

UNECE Forestry & Timber Market Report for Ireland 2019

[Department of Agriculture, Food and the Marine](#)

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1.0 Irish economy-an overview

1.1 2018

The [Irish economy](#) saw significant growth in 2018 with improvements observable across a broad set of key indicators. Gross Domestic Product (GDP) and Gross National Product (GNP) increased by 9.3% and 8.0% respectively while unemployment fell to 5.7%.

In [summary](#):

- At market prices, Gross Domestic Product (GDP) in 2018 was €324 billion, an increase in value of 9.3% over 2017. This growth was broad based and was driven by strong growth in consumer spending, investment and exports.
- At market prices, Gross National Product (GNP), increased by 8% over 2017 to €253 billion.
- Export growth has been strong, thanks partly to improved cost-competitiveness since 2009.
- In 2018, the volume of exports grew by 10.2% over 2017 to €396 billion.
- At the end of 2018, unemployment stood at 5.7%.
- Inflation as measured by the Consumer Price Index (CPI) was 0.5% for 2018.
- In value terms, personal consumption, which accounts for nearly two thirds of domestic demand, grew by 3.4% while Government expenditure increased by 8.7% over 2017.
- 18,016 homes were completed in 2018, an increase of 24% over 2017.

1.2 2019-2020

The [Irish economy](#) continues to perform in a robust manner.

However, 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.

In summary:

- The Irish economy is forecast to grow by 4% in 2019 and by 3.2% in 2020.
- However, it is likely that Brexit will constrain Irish growth prospects in the short term.
- In the short-term, the key issues of concern include a slowdown in the UK economy and a further weakening of sterling.
- GDP is forecast to grow by 7.8% in 2019 and 7.2% in 2020. This assumes that a European Economic Agreement (EEA) will exist between the UK and the European Union (EU) after October 2019.
- GNP is forecast to grow by 4.7% in 2018 and by 7.9% in 2019.
- Exports are expected to remain strong. It is expected that the volume of exports of goods and services will increase by 8.8% in 2019 and by 4.1% in 2020.
- 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 produce 25,000 new housing units per annum up to 2020, with additional undertakings provided on the provision of social housing.
- The total number of houses built in 2019 is expected that this will increase to 21,000 units.
- The rate of unemployment is set to decline to 5.1% in 2019 and 5.0% in 2020.
- Private consumer expenditure is forecast to rise by 2.7% in 2019 and 2.5% in 2020.
- Net public current expenditure is forecast to rise by 4.2% in 2019 and 3.6% in 2020.
- Inflation as measured by the Consumer Price Index (CPI) is forecast to increase by 1.1% in 2019 and 1.4% in 2020.
- The actual and expected growth in the [GDP contribution](#) of Ireland's export markets are shown in Table 1.

Table 1: Actual and estimated GDP growth in key markets (2014-2020f).

Region	2014	2015	2016	2017	2018	2019e	2020f
	Real annual growth %						
World	3.3	3.1	3.1	3.5	3.6	3.3	3.4
United States	2.6	3.0	1.6	2.3	2.9	2.6	2.2
Euro area	0.8	1.5	1.7	1.7	1.8	1.0	1.2
United Kingdom	2.6	2.2	1.8	2.0	1.4	0.8	0.9

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 some time 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.

The most substantial risk facing the Irish economy is the outcome of the Brexit negotiations. The summit of European Union leaders which was held in October 2019 has provided a potential solution.

The response of the forest products sector to Brexit is detailed in section 6.9 of this report.

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 demand in key export markets. 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 2017, the [output](#) of the Irish construction industry was €16.9 billion, an increase of 12.4% over 2016. Over the same period, the output of the sector increased in volume terms by 17%.

However, even with these sizeable growth rates, 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 [estimated output level](#) for 2017 represents just 7.5% of GNP, which is well below the recognised European sustainable level of between 10-12%.

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 thirteen years.

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 2018, housing completions increased by 24% over 2017 to 18,016¹. However, [demand for new housing](#) still outstrips supply (Table 2).

There were 9,185 [new dwelling completions](#) in the first half of 2019. This represents an increase of almost 17% on the same period last year. 21,000 housing completions are [forecast](#) for 2019.

¹ This data is based on a new methodology. Connection to the ESB power supply network is not used as a proxy for new house completions.

Table 2: Actual and forecast house completions in the Republic of Ireland (2014-2019f).

Year	House completions	YoY change %
2014	5,518	126
2015	7,219	131
2016	9,515	132
2017	14,446	152
2018	18,016	124
2019f	21,000	145f

In May 2014, the Government launched its [Construction 2020 Strategy](#) to address constraints on housing supply. This provides measures which aim to resolve the constraints currently facing the construction sector.

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.

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 (Table 3)².

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	+7..3
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 2018, the [wholesale price index for building materials](#) showed a 2.9% increase on 2017 (Table 4).

Table 4: Wholesale price index for building materials (2014-2018).

Item	2014	2015	2016	2017	2018
Index (2005 = 100)	126.3	127.6	128.5	132.4	136.2
% change year on year	2.2	1.0	0.7	3.0	2.9

² At the time of writing, data for 2018 was not available.

2.2 UK construction market

The UK construction market is the key export outlet for forest products manufactured in Ireland. In 2018, [house starts and completions](#) in the UK increased by 3.0% and 10.7% over 2017 (Table 5).

The UK construction sector is the primary driver of forest products use in the UK. There is considerable scope for expansion in this sector. Timber frame and offsite construction are under-used especially in England.

[UK housing activity](#) is concentrated in England, which in 2018, was responsible for 82% of output by volume. Timber frame dominates the Scottish market for new houses, but it does not have the same market importance in England or Wales.

House building in the UK has been on a long term downward trend since 1970. The number of houses built across the UK, has fallen from 378,000 in 1969/70 to an average of 167,000 for the period 2014-2018 (Table 5).

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 demand for new housing greatly outstrips the current levels of supply.

[UK house building](#) is expected to remain strong supported by good underlying demand, the availability of mortgages and the Help to Buy Scheme. The new £3 billion "[home building fund](#)", is a loans programme to help smaller to medium sized builders to focus on house building.

Activity levels in the UK housing repair, maintenance and improvement (RMI) market are expected to remain subdued, sensitive to changes in housing transactions and consumer confidence and spending. House building is expected to remain strong supported by good underlying demand, the availability of mortgages and the [Help to Buy Scheme](#).

Table 5: House starts and completions in the UK (2014-2018).

Year	Starts	1998 = 100	Completions	1998 = 100
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
2017	197,750	1.00	178,900	0.94
2018	203,705	1.03	198,119	1.04

2.2.1 UK housing outlook

Over the period 1970-2018, housing completions in the UK have declined by 51% (Table 6).

Table 6: Annual housing completions in the UK (1970-2018).

1970s	1980s	1990s	2000s	2010-2018
000 completions				
314	217	189	191	154

The Construction Products Association's (CPA) forecasts for UK construction activity have been downgraded due to the impacts of continued Brexit uncertainty on investment, divergences between regional housing markets, difficulties faced by traditional high street retailers and concerns over major infrastructure delivery.

