
2015	6,323	3,217	9,540
2016	6,617	3,428	10,045

Over the period 2007-2016, Ireland's share of the UK sawn softwood timber market has grown by more than 50%, from 3.3% in 2007 to 5.3% in 2016 (Table 8) .In 2016, the Republic of Ireland was the fifth largest exporter of sawn softwood timber to the UK. Moreover, there are further opportunities for the Irish sawmilling sector to grow its market share in the UK. In 2016, only 35% of the UK market for sawn softwood was supplied domestically.

Table 8: Ireland's share of UK forest products imports by product type, by volume (2012-2016)⁴³.

Product	% of imports					
	2012	2013	2014	2015	2016	
Sawn softwood	7	7	6	6	5	
Particleboard including OSB	20	15	11	14	14	
Fibreboard including MDF	36	34	47	35	32	

In 2016, the consumption of wood-based panels (WBP) in the UK increased by 2% over 2015, which followed a pattern of annual increases in consumption since 2012^{44} . However, UK production of WBP declined by 1.5% in 2016, whereas imports rose by $6.1\%^{43}$.

Over the period 2015-2016, Ireland was the largest exporter of fibreboard, including medium density fibreboard (MDF) to the UK^{45} .

2.3 €/£ Exchange rate

Historic rates 46 and forecast movements in the \in /£ exchange rate are shown in Table $9^{47,48}$.

Table 9: Historic & forecasted €/£ exchange rates by quarter (2016-2018f).

Historic	€/£	£/€	Forecast	€/£	£/€
2016-Q1	0.77	1.30	2017Q4	0.92	1.09
2016-Q2	0.79	1.27	2018-Q1	0.94	1.06
2016-Q3	0.85	1.18	2018-Q2	0.96	1.04
2016-Q4	0.87	1.15	2018-Q3	0.97	1.03
2017-Q1	0.86	1.16	2018-Q4	0.98	1.02
2017-Q2	0.86	1.16			
2017-Q3	0.90	1.11			

⁴² http://www.forestry.gov.uk/forestry/infd-9hxecv

https://www.forestry.gov.uk/pdf/Ch3_Trade_FS2017.pdf/\$FILE/Ch3_Trade_FS2017.pdf

http://www.unece.org/fileadmin/DAM/timber/country-info/statements/unitedkingdom2017.pdf

⁴⁵ http://ec.europa.eu/eurostat

https://www.centralbank.ie/statistics/interest-rates-exchange-rates/exchange-rates

⁴⁷ http://www.centralbank.ie/polstats/stats/exrates/Pages/default.aspx

⁴⁸ https://www.poundsterlinglive.com/exchange-rate-forecasts/7530-pound-to-continue-strumming-along-the-bottom-according-to-the-latest-forecasts-from-societe-generale

2.4 **Demographics**

The number of immigrants to Ireland in the year to April 2016 is estimated to have increased by almost 15% from 69,300 to 79,300, while the number of emigrants declined over the same period, from 80,900 to 76,200. These combined changes have resulted in a return to net inward migration for Ireland (+3,100) for the first time since 2009⁴⁹.

3.0 **Policy measures**

The following policy measures influence the Irish forest & forest products sector.

3.1 Forest research

The national forest research programme is managed by the Research Division of the Department of Agriculture, Food and the Marine (DAFM). The COFORD Council (an advisory body comprising representatives from the forest sector) advises the Department on the scope of forest research and provides advice to DAFM on a range of other issues, including current and projected roundwood demand and supply.

Product and processing research and innovation within the forest products sector is supported by Enterprise Ireland⁵⁰.

An overview of the work of the COFORD Council can be found in its Annual Report for 2016⁵¹.

3.2 Afforestation and forest expansion

In 2016, the private sector planted 6,500 ha of new forest in Ireland⁵² (Table 11), bringing forest cover to 756,000 hectares, some 10.7% of the land area. As of December 2016, forest cover in Ireland is estimated to be at its highest level in over 350 years⁵³.

Table 6: Area of new forest planted in the Republic of Ireland by area and by ownership (2012-2016).

Year	State	Private	Total
		ha	
2012	60	6,592	6,652
2013	3	6,249	6,252
2014	0	6,156	6,156
2015	9	6,284	6,293
2016	0	6,500	6,500

Since 1980, 378,000 ha of forest have been added to Ireland's forest estate, 72% of which has been planted by the private sector⁵⁴ which now dominates afforestation (Figure 1). Over the period 1980-2015, farmers accounted for 83% of private lands afforested. The average area of private grant-aided afforestation over the period from 1990 was 8.9 ha⁵⁵.

Sitka spruce remains the predominant species used in Irish forestry. It has proven to be one of the most productive conifers and is the mainstay of roundwood processing.

⁵⁰ http://www.enterprise-ireland.com/en/

http://www.coford.ie/media/coford/content/publications/2016/CofordCouncilActivityReport2016Web040917.pdf

⁵² https://www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/foreststatisticsandmapping/afforestationstatistics/

⁵³ https://www.agriculture.gov.ie/media/migration/forestry/forestservicegeneralinformation/AnnualForestSectorStatistics2016281216.pdf

⁵⁴ https://www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/foreststatisticsandmapping/afforestationstatistics/

⁵⁵ https://www.agriculture.gov.ie/media/migration/forestry/forestservicegeneralinformation/AnnualForestSectorStatistics2016281216.pdf

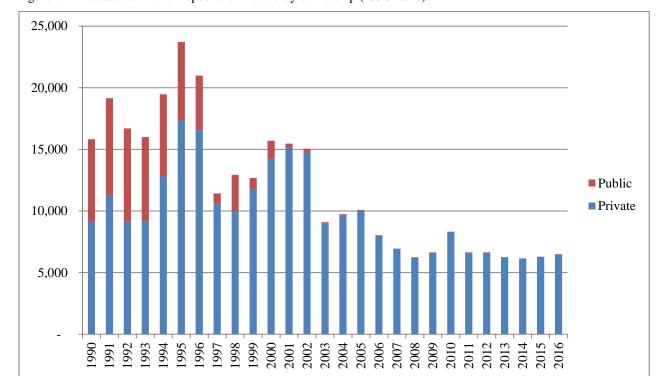


Figure 1: Afforestation in the Republic of Ireland by ownership (1990-2016).