The CPA [forecasts](#) that total construction output in the UK will fall by 0.3% during 2019 before a rise of 1.0% in 2020 with output projected to rise by 1.4% during 2021.

The effects of continued Brexit uncertainty adversely affect sectors that require high upfront initial investment: commercial offices and industrial factories. An extended period of falls in new orders in both sectors highlights that uncertainty over long-term returns has made major expenditure on new floor space increasingly difficult to justify. Offices and factories output is forecast to fall 11.0% and 15.0% respectively in 2019, with further falls of 4.0% and 10.0% respectively in 2020.

The decline in project starts has slowed down; however, the figures are expected to recover in 2020. [Growth](#) is predicted due to an expected reduction in uncertainty after Britain's deadline to leave the EU on 31 October 2019, as well as the recent extension of the Help to Buy Scheme.

Whilst the UK construction industry plays a vital role in driving [sawn softwood consumption](#) and imports, domestic producers play a dominant role in the pallets, packaging, fencing and outdoor products markets.

2.2.2 Demand for timber packaging in the UK

The [UK timber packaging market](#) is also showing signs of recovery. In 2017, the estimated number of new wood pallets manufactured in the UK was 41.4 M; a decrease of 2.6% on 2016. The estimated number of wood pallets repaired was 44.4 M; an increase of 7.3% compared with 2016³.

In 2017, it is estimated that the UK market for wooden packaging consumed 1.53 M m³ of sawn timber for the production of new pallets and the repair of existing pallets. Of this, 72% was UK grown timber and 28% was imported.

2.2.3 The UK market for forest products

The UK is a significant importer of sawn timber and panel products. In 2018, 7.21 M m³ of sawn timber products were [imported](#) (Table 7), a reduction of 8.5% over 2017. Over the same period, imports of wood-based panels (WBP) increased by 12.6%.

Over the period 2015-2018, Ireland was the [largest exporter](#) of fibreboard, including medium density fibreboard (MDF) to the UK.

Table 7: UK imports of sawn timber and wood-based panel products (2014-2018).

Year	Sawn timber imports	Panel imports	Total
	000 m ³ metres/annum		
2014	6,425	3,260	9,685
2015	6,323	3,217	9,540
2016	6,794	3,410	10,204
2017	7,883	3,443	11,326
2018	7,213	3,878	11,091

In 2018, [Ireland's share of the UK sawn softwood timber market](#) declined from 7 to 6% (Table 8). In 2019, the UK market for sawn softwood remains competitive due to the uncertainty over the outcome of Brexit and increased competition from European sawmills. The [latter](#) has been largely caused by the volume of beetle damaged roundwood available for harvest. This supply of roundwood is largely concentrated in central Europe. The volume of beetle damaged roundwood has been estimated at up to 140 M m³.

In 2018, the Republic of Ireland was the [fifth largest exporter of sawn softwood](#) to the UK. Moreover, there are further opportunities for the Irish sawmilling sector to grow its market share in the UK. In 2018, only 36% 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 (2014-2018).

Product	2014	2015	2016	2017	2018
	% of imports				
Sawn softwood	6	6	5	7	6
Particleboard including OSB	11	14	14	12	14
Fibreboard including MDF	47	35	32	29	31

2.3 €/\$ Exchange rate

[Historic rates](#) and [forecast movements](#) in the €/£ exchange rate are shown in Table 9.

Table 9: Historic & forecasted €/£ exchange rates by quarter (2018-2020f).

Historic	€/£	£/€	Forecast	€/£	£/€
2018-Q1	0.88	1.13	2019Q4	0.90	1.11
2018-Q2	0.88	1.14	2020-Q1	0.90	1.11
2018-Q3	0.89	1.12	2020-Q2	0.90	1.11
2018-Q4	0.89	1.13			
2019-Q1	0.87	1.15			
2019-Q2	0.88	1.14			
2019-Q3	0.90	1.11			

³ At the time of writing, data for 2018 was not available.

2.4 Demographics

The number of immigrants to the State in the year to April 2019 is estimated to have been 88,600, while the number of emigrants declined over the same period, was 54,900. These [combined changes](#) have resulted in net inward migration for Ireland in April 2019 (+64,500). Over the same period, the population of Ireland was estimated at 4.92 M, an increase of 1.3% over 2017.

3.0 Policy measures

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

3.1 Forest research

The Irish 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 consisting of 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 Ireland](#), including the [Department of Agriculture, Food and the Marine](#).

3.2 Afforestation and forest expansion

Ireland's forest cover, at just over 11% of the land area, is among the lowest in Europe. In order to provide for a sustained wood harvest and to provide for climate change mitigation and other public goods, the [policy aim](#) is to increase forest cover to 18%.

In 2018, the private sector planted 4,025 ha of new forest in Ireland (Figure 1 and Table 10), a decline of 27% on 2017. This brings forest cover in Ireland to 774,045 hectares, some 11% of Ireland's land area.

Table 10: Area of new forests planted in the Republic of Ireland by area and by ownership (2014-2018).

Year	State	Private	Total
	ha		
2014		6,156	6,156
2015	9	6,284	6,293
2016		6,500	6,500
2017		5,536	5,536
2018			4,025

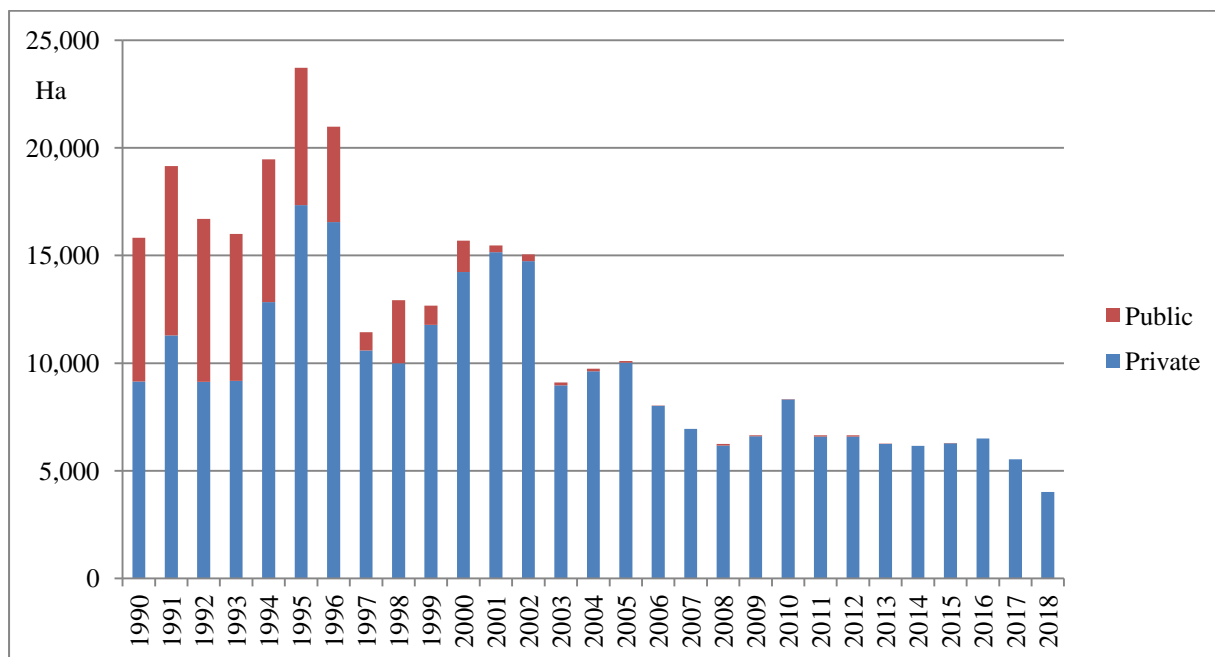
Afforestation in the Republic of Ireland is dominated by the private sector (Figure 1). Since 1990, 328,000 ha of forest have been added to Ireland's forest estate, 83% of which has been planted by the private sector. Over half (50.8%) of forests in the Republic of Ireland are in public ownership, with the remainder (49.2%) in private ownership. The share of private forests in the national forest estate has increased by over 6% since 2006.

Sitka spruce remains the [predominant species](#) used in Irish forestry, occupying 51.1% of the forest area. It has proven to be one of the most productive conifers in Ireland and is the mainstay in roundwood processing. Over one quarter of the Irish forest estate contains broadleaves. 33.6% of the broadleaves are 'other broadleaf species' (both long living and short living), of which over half are willow. The next largest broadleaf species group was birch (24.4%), followed by ash (13.1%) and oak (9.2%). Conifers occupy 479,530 ha while broadleaved species cover 193,580 ha.

In June 2019, [an overview of the administration of forestry schemes](#) was launched by the Department of Agriculture, Food and the Marine (DAFM). It is expected that this review will be completed by the end of 2019.

From November 2019, [grant applications and premium payments](#) for forestry schemes will be fully online.

Figure 1: Afforestation in the Republic of Ireland by ownership (1990-2018).



3.2.1 **Forestry Programme (2014-2020)**

The [programme](#) is 100% funded from the Irish Exchequer and has been granted State Aid approval by the European Commission. This provides for:

- An investment of €482 M 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 Scheme](#) 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.

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 €40/linear metre payable on satisfactory completion of the project.

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^{4,5,6}. Wood residues are primarily used as a fuel for sawmill kilns and for process heat in the manufacture of wood-based panels (WBP). They are also used for the production of renewable energy.

Table 11: Sources of softwood wood fibre (2014-2018).

Fibre source	2014	2015	2016	2017	2018
	000 m ³ OB RWE ⁷				
Roundwood	2,949	3,063	3,102	3,224	3,243
Sawmill residues	925	949	1,007	1,142	1,098
Wood-based panel residues	114	114	115	124	120
Residue imports	49	47	144	144	98
Harvest residues	60	60	60	60	90
Post-consumer recovered wood (PCRW)	300	300	300	300	300
TOTAL	4,397	4,533	4,728	4,994	4,949

In 2018, sawmill roundwood intake was 2.05 M m³, which was converted to 1.01 M m³ of sawn timber and 0.15 M m³ of round stakes (Table 12). In 2018, sawmill roundwood intake declined by 12.1% over 2017. This was primarily caused by [extensive fire damage](#) to GP Wood's sawmill at Lissarda, Co Cork in July 2018 (this sawmill formerly traded as Palfab). It is expected that this mill will be operational again by early 2020.

In 2018, 808,000 m³ of wood-based panels (WBP) were produced from an intake of 1.43 M m³ of wood fibre⁸, a decline of 3.3% over 2017 (Table 12).

A very high proportion (86%) of WBP manufacture was exported (691,000 m³) to a value of €243 M (Table 23). WBP exports mainly comprised 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 12: Uses of softwood wood fibre (2014-2018).

Fibre use	2014	2015	2016	2017	2018
	000 m ³ OB RWE				
Sawmilling	1,815	1,867	1,977	2,178	2,084
Round stake	147	169	164	148	165
Wood-based panels	1,377	1,370	1,395	1,505	1,430
Wood for energy use by the power generation and forest products sector	760	796	844	883	966
Other uses					
Horticultural bark mulch	40	30	30	30	40
Wood chip for heating	100	114	117	49	42
Export of forest product residues	88	36	44	44	139
Pellet manufacture	70	151	106	106	83
Other uses including shavings and animal bedding			51	51	
TOTAL	4,397	4,533	4,728	4,994	4,949

⁴ Data for wood fibre sources and uses is taken from the EUROSTAT Joint Forest Sector Questionnaire (2014-2018).

⁵ UNECE Joint Wood Energy Enquiry (2014-2018) and EUROSTAT Joint Forest Sector Questionnaire (2014-2018).

⁶ Wood fibre that is reused is counted twice in this model.

⁷ RWE: roundwood equivalent

⁸ This includes pulpwood, wood chips, sawdust and post-consumer recovered wood (PCRW).

3.4 Energy policy and support measures

3.4.1 Support Scheme for Renewable Heat

The [Support Scheme for Renewable Heat](#) (SSRH) has been designed to replace fossil fuel heating systems with renewable energy technologies. The Scheme will contribute to meeting Ireland's 2020 renewable energy and emission reduction targets.

The [second phase](#) of the SSRH was launched in June 2019. This will support businesses and farms for up to 15 years for the installation and on-going use of biomass and anaerobic digestion heating systems. The Scheme is designed to support up to 1,300 GWh of renewable heat per year (equivalent to the heating needs of circa 120,000 homes).

The [scheme](#) was developed following detailed economic analysis and extensive engagement with industry. Two public consultations were also held on the design and technology to be employed.

The Scheme is made up of two support mechanisms, an on-going operational support for biomass boiler and anaerobic digestion heating systems and an installation grant for electric heat pumps. [Funding](#) of €7 M was provided for the initial stage of this Scheme in Budget 2018.

3.5 Use of forest-based biomass for energy generation

3.5.1 Existing use of forest-based biomass for energy generation

In 2018, 40% of the wood fibre used in the Republic of Ireland was used for energy generation, mainly within the forest products sector (Table 13). This includes, roundwood, sawmill and WBP residues (i.e. bark, sawdust and woodchip), short rotation coppice (SRC) and manufactured products (i.e. charcoal, wood pellets and briquettes)⁹.

In 2018, 243,000 m³ of firewood was used in the Republic of Ireland to a value of €35 M, which provides a good market for first thinnings (Tables 13 and 16). 4.5% of the supply (i.e. 11,000 m³) was imported. In addition, firewood is also harvested by forest owners for their own use. Wood-biomass fuels used by the sector are shown in Table 13¹⁰.

Table 13: Use of forest-based biomass and as a proportion of total wood fibre availability (2014-2018).