3.2.1 Forestry Programme (2014-2020)

The programme is 100% funded from the Irish Exchequer. . The programme provides for:

- An investment of €482 million in new forests over the programme period.
- The establishment of 44,000 ha of new forests by 2020.
- Building of 700 km of new forest roads by 2020.
- An increase of 20% in annual premium payments (paid over a period of 15 years) and a 5% increase in afforestation grants.
- A 14% increase in the grant aid for the building of forest roads.
- The introduction of new species.
- The promotion of the planting of native tree species.

3.2.2 Native Woodland Scheme

The Native Woodland Scheme⁵⁶ is aimed at protecting and expanding Ireland's native woodland resource and associated biodiversity. It is a key biodiversity measure within Ireland's national forest policy. It also supports a wide range of other benefits and functions arising from native woodlands, relating to landscape, cultural heritage, wood and non-wood products and services, traditional woodland management techniques, environmental education and climate change mitigation.

In September 2017, the Forest Service (Department of Agriculture, Food and the Marine) and National Parks & Wildlife Service (Department of Arts, Heritage, Regional, Rural & Gaeltacht Affairs) published *Management Guidelines for Ireland's Native Woodlands*⁵⁷. This publication is aimed at the owners of both existing and potential woodland sites and at ecologists, foresters and other practitioners involved in native woodland management. It is also aimed at statutory and non-statutory bodies with an interest in native woodlands from the perspective of wider nature conservation, water and soil protection, fisheries, climate change mitigation, rural development, landscape, amenity, and environmental education.

This provides two sets of management guidelines, the first addressing a range of specific topics (e.g. 'area', 'grazing', 'products') and the second covering specific native woodland types, such as Oak woodland, Hazel woodland and alluvial woodland.

3.2.3 Forest Roads Scheme

The forest roads scheme provides grant-aid to forest owners to improve access to forests and facilitate thinning. There is a once off payment of 80% of eligible costs to a maximum of ϵ 40/linear metre payable on satisfactory completion of the project⁵⁸.

3.2.4 Land availability for afforestation

In January 2016, COFORD published a report *Land Availability for Afforestation, exploring opportunities for expanding Ireland's forest resource*⁵⁹. It examined the factors surrounding land availability for afforestation in Ireland.

3.3 Sources & uses of wood fibre

Wood fibre sources for the processing and wood energy sectors and residue outturn are shown in Table 11; uses are in Table 12^{60,61}. Wood residues are primarily used as feedstock for sawmill kilns and for process heat in the manufacture of wood-based panels (WBP). Post-consumer recovered wood (PCRW) is increasingly being used for wood energy and in the manufacture of wood-based panels⁶².

Table 7: Sources of softwood wood fibre (2012-2016).

Fibre source	2012	2013	2014	2015	2016
	000 m ³ OB RWE ⁶³				
Roundwood	2,594	2,851	2,949	3,063	3,102
Sawmill residues	853	897	925	949	1,007
Wood-based panel residues	104	110	114	114	115
Residue imports		108	49	47	144
Harvest residues	30	30	60	60	60
Post-consumer recovered wood (PCRW)	250	250	300	300	300
TOTAL	3,882	4,246	4,397	4,533	4,728

⁵⁶

 $[\]frac{http://www.agriculture.gov.ie/media/migration/forestry/publications/nativewoodlandschememanual/NativeWoodlandSchemeManual2008060911.pdf$

⁵⁷ https://www.agriculture.gov.ie/media/migration/forestry/publications/ManagementGuidelinesIrelandNativeWoodlands270917.pdf

http://www.agriculture.gov.ie/press/pressreleases/2012/january/title,60877,en.html

 $[\]frac{59}{\text{http://www.coford.ie/media/coford/content/publications/cofordarticles/LandAvailabAfforestation130116.pdf}$

⁶⁰ UNECE Joint Wood Energy Enquiry (2013-2017) and EUROSTAT Joint Forest Sector Questionnaire (2013-2017).

⁶¹ Wood fibre that is reused is counted twice in this model.

⁶² UNECE Joint Wood Energy Enquiry (2013-2017) & EUROSTAT Joint Forest Sector Questionnaire (2013-2017).

⁶³ RWE: roundwood equivalent

In 2016, 2.14 M m³ of roundwood was used for the production of sawn softwood, while the WBP sector used 1.4 M m³ of wood fibre for process use⁶⁴ (Table 12).

Table 12: Uses of wood fibre (2012-2016).

Fibre use	2012	2013	2014	2015	2016
	000 m ³ OB RWE				
Sawmilling	1,622	1,710	1,815	1,867	1,977
Round stake	131	117	147	169	164
Wood-based panels	1,276	1,407	1,377	1,370	1,395
Wood for energy use by the power generation and forest products sector ⁶⁵	611	704	760	796	844
Other uses		_		_	
Horticultural bark mulch	40	50	40	30	30
Wood chip for heating 66	30	100	100	114	117
Export of forest product residues	112	88	88	36	44
Pellet manufacture	60	70	70	151	106
Other uses including shavings and animal bedding					51
TOTAL	3,882	4,246	4,397	4,533	4,728

3.4 Energy policy and support measures

3.4.1 <u>Draft Bioenergy Plan</u>

In 2017, a bioenergy plan for Ireland is due to be launched by the Department of Communications, Climate Action and the Environment⁶⁷. This plan seeks to form a link between critical policy areas for Ireland, namely, renewable energy; agriculture; forestry; the environment; sustainability; and the growth potential of the green economy⁶⁸.

3.4.2 <u>Forest-based biomass outlook to 2020</u>

The COFORD report *Mobilising Ireland's forest resource* estimates that by 2020, the demand⁶⁹ for roundwood in the Republic of Ireland is set to increase to 4.67 M m³. The forecast is currently under review by the COFORD Roundwood Production Forecasting and Wood Mobilisation Group. The review is expected to be published in late 2017.

The COFORD mobilisation report⁷⁰ outlines measures to ensure wood mobilisation reaches forecast levels; (see section 3.9). These measures are currently being reviewed by the COFORD Roundwood Production Forecasting and Mobilisation Group. It is expected that the report of this Group will be published by the end of 2017.

⁶⁴ Source: COFORD Connects Woodflow 2016; in publication; www.coford.ie

⁶⁵ Wood biomass is used by the forest products sector for process drying, heating and by the wood-energy sector for the generation of heat and electricity. This includes the use of wood biomass for co-firing by Bord na Móna at Edenderry Power.