Item	2014	2015	2016	2017	2018
	000 m ³				
Wood-biomass use by the energy ¹¹ and forest products industry	760	796	1,049	1,296	1,080
Roundwood chipped for primary energy use ¹²	100	114	117	49	67
Household firewood use	235	237	237	239	243
Short rotation coppice (SRC)	5	5	20	20	18
Wood pellets and briquettes	150	154	160	175	172
Charcoal	1	1	1	1	2
TOTAL	1,251	1,307	1,584	1,780	1,582
Of which supplied from domestic resources	1,166	1,132	1,139	1,465	1,393
Roundwood available for processing	2,975	3,016	3,108	3,242	3,248
Firewood used	235	237	237	235	243
Total wood fibre used ¹³	3,210	3,253	3,345	3,477	3,491
Domestic wood-biomass use as a % of wood fibre used	36.3	34.8	34.1	42.1	40.0

⁹ UNECE Joint Wood Energy Enquiry (JWEE); 2014-2018

¹⁰ drima market research study

¹¹ Includes co-firing of wood biomass at [Edenderry Power](#)

¹² Primarily used for space and process heating

¹³ Roundwood use includes the use of domestically sourced and imported roundwood

In 2017, the [biomass fuelled](#) combined heat and power (CHP) had an installed capacity of 5.5 megawatts (Mwe) (Table 14)¹⁴. However, in 2017, [only 71.1% of the installed CHP capacity](#) (by number of units) was in use.

In 2018, the output of the forest-based biomass energy sector declined by 11.1% over 2017 (Table 15). This resulted in greenhouse gas (GHG) emission saving of 0.88 M tonnes of carbon dioxide (CO₂). The reduced output from the sawmill and WBP sectors and the reduction in the demand for wood-biomass by Edenderry Power caused this decline¹⁵.

Table 14: Number of CHP units and installed capacity by fuel type (2017).

Fuel type	No	Capacity (Mwe)	No of units %	Installed capacity %
Biomass	3	5.5	1	2

Table 15: Heat and electrical energy output from forest-based biomass, and associated greenhouse gas emissions savings (2014-2018).

Item	Unit	2014	2015	2016	2017	2018
		Output				
Heat	TJ	7,562	7,730	9,017	11,686	10,386
Electricity	TJ	530	446	932	1,208	1,074
TOTAL	TJ	8,092	8,176	9,949	12,894	11,460
CO ₂ emission savings	000 tonnes	619	625	761	986	876

Table 16: Volume and value of the domestic firewood market in the Republic of Ireland (2014-2018).

Year	000 m ³ OB	€ M
2014	235	34.05
2015	237	34.34
2016	237	34.34
2017	239	34.63
2018	243	35.21

3.6 Renewables and national renewable energy targets

3.6.1 Forest-based biomass outlook to 2025

Depending on the scenario chosen, The COFORD report [Mobilising Ireland's forest resource](#) estimates that by 2025, the demand for wood fibre on the island of Ireland will exceed supply of wood fibre by 3 to 4.7 M m³.

Based on scenario modelling¹⁶, the Sustainable Energy Authority of Ireland (SEAI) currently forecasts that by 2020, the [demand for biomass for energy](#) in the Republic of Ireland will be 53 PJ, equivalent to 1.87 M m³. Forest-based biomass and waste resources could deliver about 9 PJ each, with agricultural residues having the potential to supply a further 8 PJ. The balance of supply is likely to comprise indigenous purpose-grown energy crops and imported biomass. The demand for forest-based biomass for energy in 2025 is an aggregate of the demand for combined heat & power (CHP), heat only and co-firing. To meet the 2025 renewable energy target, the demand for forest-based biomass for energy production will need to more than double over the period 2018 to 2025. This is a challenging target. However, experience in Scotland and in Austria has shown that biomass use can grow to meet challenging renewable energy targets.

The [COFORD roundwood mobilisation report](#) outlines measures to ensure wood mobilisation reaches forecast levels; (see section 3.9). These measures were reviewed by the COFORD Roundwood Forecasting and Mobilisation Group, whose [report](#) was published in late 2018.

¹⁴ At the time of writing, data for 2018 was not available.

¹⁵ UNECE Joint Wood Energy Enquiry (2014-2018)

¹⁶ This is based on data available as of 2/11/2010.

3.6.2 Contribution of renewables to heat and electricity demand

Forest-based biomass is primarily used to generate renewable heat, with 1.58 M tonnes of forest-based biomass being consumed for energy production in 2018 (Table 13)¹⁷.

In 2017, [79% of renewable heat](#) was generated from solid biomass¹⁸. This includes forest-based biomass and tallow. In industry, most renewable heat energy is in the form of wood waste used in wood-based panel mills and sawmills. The food processing industry mostly uses tallow, but this declined by 57% between 2005 and 2017. A significant new source of renewable heat energy that has emerged since 2005 is the use of renewable waste in cement manufacture.

In 2017, the contribution of renewable energy to gross final consumption (GFC) was 10.6%, compared to a 2020 target of 16%. This avoided 4.2 M tonnes of carbon dioxide (CO₂) emissions and saved €382 M of fossil fuel imports. Ireland's [progress towards meeting its renewable energy targets](#) are shown in Table 17.

Table 17: Renewable energy progress to targets (2010-2017).

Energy type	Progress towards targets by year							Target 2020
	2010	2011	2012	2013	2014	2016	2017	
RES-E (normalised)	14.5	17.3	19.5	20.8	22.7	27.2	30.1	40
RES-T	2.4	3.8	4.0	4.9	5.2	5.0	7.4	10
RES-H	4.5	4.9	5.1	5.5	6.6	6.8	6.9	12
Directive (2009/29/EC)	5.6	6.5	7.1	7.6	8.6	9.2	10.6	16

3.7 Forecast of roundwood demand

An updated [forecast of roundwood demand \(2020-2025\)](#) was prepared by the COFORD Roundwood Forecasting and Mobilisation Group. This report was published in late 2018.

This report stated that ‘demand by indigenous industry for forest fibre on the island of Ireland already exceeds the supply capacity of state and private forests’. Despite the forecasted near doubling of roundwood output on an all Ireland basis from 3.95 M m³ in 2017 to 7.86 M m³ by 2035, an existing supply deficit is likely to substantially increase over the period up to 2025 and beyond, with wood energy demand being a key driver. A significant feature of the forecasted supply is that almost all of the increase is forecast to be from privately owned forests in the Republic.

3.8 Mobilising roundwood supply – the COFORD wood mobilisation report (2018)

[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.

¹⁷ UNECE Joint Wood Energy Enquiry (2014-2018)

¹⁸ At the time of publication, data for 2018 was not available.

3.9 National climate change strategy

3.9.1 Climate Action and Low Carbon Development Act (2015)

The enactment of the Climate Action and [Low Carbon Development Act 2015](#) was a landmark national milestone in the evolution of climate change policy in Ireland. The *Climate Action and Low Carbon Development Act 2015* provides the statutory basis for the national transition objective laid out in the national policy position. As provided for in the 2015 Act, 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) and [National Adaptation Frameworks](#) (NAFs).

Ireland's NMP 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 basis.

The National Adaptation Framework (NAF) sets 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.

In January 2018, Ireland's first statutory National Adaptation Framework (NAF) was published by Minister Denis Naughten T.D. The NAF sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF was developed under the Climate Action and Low Carbon Development Act 2015. The Government published in 2019 a [Climate Action Plan](#) which recognises the importance of forests in climate change mitigation. A series of actions are detailed in the plan for all sectors of the economy which includes increased afforestation, road construction, protecting the forest estate and the promotion of timber products.