⁶⁶ Primarily used for the production of space or production heat.

⁶⁷ http://www.dccae.gov.ie/en-ie/Pages/default.aspx

http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf

⁶⁹ http://www.coford.ie/media/coford/content/publications/projectreports/Mobilising%20Irelands%20forest%20resources%20-

^{%20}Digital%20March2015.pdf

70 http://www.coford.ie/media/coford/content/publications/projectreports/Mobilising%20Irelands%20forest%20resources%20%20Digital%20March2015.pdf

3.5 Mobilising roundwood supply – an update on the COFORD wood mobilisation report

Recent work undertaken by COFORD shows that the following challenges need to be overcome if the forecast roundwood harvest from the Irish private forest estate is to be realised. These include:

- Improving the accessibility (for timber harvesting) of the Irish private forest estate;
- Continuing Forest Service grant assistance for the development of forest roads;
- Developing a "standardised low cost" roundwood sales system which facilitates roundwood sales in the Irish private forest estate, and;
- The combination of private woodlots into larger sales units which can be harvested more economically.

The implementation of the recommendations in the report is currently being reviewed by the COFORD Roundwood Forecasting and Mobilisation Group.

3.6 National climate change strategy

3.6.1 Climate Action and Low Carbon Development Act (2015)

The enactment of the Climate Action and Low Carbon Development Act 2015⁷¹ was a landmark national milestone in the evolution of climate change policy in Ireland. www.agriculture.gov.ie provides the statutory basis for the national transition objective laid out in the national policy position. Under the Act, and in order to pursue and achieve the national transition objective, the Minister for Communications, Climate Action and Environment must make and submit to Government a series of successive National Mitigation Plans (NMPs)⁷² and National Adaptation Frameworks⁷³ (NAFs).

Irelands first NMP published in 2017 shows that Ireland's forest sector, through afforestation and the use of forest-based biomass (FBB) and wood products, offers considerable scope for climate change mitigation, equivalent to 20-22% of agricultural emissions on an annual basis⁷⁴.

The National Adaptation Framework (NAF) will set out Ireland's first statutory strategy for the application of adaptation measures in different Government sectors, including the local authority sector to reduce the vulnerability of the State to the negative effects of climate change but also to avail of any positive effects that may occur.

Work on developing the NAF is underway within the Department and a draft NAF has now been published for public consultation and is available at www.agriculture.gov.ie. It is expected that the consultation process will be completed by 2 October 2017.

3.6.2 <u>Irish forests and climate change</u>

The Irish forestry and forest products sector, through afforestation, the use of forest-based biomass and wood products offers considerable scope for climate change mitigation and has a role to play in adaptation measures such as reducing flood risks⁷⁵.

According to the second NFI, Irish forests contained over 380 million tonnes of carbon in 2012. Put in perspective, this is equivalent to 24 times the greenhouse emissions that occurred in the same year. Due to the relatively young age of the forest estate the carbon store continues to accumulate. Latest estimates show that, after taking harvest into account, over 4.0 million tonnes of carbon dioxide (CO₂) were stored in 2015.

In 2016, 34% of the roundwood used in the Republic of Ireland was used for energy generation, mainly within the forest products sector. The use of wood biomass energy in Ireland results in greenhouse gas (GHG) emission savings from the displacement of fossil fuels. The saving in 2014 is estimated at over 0.5 million tonnes of carbon dioxide (CO_2), which compares with total emissions of 57.8 million tonnes of carbon dioxide (CO_2) in the same year.

 $\frac{\text{https://www.agriculture.gov.ie/media/migration/ruralenvironment/climatechange/ghgmitigation/AgriSectorMitigationPlanPublicConsult120}{215.pdf}$

⁷¹ http://www.irishstatutebook.ie/eli/2015/act/46/enacted/en/html

⁷² http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf

⁷³ http://www.dccae.gov.ie/en-ie/climate-action/topics/adapting-to-climate-change/national-adaptation-framework/Pages/default.aspx

⁷⁴ http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf

The Irish forest sector, through afforestation and the use of forest-based biomass (FBB) and wood products, offers considerable scope for climate change mitigation, equivalent to 20-22% of agricultural emissions on an annual basis.

Over the period 2021 to 2030, afforestation since 1990 (i.e. all new forests planted since 1990 and up to 2020) will remove an estimated net 4.5 million tonnes of CO_2 from the atmosphere per annum based on the current method of accounting in EU Decision 529/2013.

Under the 2016 EU Effor Sharing Regulation, SR proposal, which is currently under negotiation, Ireland has the potential to contribute 2.7 Mt CO₂ equivalent per annum through LULUCF (land use, land-use change and forestry) activities in order to meet its emission reduction requirements over the period 2021-2030. This is based on a combined contribution of net afforestation (afforestation less any deforestation emissions) over a 30-year historical period and cropland and grassland management⁷⁶.

3.7 Forest-based biomass and renewable energy policy

3.7.1 Existing use of forest-based biomass for energy generation

In 2016, 34% of the roundwood available in the Republic of Ireland was used for energy generation, mainly within the forest products sector. Wood-biomass fuels use is shown in Table 13.

Table 9: Use of forest based biomass and as a	a proportion of total roundwood harvest (2012-2016) ⁷⁷ .
Table 6. Use of forest-based bioliass and as a	a proportion of total foundwood harvest (2012-2010).

Item	2012	2013	2014	2015	2016
	000 m ³				
Wood-biomass use by the energy ⁷⁸ and forest products industry	611	704	760	796	1,049
Roundwood chipped for primary energy use ⁷⁹	30	100	100	114	117
Household firewood use	225	230	235	237	237
Short rotation coppice (SRC)	5	5	5	5	20
Wood pellets and briquettes	144	161	150	154	160
Charcoal	2	1	1	1	1
TOTAL	1,017	1,201	1,251	1,307	1,584
Of which supplied from domestic resources	910	1,034	1,166	1,132	1,139
Roundwood available for processing	2,594	2,852	2,975	3,016	3,104
Firewood used	225	230	235	237	237
Total roundwood use ⁸⁰	2,819	3,082	3,210	3,253	3,341
Domestic wood-biomass use as a % of roundwood used	32.3	33.5	36.3	34.8	34.1

In 2016, the output of the forest-based biomass energy sector grew by 22% over 2015 (Table 15). This increase was largely driven by a substantial increase in the use of wood biomass at Bord na Móna, Edenderry, which was largely met by imports. The use of wood for energy continued to increase, and resulted in an estimated greenhouse gas (GHG) emission saving of 0.76 million tonnes of CO_2 . Emission savings were up almost 22% on the 2015 level of 0.63 million tonnes (Table 14). As a comparison, total GHG emissions in Ireland in 2015 were 59.9 million tonnes CO_2 equivalent⁸¹.

⁷⁶ http://www.dccae.gov.ie/documents/National%20Mitigation%20Plan%202017.pdf

⁷⁷ UNECE Joint Wood Energy Enquiry (JWEE); 2013-2017

⁷⁸ Includes co-firing of wood biomass at Edenderry Power; <u>www.edenderrypower.ie</u>

⁷⁹ Primarily used for space and process heating

⁸⁰ Roundwood use includes the use of domestically sourced and imported roundwood

 $^{{\}color{blue}{^{81}}} \ \underline{\text{http://www.epa.ie/pubs/reports/air/airemissions/ghgemissions/GHG\%201990-2015\%20April\%202017.pdf}$

Table 9: Output use of forest-based biomass and associated greenhouse gas emissions mitigation (2012-2016)82.

Item	Unit	2012	2013	2014	2015	2016		
		Output						
Heat	TJ	6,808	7,002	7,562	7,730	9,017		
Electricity	TJ	477	491	530	446	932		
TOTAL	TJ	7,285	7,493	8,092	8,176	9,949		
CO ₂ emission savings	000 tonnes	557	573	619	625	761		

In 2016, 237,000 m³ of firewood⁸³ was used in the Republic of Ireland to a value of €34 million (Table 15). A small proportion of the supply - 6,000 m³ - was imported. In addition, firewood is also harvested by forest owners for their own use and is not included in these statistics.

Table 10: Volume and value of the domestic firewood market in the Republic of Ireland (2012-2016)⁸⁴.

Year	000 m ³ OB	€ million
2012	225	32.56
2013	230	33.33
2014	235	34.05
2015	237	34.34
2016	237	34.34

3.7.3 Contribution of renewables to heat and electricity demand

Renewable energy⁸⁵contributing to Ireland's thermal energy requirements is dominated by industrial biomass use, in particular the use of waste wood to produce heat in the manufacture of wood-based panels, joineries and wood processing plants and the use of tallow from rendering plants for heat.

The increasing activity in specific sub-sectors of industry, as well as some incentives and regulations for renewable systems in residential dwellings, has led to renewable energy use more than doubling, from 108 ktoe in 1990 to 287 ktoe in 2015 (a growth of 166%)⁸⁶.

Ireland has a target to deliver 12% of final heat demand from renewable energy sources by 2020. While progress has been made in recent years on deployment of renewable heat technologies, energy forecast projections show that Ireland is likely to fall short of the renewable heat (RES-H) target⁸⁷.

In 2015, renewable thermal energy (RES-H) increased by 2.5% in absolute terms relative to 2014. However, as overall thermal energy consumption increased at a faster rate than renewable heat in 2015, the renewable share of thermal energy fell by 0.1 percentage points to 6.5% in 2015⁸⁸.

A public consultation which closed on 3 March 2017 invited submissions from interested parties on the design options and implementation of a Renewable Heat Incentive in Ireland. More than 200 submissions were received⁸⁹. Subject to State Aid Approval from the European Commission, it is expected that the RHI scheme will be launched by the end of 2017⁹⁰.

A recent speech by the Minister for Communications, Climate Action and Environment⁹¹ stated 'the Renewable Heat Incentive (RHI) is envisaged as a tangible and viable measure to stimulate growth in the domestic biomass sector.

'Crucially it will create new commercial opportunities for farmers in heat technologies including biomass boiler installations and new opportunities for foresters. It will also help us to meet our EU renewable energy targets⁹²'.

⁸² UNECE Joint Wood Energy Enquiry (2013-2017)

⁸³ Firewood use in Ireland is taken from the Household Budget Survey (HBS) as produced by the Central Statistics Office (www.cso.ie). The CPI inflation rate is used to produce an estimate of firewood use in the years between two corresponding HBS. In 2016, the rate of CPI was 0.0%. Therefore, firewood use in 2016 is estimated to be the same as for 2015.

⁸⁴ drima market research study

⁸⁵ http://www.seai.ie/Publications/Statistics_Publications/Renewable_Energy_in_Ireland/Renewable-Energy-in-Ireland-2012.pdf

At the time of writing, data for 2016 was not available.

⁸⁷ https://www.seai.ie/resources/publications/Achieving-Ireland-s-2020-Renewable-Heat-Target.pdf

⁸⁸ http://www.seai.ie/resources/publications/Energy-in-Ireland-1990-2015.pdf

⁸⁹ http://www.dccae.gov.ie/en-ie/energy/consultations/Pages/Renewable-Heat-Incentive-Consultation.aspx

⁹⁰ http://www.dccae.gov.ie/en-ie/energy/topics/Renewable-Energy/heat/Pages/Heat.aspx

⁹¹ https://www.teagasc.ie/news--events/news/2017/energy-in-agriculture.php

Wind energy⁹³ dominates the renewable electricity sector (RES-E) sector. In 2015, it accounted for 22.8% of electricity generated and was the second largest source of electricity generation after natural gas^{94,95}.

3.74 Renewable energy targets

The renewable energy targets for the Republic of Ireland are shown in Table 16⁹⁶.

Table 11: Renewable energy targets for the Republic of Ireland to 2020 by type.

RES type		2016	2017	2018	2019	2020
			9,	6		
Renewable heat (RES-H)	8	9	10	10	11	12
Renewable electricity (RES-E)	34	36	38	40	42	44
Renewable energy used in transport (RES-T)	7	7	9	9	10	11
Overall RES	12	12	13	14	15	16

Ireland's progress towards meeting its renewable energy targets are shown in Table 17^{97,98,99}.

Table 17: Progress towards meeting Ireland's renewable energy targets (2010-2020).