3.9.2 Irish forests and climate change

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 risks.

According to the [third NFI report](#), Irish forests contained over 312 M tonnes of carbon in 2017. Put in perspective, this is equivalent to 24 times the greenhouse gas (GHG) 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, 3.8 M tonnes of carbon dioxide (CO₂) were stored in 2016.

In 2018, 40% of the roundwood used in the Republic of Ireland was used for energy generation, mainly within the forest products sector (Table 13). The use of wood biomass energy in Ireland results in greenhouse gas (GHG) emission savings from the displacement of fossil fuels. The saving in 2018 is estimated at 0.88 M tonnes of carbon dioxide (CO₂) (Table 15). This compares with [total emissions](#) of 60.8 M tonnes of CO₂ for 2017.

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.

Under the EU Climate and Energy Framework 2030, EU Member States have agreed to account emissions and removals in forests and other land use under the Regulations referred to as the Effort Sharing Regulation (Regulation 2018/842) and the Land use, Land Use Change and Forestry Regulation (Regulation 2018/841). Ireland forests have the [potential](#) to contribute up to 2.0 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 management.

In 2019, the Minister for Agriculture, Food and the Marine is in the process of preparing an adaptation plan for climate change in the agriculture, fisheries and forestry sector.

3.9.3 New native woodlands on cutaway bog

In October 2019, it was announced that 1,500 ha of bog, no longer used for peat production, will be initially targeted under a [new collaboration](#) between [Bord na Móna](#) and [Coillte](#) to transform former peat production land into native woodland. The land in counties Offaly, Laois, Westmeath and Tipperary will be used for the establishment of at least 4 M new trees over the next three years, according to Bord na Móna.

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 wood-based panels continues to expand.

4.1 Irish roundwood harvest

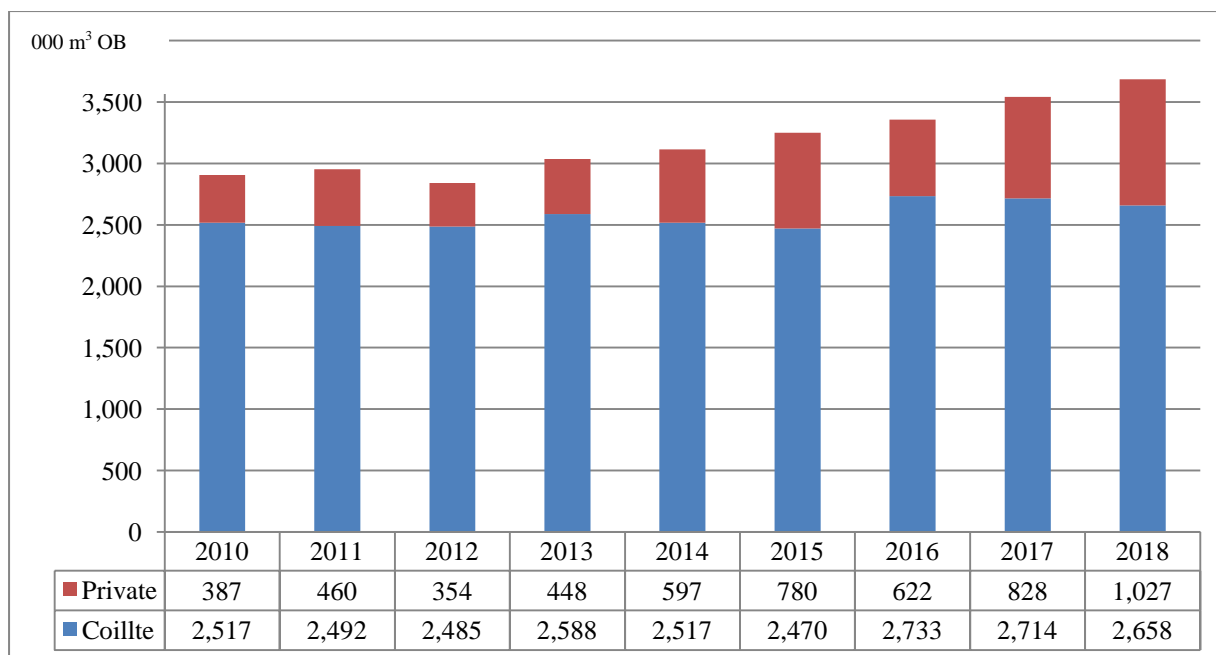
In 2018, 3.69 M m³ of roundwood was harvested in the Republic of Ireland (Table 18)¹⁹, an increase of 4.0% over 2017. This increase in roundwood harvest was driven by the increase in the roundwood harvest from the private forest estate (Figure 2). Over the same period, the roundwood harvest from Coillte's forest estate decline by 2.1% (Table 18).

Over the period 2017-2018, the harvest of roundwood by the private forestry sector increased by 24% to 1.03 M m³, a new record. This is the first time that the private roundwood harvest in the Republic of Ireland has exceeded 1 M m³. This increase was driven by a strong demand for wood fibre from both home and export markets.

Table 18: Total roundwood harvest (including firewood) in the Republic of Ireland (2014-2018).

Harvest type	2014	2015	2016	2017	2018
	000 m ³ OB				
Coillte	2,517	2,470	2,733	2,714	2,658
Private	597	780	622	828	1,027
TOTAL	3,114	3,250	3,355	3,542	3,685

Figure 2: Total roundwood harvest (including firewood) from Coillte and private forests in the Republic of Ireland (2010-2018).



¹⁹ Historic harvest and trade data for the period 1961-2017 is on the [FAOSTAT website](#)

In 2018, 3.25 M m³ of roundwood was available for processing²⁰ in the Republic of Ireland²¹, virtually unchanged on 2017. In 2018, the level of roundwood harvest in the private sector was 27% higher than in 2017 (Table 19).

Table 19: Roundwood available for processing in the Republic of Ireland (2014-2018).

Item	2014	2015	2016	2017	2018
	000 m ³ OB				
Commercial softwood					
Imports less exports	68	40	-16	-65	-205
Coillte	2,434	2,377	2,600	2,613	2,591
Private sector	447	646	518	676	857
Commercial hardwood					
Imports less exports					
Coillte	6	3	5	7	
Private sector	0	0	1	11	5
TOTAL	2,955	3,066	3,108	3,242	3,248

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)²². The majority of the logs supplied to Irish sawmills are certified to the [FSC](#) and/or [PEFC](#) standard. In addition, Irish sawmills have their own chain of custody (CoC) certification.

In 2018, sawmill roundwood intake was 2.25 M m³, which was converted to 1.01 M m³ of sawn timber and 0.15 M m³ of round stakes (Tables 12 & 21). In 2018, sawmill roundwood intake declined by 12.1% over 2017. This was primarily caused by [extensive fire damage](#) to GP Wood's sawmill at Lissarda, Co Cork in July 2018 (this sawmill formerly traded as Palfab). It is expected that this mill will be [operational again by early 2020](#).