RES type	2010	2011	2012	2015	2020		
	Progress towards target						
RES-E normalised	14.9	17.6	19.6	25.3	40		
RES-T	2.6	3.6	3.8	5.7	10		
RES-H	4.3	4.7	5.2	6.5	12		
Directive (2009/29/EC)	5.5	6.4	7.1	9.1	16		

⁹² http://www.dccae.gov.ie/en-ie/news-and-media/speeches/Pages/Speech-by-Denis-Naughten-T-D--Minister-of-Communications,-Climate-Action-and-Environment-at-Energy-in-Agriculture-2017-Even.aspx
93 http://www.seai.ie/Publications/Statistics_Publications/Renewable_Energy_in_Ireland/Renewable-Energy-in-Ireland-2012.pdf

http://www.seai.ie/resources/publications/Energy-in-Ireland-1990-2015.pdf

⁹⁵ At the time of writing, data for 2016 was not available.

⁹⁶ http://www.mnag.ie/workshop_2010_7_2172276902.pdf

⁹⁷ www.seai.ie

http://www.seai.ie/resources/publications/Energy-in-Ireland-1990-2015.pdf Http://www.seai.ie/resources/publications/Energy-in-Ireland-1990-2015.pdf At the time of writing, data for 2016 was not available.

4.0 Developments in forest products markets

The Irish sawmilling and board manufacturing sector is competitive internationally and has developed major export markets over recent years in the UK and elsewhere. Demand for all wood products remains strong, further growth is anticipated in the years to come as overseas markets for Irish sawnwood and panel board products continue to expand ¹⁰⁰.

4.1 Irish roundwood harvest

In 2016, 3.36 million m³ of roundwood was harvested in the Republic of Ireland (Table 19)¹⁰¹, an increase of 3.2% over 2015, and represents a continuation of the trend for increased levels of harvest over the 2012-2016 period.

Table 12: Total roundwood harvest (including firewood) in the Republic of Ireland (2012-2016).

Harvest type	2012	2013	2014	2015	2016			
	$000 \text{ m}^3 \text{ OB}$							
Coillte	2,485	2,588	2,517	2,470	2,733			
Private	354	448	597	780	622			
TOTAL	2,839	3,036	3,114	3,250	3,355			

In 2016, 3.11 million cubic metres of roundwood was available for processing in the Republic of Ireland ¹⁰², a 1.4% increase on 2015. However, the level of harvest in the private sector was 20% lower than in 2015 (Table 19). This partly reflects market conditions and may be related also to higher levels of harvest by Coillte.

Table 13: Roundwood available for processing in the Republic of Ireland (2012-2016).

Item	2012	2013	2014	2015	2016			
	000 m ³ OB							
Commercial softwood								
Imports less exports	-18	49	68	40	-16			
Coillte	2,269	2,474	2,434	2,377	2,600			
Private sector	343	328	447	646	518			
Commercial hardwood								
Imports less exports	0	-1	0	0	0			
Coillte	1	2	6	3	5			
Private sector	1	1	0	0	1			
TOTAL	2,596	2,853	2,955	3,066	3,108			

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¹⁰⁰ https://www.agriculture.gov.ie/media/migration/foodindustrydevelopmenttrademarkets/foodwise2025/report/FoodWise2025.pdf

Historic harvest and trade data for the period 1961-2015 is on the FAOSTAT website: http://faostat.fao.org/site/626/default.aspx#ancor

¹⁰²Firewood is excluded.

4.2 Sawn timber production, consumption, trade and promotion

4.2.1 **Production**

Eight companies supply over 90% of Irish sawmilling output and provide the main market for sawlog and stakewood harvested from Irish forests (Table 20)¹⁰³. The majority of the logs supplied to Irish sawmills are certified to the FSC^{104,105} and/or PEFC¹⁰⁶ standard. In addition, Irish sawmills have their own chain of custody (CoC) certification.

Table 14: Large and medium sized sawmills on the island of Ireland.

Size	Sawmill	Location(s)	Website
Large	Balcas Ltd.	Enniskillen, Co Fermanagh, Northern Ireland	www.balcas.com
Large	ECC Timber Products Ltd.	Corr na Móna, Co Galway	www.ecc.ie
Large	Glennon Brothers Ltd.	Longford, Co Longford Fermoy, Co Cork	www.glennonbrothers.ie
Large	GP Wood Ltd.	Enniskeane, Co Cork Macroom, Co Cork	www.gpwood.ie
Large	Murray Timber Group	Ballygar, Co Galway Ballon, Co Carlow	www.mtg.ie
Medium	Coolrain Sawmills Ltd.	Coolrain, Co Laois	www.gardendeckingfencing.ie
Medium	Laois Sawmills Ltd.	Portlaoise, Co Laois	www.laoissawmills.com
Medium	Woodfab Timber Ltd.	Aughrim, Co Wicklow	www.woodfabtimber.ie

In 2016, sawmill roundwood intake was 2.14 million m³, which was converted to 0.99 million m³ of sawn timber and 0.15 million m³ of round stakes. In 2016, sawmill roundwood intake increased by 5.2% over 2015. 75.4% of sawmill's roundwood requirement was sold by Coillte, with the balance supplied by the private forest sector, with some imports.

Over the period 2015-2016, the production of wood residues increased by 0.6% (Table 21).

Table 15: Production of wood residues (2012-2016).

Residue type	2012	2013	2014	2015	2016
			000 m^3		
Bark	232	243	219	238	225
Wood chip	524	552	576	590	640
Sawdust	201	212	244	285	257
Post-consumer recovered wood (PCRW)	250	250	300	300	300
Total	1,207	1,257	1,339	1,413	1,422

 $^{^{103}}$ Source: drima market research survey

¹⁰⁴ FSC: Forest Stewardship Council; www.fsc.org

¹⁰⁵ The Forest Stewardship Council (FSC) is an independent, non Governmental, not for profit organisation established to promote the responsible management of the world's forests; www.fsc.org

4.2.2 <u>Trade</u>

In 2016, exports of forest products from the Republic of Ireland were €380 million, a 7% increase on 2015. Wood-based panels accounted for €206 million, the balance comprising sawn timber and paper product exports (Table 22). Export volumes of WBP increased by 8% on 2015, while exports of sawn timber remained relatively unchanged (Table 22).

In 2016, forest products to the value of €586 m were imported. This trade is dominated by imported pulp, paper and paper-board products. In 2016, they represented 65% of forest product imports (Table 22).

Table 16: Primary forest products trade, volume and value (2012-2016).