The output of the Irish sawmill sector over the period 2014-2018 is in Table 21^{23,24,25}. Over the period 2017-2018, the production of wood residues declined by 3.7%. These include sawmill and wood-based panel residues (Table 22).

Table 20: Large and medium sized sawmills on the island of Ireland.

Size ²⁶	Sawmill	Location(s)
Large	Balcas Ltd.	Enniskillen, Co Fermanagh, Northern Ireland
Large	ECC Timber Products Ltd.	Corr na Móna, Co Galway
Large	Glennon Brothers Ltd.	Longford, Co Longford and Fermoy, Co Cork
Large	GP Wood Ltd.	Enniskeane, Co Cork Macroom, Co Cork
Large	Murray Timber Group	Ballygar, Co Galway and Ballon, Co Carlow
Medium	Coolrain Sawmills Ltd.	Coolrain, Co Laois
Medium	Laois Sawmills Ltd.	Portlaoise, Co Laois
Medium	Woodfab Timber Ltd.	Aughrim, Co Wicklow

²⁰ Roundwood available for processing is defined as: (domestic roundwood harvest + roundwood imports) – (exports of roundwood).

²¹ Firewood is excluded.

²² drima market research survey

²³ EUROSTAT Joint Forest Sector Questionnaire (2014-2018).

²⁴ Over the period 2015-2018, sawmill output was estimated by a sawmill survey. This has provided a better estimate of products manufactured and the volume of output.

²⁵ This output includes the production of sawn hardwood.

²⁶ Large sawmills are those with an annual roundwood intake of over 400,000 m³ per annum. Medium sized sawmills have an annual roundwood use of 150,000 to 200,000 m³ per annum.

Table 21: Production of sawnwood (2014-2018).

Product	2014	2015	2016	2017	2018
	000 m ³				
Construction timber	478	491	519	553	535
Pallet/packaging	209	221	234	249	241
Square edge fencing	203	203	215	229	221
Other	17	16	17	18	17
TOTAL sawn wood	907	931	985	1,049	1,014

Table 22: Production of wood residues (2014-2018).

Residue type	2014	2015	2016	2017	2018
	000 m ³				
Bark	219	238	225	295	285
Wood chip	576	590	640	703	654
Sawdust	244	285	257	268	268
Post-consumer recovered wood (PCRW)	300	300	300	300	300
TOTAL	1,339	1,413	1,422	1,566	1,508

4.2.2 Trade

In 2018, exports of forest products from the Republic of Ireland were €450 M, an increase of 6.8% on 2017. WBP accounted for €243 M, the balance comprising paper and sawn timber exports. Export values of WBP and sawn timber increased by 13.2% and 8.5% on 2017 (Table 23).

In 2018, forest products to the value of €642 M were imported into Ireland, an increase of 6.8% over 2017. This trade is dominated by the importation of pulp, paper and paper-board products, representing 61% of forest product imports (by value).

In 2018, net imports of forest products to the Republic of Ireland were €192 M, largely driven by the import of pulp and paper products, while the net exports of sawn timber and WBP were both positive at €20 M and €117 M respectively (Table 24)^{27,28}.

Table 23: Timber and paper products trade, volume and value (2014-2018).

Product	Imports									
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
	000 m ³					€ M				
Sawn timber	205	227	250	266	339	74	88	92	99	126
Wood-based panels	235	240	242	273	275	98	112	112	122	126
	000 tonnes									
Pulp products	46	51	46	45	41	42	53	45	45	37
Paper and paper-board products	404	427	417	407	388	340	359	337	335	353
TOTAL						554	612	586	601	642
Product	Exports									
	000 m ³					€ M				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Sawn timber	718	701	806	875	832	122	121	122	129	146
Wood-based panels	662	610	628	660	691	199	190	206	224	243
	000 tonnes									
Pulp products	0	0	3	0	18	0	0	1	1	1
Paper and paper-board products	67	86	137	40	37	50	44	51	69	60
TOTAL						370	355	380	423	450

²⁷ Negative values show a surplus of imports over exports.

²⁸ Includes import/export figures for sawn timber, wood-based panels and pulp/paper products only. Data are taken from Ireland's EUROSTAT Joint Forest Sector Questionnaire (JFSQ) returns (2014-2018). Roundwood, sawmill residues and secondary processed timber products are not included. Trade data for the JFSQ was estimated using net mass and value figures received at SITC level from the [CSO](#)

Table 24: Overall balance of the trade in the value of primary forest products (2014-2018).

Product	2014	2015	2016	2017	2018
	€ M				
Sawn timber	48	33	30	30	20
Wood-based panels	101	78	94	102	117
Pulp products	-42	-53	-44	-44	-36
Paper and paper-board products	-290	-315	-286	-266	-293
TOTAL	-183	-257	-206	-178	-192

4.2.3 Sawn softwood imports

In 2018, imports of sawn softwood were 310,000 m³, to a value of €95 M. The main suppliers to the Irish market for the period 2014-2018 are in Table 25²⁹.

Table 25: Main softwood exporters to Ireland (2014-2018).

Exporter	2014	2015	2016	2017	2018
	000 m ³ UB				
Sweden	32	37	48	56	64
Latvia	44	44	49	46	60
Germany	10	12	22	15	45
Finland	13	21	20	28	40
Great Britain ³⁰	14	19	27	27	38
Russian Federation	17	21	16	18	19
Northern Ireland	29	21	18	12	13
Netherlands	7	7	8	9	12
Estonia	3	5	3	7	5
France			4	3	5
Belgium	2	1	1		4
Lithuania					1
Canada	1	1	1	1	1
New Zealand				1	1
Poland				2	
Total volume	172	189	217	225	308
% of total imports	97	97	100	97	99

4.2.4 Sawn hardwood imports

In 2018, Ireland imported 29,000 m³ of sawn hardwood to a value €31.1 M, a decline of 14.7% in volume on 2017. Over the same period, 13,000 m³ of tropical hardwoods were imported to a value of €10.0 M. This was a 27.8% decline on the volume of tropical hardwood imported in 2017. The main hardwood exporters to the Irish market for the period 2014-2018 are shown in Table 26³¹.

²⁹ [Central Statistics Office](#)

³⁰ Data on sawn timber which is imported from Northern Ireland is treated separately from that which is imported from Great Britain.

³¹ [CSO Trade Statistics](#) & EUROSTAT JFSQ for Ireland (2014-2018)

Table 26: Main exporters of sawn hardwood to Ireland (2014-2018).

Exporter	2014	2015	2016	2017	2018
	000 m ³ UB				
United States	11	10	11	10	10
Cameroon	12	14	15	13	12
Northern Ireland	2	2	2	3	3
Congo			4	1	
Congo Dem Rep				1	
Canada	1	1	1	1	1
Great Britain ³²	1	1	2	2	1
Ivory Coast	1	1	1	1	
Germany	1	1	1	1	1
Total volume	29	30	37	33	28
% of hardwood imports	95	91	94	93	95

4.3 Value added products - wooden furniture

In 2018, wooden furniture to the value of €265 M was imported into the Republic of Ireland. In 2018, the exports of wooden furniture declined year-on-year by 54% to €22 M. Over the period 2014-2018, net imports for wooden furniture increased by 54% to €243 M (Table 27)³³.