Product		Imports								
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
			000 m^3				•	millio	1	
Sawn timber	145	134	205	227	250	54	51	74	88	92
Wood-based panels	204	194	235	240	242	75	78	98	112	112
		00	00 tonn	es						
Pulp products	47	50	46	51	46	45	41	42	53	45
Paper and paper-board products	415	428	404	427	417	339	340	340	359	337
TOTAL						513	510	554	612	586
					Exp	orts				
			000 m^3				•	millio	n	
Sawn timber	534	601	718	701	806	73	81	122	121	122
Wood-based panels	630	665	662	610	628	173	179	199	190	206
		00	00 tonn	es						
Pulp products	0	0	0	0	3	0	0	0	0	1
Paper and paper-board products	68	81	67	86	137	51	59	50	44	51
TOTAL						303	339	370	355	380

In 2016, consumption of sawn timber in the Republic of Ireland declined by 6.1% over 2015^{107} . In 2016, 46% of the Irish market for sawn softwood timber was supplied by domestic production with the balance being imported. However, over the same period, only 8% of the Irish market for sawn hardwood was supplied domestically (Table 23)¹⁰⁸.

Table 23 Self-sufficiency in sawnwood (2012-2016)^{109,110,111}.

Item	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
		Sawn softwood		Sawn hardwood						
					000	m ³				
Domestic production	782	824	904	929	985	1	1	3	2	3
Exports	534	601	718	700	803	0	0	1	1	3
Imports	116	108	175	194	215	28	26	30	33	36
TOTAL consumption ¹¹²	364	331	361	423	397	29	27	32	34	36
% of sawn timber market which is supplied by domestic production	68	67	52	54	46	3	4	6	3	8

¹⁰⁷ This data is subject to further verification.

Data on the import and export of sawn softwood is subject to final verification.

¹⁰⁹ Central Statistics Office; (www.cso.ie) & EUROSTAT Joint Forest Sector Questionnaire (2013-2017)

¹¹⁰ Central Statistics Office; <u>www.cso.ie</u> & EUROSTAT Joint Forest Sector Questionnaire (2013-2017)

¹¹¹ This data is subject to further verification.

Total consumption is calculated as: domestic production + (imports-exports).

In value terms, Ireland became a net exporter of sawn timber in 2010 (Table 24). It marked the continuation of a trend apparent since 2008 (and more apparent in the case of export volumes) with the gap between the value of exports and imports closing due to the collapse of the domestic construction market and increased levels of exports, mainly to the UK.

Table 17: Balance of payments in the value of traded forest products (2012-2016).

Product	2012	2013	2014	2015	2016
		€	million	1	
Sawn timber	19	30	48	33	30
Wood-based panels	104	121	101	78	94
Pulp products	-45	-41	-42	-53	-44
Paper and paper-board products	-288	-281	-290	-315	-286
Total	-210	-171	-183	-257	-206

4.2.3 Sawn softwood imports

In 2016, imports of sawn softwood were 215,000 m³, to a value of ϵ 61 million. The main suppliers to the Irish market for the period 2012-2016 are in Table 25¹¹³.

Table 25: Main softwood exporters to Ireland (2012-2016).

Exporter	2012	2013	2014	2015	2016 ¹¹⁴				
	000 m ³ UB								
Sweden	26	28	32	37	48				
Latvia	23	22	44	44	49				
Northern Ireland	19	17	29	21	18				
Great Britain ¹¹⁵	13	9	14	19	27				
Finland	10	8	13	21	20				
Russian Federation	8	7	17	21	16				
Germany	7	6	10	12	22				
Netherlands		4	7	7	8				
Estonia	3	3	3	5	3				
France					4				
Canada	1	1	1	1	1				
Belgium		1	2	1	1				
% of total imports	94	97	97	97	100				

¹¹³ Source: Central Statistics Office (CSO); <u>www.cso.ie</u>

Due to rounding, the data for 2016 adds to more than the total of 215,000 m 3 .

Data on sawn timber which is imported from Northern Ireland is treated separately from that which is imported from Great Britain.

4.2.4 Sawn hardwood imports

In 2016, Ireland imported 36,000 m³ of sawn hardwood to a value \in 29.4 million, an increase of 8% in volume on 2015. Some 18,100 m³ of tropical hardwoods were imported to a value of \in 14.0 million, a 13% increase on the volume imported in 2015. The main hardwood exporters to the Irish market for the period 2012-2016are shown in Table 26¹¹⁶.

Table 26: Main exporters of sawn hardwood to Ireland (2012-2016).

Exporter	2012	2013	2014	2015	2016
-		00	00 m ³ U	В	
United States	10	9	11	10	11
Cameroon	9	7	12	14	15
Northern Ireland	2	5	2	2	2
China	1	1			
Congo					4
Canada	1	1	1	1	1
Great Britain ¹¹⁷	1	1	1	1	2
Ivory Coast	1		1	1	1
Germany			1	1	1
% of hardwood imports	88	92	95	91	94

4.3 Value added products - wooden furniture

In 2016, wooden furniture to a value of \in 206 million was imported into the Republic of Ireland. Over the period 2015-2016, net imports for wooden furniture declined by 14% (Table 27)¹¹⁸.

Table 27: The value of wooden furniture imports & exports to/from the Republic of Ireland (2012-2016).

Item	2012	2013	2014	2015	2016				
	€ million								
Imports	152	163	195	224	206				
Exports	26	34	37	48	54				
Net imports	126	129	158	176	152				

4.4 UK market outlook for selected forest products (2017)

The forecast for the UK sawn softwood market for 2017 indicates an increase in imports, production and consumption of 3.7%, compared with 2016. This predicts import volumes of nearly 6.5 M m³, on foot of domestic UK production of 3.7 M m³ to bring total softwood consumption to just below 10 M m³ for 2017¹¹⁹.

The Construction Product Association's (CPA) summer forecast (2017)¹²⁰ predicts a growth in construction output by 1.6% in 2017 and 0.7% in 2018; this 2017 forecast is an upward revision on previous predictions, which is suggested to have been driven by growth in new infrastructure activity (set to rise by 7.4% in 2017) and private house building.

4.4.1 <u>Promotion</u>

In September 2016, Enterprise Ireland¹²¹ hosted three Irish construction sawnwood exporters at Timber Expo which took place at the NEC in Birmingham, UK: Glennon Brothers¹²², GP Wood Ltd. ¹²³ and MTG (Murray Timber Group)¹²⁴.

 $^{^{116}}$ Sources: CSO Trade Statistics $\underline{www.cso.ie}$ & EUROSTAT JFSQ for Ireland (2013-2017)

¹¹⁷ Data on sawn timber which is imported from Northern Ireland is treated separately from that which is imported from Great Britain

Source: EUROSTAT JFSQ for Ireland (2013-2017).

¹¹⁹ Source: Timber Trade Federation (TTF): http://www.ttf.co.uk/

¹²⁰ http://www.constructionproducts.org.uk/publications/economics/construction-industry-detailed-forecast-summer-edition/construction-industry-forecast-summer-2017/

¹²¹ http://www.enterprise-ireland.com/en/

http://www.glennonbrothers.ie/

¹²³ www.gpwood.ie

4.5 Wood-based panels (WBP)

Reflecting the European economic recovery, European wood-based panel production increased by 2.8% in 2016^{125} , to 74.7 M m³.

Irish based wood-based panel manufacturers and products are outlined in Table 28¹²⁶.

Table 28: Wood-based panel manufacturer in the Republic of Ireland.

Manufacturer	Established	Product(s)	Location
Masonite Ireland	1997	Thin MDF/Moulded door facings	Drumsna, Co Leitrim
MEDITE-Europe	1983	Medium Density Fibreboard (MDF)	Clonmel, Co Tipperary
SMARTPLY Europe	1995	Oriented Strand Board (OSB)	Slieverue, Co Kilkenny

In 2016, 774,000 m³ of wood-based panels (WBP) were produced from an intake of 1.40 million m³ of wood fibre ¹²⁷, virtually unchanged on 2015. A very high proportion (81%) of WBP manufacture was exported; 628,000 m³, to a value of €206 million (Table 29)¹²⁸. WBP exports comprised mainly oriented strand board (OSB) and medium density fibreboard (MDF); manufactured by Masonite, MEDITE and SMARTPLY. Key export markets were the UK and the Benelux countries.

Table 29: Production and exports of wood-based panels in and from the Republic of Ireland (2012-2016).

Item	Unit	2012	2013	2014	2015	2016
Production	000 m^3	704	739	773	769	774
Export volume	000 m^3	630	665	662	610	628
Export value	€ million	179	199	198	190	206

SMARTPLY's new OSB line was commissioned in April 2016, which allows the company to supply OSB panels to a broader customer range.

4.6 Builders merchanting

The Grafton Group is Ireland's largest builders merchant. Its 2016 annual report stated that the merchant market benefitted from the relatively strong performance of the Irish economy. Increased consumer spending was driven by gains in employment, with the number of people at work at its highest level for eight years, and growth in disposable incomes. Revenue growth was primarily stimulated by strong demand in the residential repair, maintenance and improvement (RMI) market 129.

Demand from the house building sector also improved.

¹²⁴ www.mtg.ie

http://www.unece.org/forests/welcome.html

¹²⁶ EUROSTAT/FAO Joint Forest Sector Questionnaire (JFSQ) for Ireland (2013-2017)

¹²⁷ Includes pulpwood, wood chips, sawdust and post-consumer recovered wood (PCRW).

¹²⁸ EUROSTAT Joint Forest Sector Questionnaire (2013-2017)

http://www.graftonplc.com/~/media/Files/G/Grafton/ANNUAL%20REPORT%202016%20-%20FINAL.pdf

4.7 Voluntary forest certification

4.7.1 Schemes

To date, certification has not been a major issue for private forest owners. However, as the private forests' contribution to the national yearly harvest increases, certification is likely to become an issue ¹³⁰. Currently, about 6,500 hectares of private forest is certified ^{131,132}.

A recent conference on the topic of "Forest Certification for the Private Grower in Ireland" highlighted the ongoing demand for certified wood products in Ireland's export markets and the necessity for the maturing private estate to engage in the certification process¹³³.

In an effort to support wood mobilisation, the Forest Service is at an advanced stage in the development of a Pilot Scheme to use Knowledge Transfer Groups to support group certification. It was initially envisaged that this pilot project would achieve group certification for both of the participating producer groups and in the process create a template that can be adopted by other groups (see section 4.6.2).

4.7.2 Forest Service certification initiative

The Forest Service, Department of Agriculture, Food and the Marine are currently undertaking a pilot forest certification project. This aims to develop voluntary certification within the private forest estate in Ireland. The North East Forestry Group¹³⁴ and the Forestry Owners Cooperative Society¹³⁵ are both taking part in a pilot project in which the template will be tested and two certification groups for private forest owners will be established. This project will lay the groundwork for future groups to emerge and will provide the tools for owners and forestry professionals to apply for voluntary forest certification¹³⁶.

http://www.teagasc.ie/forestry/docs/advice/Teagasc_Situation_Outlook_Forestry_2012.pdf

https://www.agriculture.gov.ie/media/migration/forestry/forestservicegeneralinformation/Annual%20Forest%20Sector%20Statistics%20%2

02015.pdf

132 by the first of the first o

¹³² http://www.coillte.ie/our-forests/public-goods/certification/

http://northeastforestrygroup.ie/North East Forestry Group News files/Forest%20Certification%20and%20Private%20Forests%20Artic

http://northeastforestrygroup.ie/North_East_Forestry_Group_Home.html

^{135 &}lt;u>http://focs.ie/56/</u>

https://www.agriculture.gov.ie/press/pressreleases/2016/june/title,98416,en.html

5.0 Irish forests and the environment

The Irish forest sector has strong environmental and non wood benefits. Sustainable forest management is implemented through national legislation, forest policy, guidelines and procedures 137

New guidelines for afforestation are currently in preparation by the Department of Agriculture, Food and the

Ireland's forests and afforestation programme (see Section 3.2) provide for the conservation and enhancement of biodiversity at both a local and a national level.

It has been estimated that 18 million people visit Irish forests for recreation purposes each year. This activity has been valued at €97 million, which in turn generates €268 million in economic activities in rural communities 138.

For Kyoto II (2013-2020), the net sink contribution of afforestation, reforestation and deforestation (ARD) is forecast to be 3.8 million tonnes of CO₂ per year. This includes harvested wood products (HWP)¹³⁹.

6.0 **Recent developments**

6.1 **National Forest Inventory (NFI)**

The third NFI cycle commenced in 2015 and is expected to report in 2018. It will facilitate the monitoring of the national forest estate, including the assessment of standing roundwood stocks and annual increment as an input to the assessment of sustainable forest management at the national level 140. It will also I facilitate industry planning and development.