Table 27: The value of wooden furniture imports & exports to/from the Republic of Ireland (2014-2018).

Item	2014	2015	2016	2017	2018
	€ M				
Imports	195	224	206	229	265
Exports	37	48	54	48	22
Net imports	158	176	152	181	243

4.4 Wood-based panels (WBP)

Irish based wood-based panel manufacturers and the products which they manufacture are outlined in Table 28.

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

Manufacturer	Established	Product(s) produced	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 2018, 808,000 m³ of wood-based panels (WBP) were produced from an intake of 1.43 M m³ of wood fibre³⁴, a decline of 3.3% over 2017. A very high proportion (86%) of WBP manufacture was exported (691,000 m³) to a value of €243 M (Table 29). WBP exports mainly comprised 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 (2014-2018).

Item	Unit	2014	2015	2016	2017	2018
Production	000 m ³	773	769	774	836	808
Export volume	000 m ³	662	610	628	660	691
Export value	€ M	198	190	206	224	243

³² Data on sawn timber which is imported from Northern Ireland is treated separately from that which is imported from Great Britain

³³ EUROSTAT JFSQ for Ireland (2014-2018).

³⁴ This includes pulpwood, wood chips, sawdust and post-consumer recovered wood (PCRW).

4.5 Builders merchanting

The Grafton Group is Ireland's largest builders merchant. Its [2018 Annual Report](#) stated that the merchant market benefitted from 'strong organic growth was reported by the merchanting and DIY businesses in Ireland'.

It further states that 'underlying market conditions were positive in the residential RMI and new build markets and in sectors of the non-residential construction market. An increase in the supply of building materials to all phases of house building was a key contributor to revenue growth'.

4.6 Voluntary forest certification

4.6.1 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. Currently, about 6,500 hectares of private forest is [certified](#). All forests managed by Coillte are [dual certified](#) to [FSC](#) and [PEFC](#) standards.

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 process.

In 2018 the Department of Agriculture, Food and the Marine established, [two certification groups](#) for private forest owners where costs can be shared. A template for certification was also launched in 2018 to help navigate the complexities of the certification process. As a result of these initiatives, there are early signs that the forest industry is beginning to put measures in place to roll out certification to private forest owner.

4.6.2 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 Group](#) and the [Forestry Owners Cooperative Society](#) 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 certification

In November 2016, the Minister of State at the Department of Agriculture, Food and the Marine, with responsibility for forestry, welcomed the development of a [template for private forest owners](#) to establish certification groups.

The certification contract is with an international consortium led by Commercial Forestry Services Ltd., in partnership with The Forestry Company, UK Forest Certification Ltd. and the Soil Association Certification Ltd. (UK). Key contributors to the project are [Teagasc](#) and the two participating forestry groups, North East Forestry Group and Forest Owners Co-operative Society.

In April 2018, the Minister of State at the Department of Agriculture, Food and the Marine with responsibility for forestry, Andrew Doyle T.D., [congratulated](#) the North East Forestry Group and the Forest Owners Co-operative Society, on achieving [Forest Stewardship Council \(FSC\) certification](#).

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 procedures³⁵.

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 M people](#) visit Irish forests for recreation purposes each year. This activity has been valued at €97 M, which in turn generates €268 M in economic activities in rural communities.

For Kyoto II (2013-2020), the net sink contribution of afforestation, reforestation and deforestation (ARD) is forecast to be 3.8 M tonnes of CO₂ per year. This includes harvested wood products (HWP)³⁶.

In 2018, Coillte, Ireland's state forest company has launched a new classification system that will allow for integrated planning and management of key biodiversity sites across its 440,000-hectare estate. Its '[Bio-Class](#)' system has been designed to categorise key areas of its forest estate which are of ecological value. These range from moderate to very high. This will enable Coillte to ensure its biodiversity areas are properly managed and resourced.

³⁵ The Environmental Report on the Forest Policy Review can be found at:

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

³⁶ 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).

6.0 Recent developments

6.1 Forestry budget

The Department of Agriculture, Food and the Marine (DAFM) promotes afforestation as a viable land use for landowners through the provision of planting grants and payment of annual premiums. In 2018, €103 M of [capital expenditure](#) (including a capital carryover) was invested in forestry development, 93% of which went towards afforestation grants and premiums.

A [review of the administration of forestry schemes](#) is currently being undertaken. It is expected that the report on same will be published in late 2019.

6.2 A review of the socio-economic effect of forestry in County Leitrim

In 2018, University College Dublin completed an analysis of [the Socio-Economic Benefits of Forestry in County Leitrim](#), a county in the North West of Ireland. This study was completed on behalf of the [Irish Department of Agriculture, Food and the Marine](#) (DAFM).

In 2017, 18.9% of Co. Leitrim was under forest. This is the highest percentage forest cover among all counties in the Republic of Ireland and is substantially higher than the national level of 11%. Private forests account for just over half (51.3%) of the forest area in the county.

An estimate of the direct economic activity associated with forestry in Co. Leitrim in 2017 is €15.0 M. The economic activity associated with wood processing is €11.5 M in 2017, giving a total of €26.5 M economic activity associated with forestry/wood processing in 2017 in Co. Leitrim.

The total carbon stock in Co. Leitrim forests is estimated to be 126 M tonnes.

6.3 Forest Industries Ireland (FII)

In late 2018, Ibec, the Irish business lobbying group, launched [Forestry Industries Ireland](#) (FII), a new trade association, specifically for the forestry and timber industry in Ireland. FII represents the forestry and forest products sector in the Republic of Ireland and in Northern Ireland.

FII was formerly the [Irish Forestry and Forest Products Association](#) (IFFPA).

6.4 National Forest Inventory (NFI)

The third NFI cycle commenced in 2015 and was completed in 2018. This facilitates 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. The new NFI also facilitates industry planning and development.

Nearly half of the stocked forest area is less than 20 years of age. The promotion of afforestation and the mobilisation of the private timber resource continue to be [key objectives](#) of the Department of Agriculture, Food and the Marine (DAFM). [Key findings](#) of the NFI are outlined in Table 30.

A fourth NFI is currently under way.

Table 30: Key findings of Ireland's NFI as of 12/2017.

Item	Unit	Value
Area under forest	%	11%
Area under forest	000 ha	770
% of forest in public ownership	%	50.8
% of forest in private ownership	%	49.2
Area under conifers	%	71.2
Area under broadleaves	%	28.8
Total growing stock	M m ³	116
Forest carbon sink	M tonnes	312

6.5 Felling decision tool

In 2017, a [web based felling decision tool](#) designed for conifers tree species was launched by Mr Andrew Doyle T.D., Minister of State with responsibility for forestry. This is available on the Department of Agriculture, Food and the Marine website. It is designed to be used by foresters and non-foresters and only requires basic information to be inputted by the user (i.e. species, yield class, rotation type and thinning regime). The tool is designed to support a range of conifer species. These include: Sitka spruce, Norway spruce, European larch, Japanese larch, Douglas fir, lodgepole pine (north and south coastal) and Scots pine.