6.2 Forecast of roundwood production (2016-2035)

In 2016, COFORD published its All Ireland Roundwood Production Forecast 2016-2035. This shows that over the period 2016-2035, roundwood production from forests on the island is forecast to double from 3.96 million cubic metres in 2016 to 7.90 million cubic metres in 2035. Almost all of this increase is expected to come from the private sector¹⁴¹.

6.3 New felling decision tool for conifers

In January 2017, the Minister of State for Forestry, Andrew Doyle T.D. launched the Department of Agriculture Food and the Marine's Felling Decision Tool for conifers 142. This provides guidance to forest owners on when to fell their forest to obtain the best return from their forest asset. Speaking at the launch Minister Doyle said, "The importance of deciding when to clearfell and its impact on returns should not be underestimated. This tool will assist forest owners in making a more informed decision on clear-felling. The tool clearly shows that rotation length has a very significant impact on the return a grower will get from his or her crop. It is vital that landowners have a positive experience from their forestry investments and that revenue from the first rotation facilitates reforestation to continue the forest cycle".

6.4 Improving roundwood haulage

Managing timber transport effectively from forest to market is a key link in the forestry chain to determine wood mobility and support the expansion of a sustainable timber processing sector ¹⁴³.

In 2017, the Forest Industry Transport Group (FITG) published a report on round timber transport 144.

http://www.coford.ie/publications/forestry2030/irishforestryandtheeconomy/

¹³⁷ The Environmental Report on the Forest Policy Review can be found at:

https://www.agriculture.gov.ie/media/migration/forestry/publicconsultation/forestpolicyreview/SEAForestPolicyReviewJune2013.pdf

Hendrick E; Department of Agriculture, Food and the Marine; Stakeholder consultation on discussion document on GHG mitigation potential within the agriculture and forest sector (2015).

140 http://www.agriculture.gov.ie/media/migration/publications/2015/ARO201415230615.pdf

http://www.coford.ie/media/coford/content/publications/2016/CofordRoundwoodProd1635020916.pdf

https://www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/foreststatisticsandmapping/fellingdecisiontool/

https://www.teagasc.ie/crops/forestry/news/2016/national-timber-transport-conference.php

 $[\]overline{\text{https://www.agriculture.gov.ie/media/migration/forestry/publications/FinalDraftFITGLoadSecuringManual190717.pdf}$

6.5 Plant health

The Forest Service of the Department of Agriculture, Food and the Marine has regulatory responsibility for implementing the forestry aspects of the EU Plant Health Directive on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community. The Forest Service implements the provisions of the Directive relating to timber, wood packaging material (pallets, crates etc) and surveys of the national forest estate for quarantine pests and diseases¹⁴⁵.

Over the course of the first seven months of 2017, i.e. from 1st January to 31st July, findings of Ash Dieback Disease have been confirmed in a further 62 forestry plantations. These findings bring the current total of findings in forestry plantations to 384. All the new forestry plantation findings to date in 2017 are in counties where there have previously been confirmed findings in forestry plantations and as so, the number of counties with forests affected by Ash Dieback Disease remains unchanged at 24. Notable increases in the frequency of findings in forestry plantations were recorded in Counties Tipperary, Kilkenny, Wexford, Kildare, Meath, Cavan, and Clare 146.

7.0 **Research & innovation**

7.1 **Innovation in forest products and markets**

Irish timber processors have continued to invest in innovation in processing and products ¹⁴⁷.

- In May 2017, the Minister of State for Food, Forestry, and Horticulture, Andrew Doyle T.D. officially launched a new programme to support the value and market-reach of Irish timber. Led by NUI Galway, the 'Wood Properties for Ireland' or 'WoodProps' programme will characterise the strength and properties of Irish timber for European regulatory authorities, expanding its potential market value 148.
- In 2016-2017, the Department of Agriculture, Food and the Marine funded a number of programmes at the National University Galway (NUIG). These include:
 - The commercialisation of Irish Cross-Laminated Timber (CLT)¹⁴⁹.
 - Impacts of faster growing forest on raw material properties with consideration of the potential effects of a changing climate on species choice.
- In 2016/2017 GP Wood invested €14 Million in improving its operations in Enniskeane 150. This investment which was completed in 2017, funded an enhanced product range, increased plant capacity and created an additional 27 direct and indirect jobs ¹⁵¹.
- Over the past 3 years, Masonite Ireland has developed two new door facings. These have enabled it to develop new markets in India and continue to grow their export sales steadily.
- In April 2016, SMARTPLY commissioned its new €59 million OSB line.
- In September 2017, MEDITE SMARTPLY announced that it was building a factory in Hull, UK to support the ongoing development of its outdoor MEDITE TRICOYA product ¹⁵².
- In 2016/2017, MEDITE SMARTPLY extended its product range to include:
 - SMARTPLY DRYBACKER, an innovative factory-prepared oriented strand board (OSB) is designed to greatly reduced the time spent on dry-lining contractor.
 - SMARTPLY PROPASSIV is a structural OSB panel with integrated vapour control and air barrier properties for use as structural sheathing in timber frame structures.

 $[\]underline{\text{http://www.agriculture.gov.ie/media/migration/publications/2015/ARO201415230615.pdf}}$

https://www.agriculture.gov.ie/forestservice/treediseases/ashdiebackchalara/#FourthSurvey

¹⁴⁷ http://www.ibec.ie/IBEC/Press/PressPublicationsdoclib3.nsf/vPages/Newsroom~forestry-sector-looks-to-export-market-for-growth-10-

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 $[\]frac{152}{\text{https://mdfosb.com/en/medite-tricoya-extreme/products}}$

7.2 Innovation in wood mobilisation/Teagasc *Talking Timber* events

In August and September 2017, Teagasc, (the Agriculture and Food Development Authority) in association with the Forest Service and the Irish timber industry, held two regional timber marketing events in counties Cavan and Tipperary. Topics covered at the event included: knowing when your forest is ready for thinning; how to contact potential buyers; what is the best way to sell your timber and how to maximise timber value.

Both events were well attended. The forest and wood processing sector was strongly represented at both events enabling forest owners with roundwood for sale to contact buyers in their area ¹⁵³.

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¹⁵³ https://www.teagasc.ie/crops/forestry/news/2017/talking-timber-2017.php

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