The tool aims to provide owners with information on their estimated timber revenues and crop parameters (volumes, top height, mean tree size). This information will assist them in deciding when to clearfell their crops. The tool will also show the implications of felling earlier or later than the recommended financial rotation age.

6.6 Forest fires

2017 saw a major increase in levels of fire activity relative to preceding years. The [bulk of fire activity](#) occurred between April and May 2017 and corresponded with prolonged high fire risk in upland areas typically associated with fire activity.

In 2017 up to 1,700 ha of forest lands are known to have been damaged by fire in Ireland, mainly commercial forest holdings adjacent to fire prone upland areas. [Estimates for 2018](#) indicate that forest fires occurred in approximately 500 ha.

6.7 Management of native woodlands

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](#). 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.

6.8 Plant health

In 2017, no harmful pests or diseases for which Ireland has current EU Protected Zone status have been detected in Irish forests during [annual surveys](#) in 2017;

- The first detection of *Hymenoscyphus fraxineus* (previously referred to as *Chalara fraxinea*) in Ireland was in October 2012. The systematic and targeted plant health surveys undertaken by the Department over the summer months of 2017 recorded significant increases in findings of the disease. By the end of 2017 there had been findings in ash in over 600 locations in various settings – forests, nurseries and garden centres, on farm planting, roadside planting, hedgerows and private gardens in all 26 counties. In 2017 in light of the increasing numbers of findings DAFM switched to mapping findings on the basis of whether the disease had been found in 10km grid squares rather than showing individual findings.
- *Phytophthora ramorum* was first detected in Japanese larch in 2010 and at the end of 2017 has been confirmed present at a total of 52 locations in this tree species;
- Fire damage peaked in 2017 at 1,700 ha, primarily due to the Cloosh forest fire in Co. Galway;
- 109 Seed Collection Permits and 19 Master Certificates of Provenance were issued in 2017 in relation to home collected forest reproductive material;
- 45 Irish companies are currently registered in Ireland to produce wood packaging material to the FAO IPPC International Standard for the Regulation of Wood Packaging Material in International Trade (ISPM No. 15) thus facilitating the export of goods worldwide from Ireland on compliant pallets and crates.

6.9 Brexit Forum

UK exit from the EU will be particularly challenging for Irish business. As [Ireland's largest EU trading partner](#), the UK accounts for 14% of our total exports and 26% of imports.

However, the Irish timber industry is uniquely exposed to Brexit, with almost 80% of its output, and 100% of future growth, dependent on ongoing access to the UK. Due to the physical properties of Ireland's fast grown conifers, diversification into other markets is not a realistic option. The [Timber Industry Brexit Forum](#) (TIBF) was established when the principals of the 10 companies responsible for the export volume of the Irish timber industry came together to assess the risks of Brexit and to devise strategies to minimise negative impact on the industry.

There are approximately 40,000 roll on/ off truck deliveries of Irish timber products to the UK per annum. Due to the relative size of each load relative to value, the imposition of new customs and logistics costs would effectively create an expensive tariff on the Irish timber into the UK. The ability to service the UK market in a just in time basis gives Irish timber a competitive advantage against non-EU timber, any port related delays would severely reduce this advantage.

6.10 Market for wood pellets

The [price of wood pellets](#) in Ireland varies depending on the size of delivery, but for a bulk, blown delivery of a minimum of 3 tonnes is in the range of 5 to 5.3 cent/kWh. For larger deliveries, this can drop to 4.6 cent/kWh.

Existing modelling which was undertaken to support the design of the renewable heat incentive (RHI) suggests that there is a potential for the delivery of up to an additional 1,200 GWh of heat from the installation of new boilers in the non-domestic, non-ETS sector. This would require about 1,500 GWh of biomass fuel. If supplied by wood pellets, this would require about 370,000 tonnes and if by wood chip between 370,000 and 430,000 tonnes (depending on moisture content). This new biomass demand could be met by additional wood fuels produced in Ireland and/or by imported biomass, probably in the form of pellets.

6.11 Woodland Environment Fund

In October 2019, [An Post](#), the Irish postal service was the first company to sign up for the [Woodland Environment Fund](#) (WEF). The initiative supported by An Post is a site in Co. Galway involved the planting of some 25,000 native oak, alder and birch trees.

6.12 Enhancing bio-diversity in Irish forests

In January 2019, the Irish Department of Agriculture, Food and the Marine announced a series of new measures to improve the [bio-diversity of Irish forests](#) including:

- A [new scheme](#) to support 'Continuous Cover Forestry', (CCF), which allows for the production of commercial timber while retaining forest cover at all times;
- A new Deer Tree Shelter and Deer/Hare Fencing Scheme which aims to support land owners who wish to plant broadleaves in areas where there is a risk of deer damage and
- Changes to the [Woodland Improvement Scheme](#) (WIS) to introduce grant aid to carry out a second thinning intervention for broadleaf forests.

6.13 Knowledge Transfer Groups

Following a successful pilot scheme in 2017, a [Forestry Knowledge Transfer Group \(KTG\) Scheme](#) was launched by Andrew Doyle T.D., Minister of State at the Department of Agriculture, Food and the Marine with responsibility for forestry, in August 2018. The [KTG module](#) comprised 33 groups with 605 participants, focussed on timber mobilisation and forest-based biomass.

6.14 Forest recreation

Over [18 M visitors](#) visit Irish forests each year, primarily in the [Coillte estate](#). Other providers include the [National Parks and Wildlife Service](#) (NPWS). Within its forest estate, Coillte provides access to twelve forest parks, almost 300 recreation sites and more than 3,000 kilometres of way-marked roads and paths.

In 2018, Coillte applied for planning permission for a major redevelopment of its [Avondale House and Forest Park](#), Rathdrum, Co Wicklow to create a new visitor destination of national scale. Capital funding of €8 million has been secured from both Coillte and [Fáilte Ireland](#) to develop the first phase of this visitor project.

In 2018, two new national mountain bike trail centres were constructed in the Slieve Bloom Mountains, in counties Laois & Offaly and at Coolaney in County Sligo. An investment of more than €2 million was secured to develop over 40 kilometres of mountain bike trails and associated visitor facilities across both of these new sites.

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.

- In 2019, Glennon Brothers won the [Timber Trades Journal \(TTJ\) Softwood Trader of the Year](#) Award.
- [GP Wood](#) is in process of re-building its sawmill at Lissarda which was badly damaged by fire in 2018. This sawmill is set to re-open in early 2020.
- 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).
 - 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 M](#) in improving its operations in Enniskeane. This investment which was completed in 2017, funded an enhanced product range, increased plant capacity and created an additional 27 direct and indirect jobs.
- Since 2014, Glennon Brothers [has invested €20 M](#) in its Fermoy sawmill. This includes a new log sorter and a sawn timber planing facility.
- Over the past 3 years, Masonite Ireland has developed 2 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 M OSB line. This line is now fully operational.
- In 2018, SMARTPLY was the winner at the Timber Trade Journal (TTJ) Awards for Marketing Excellence. This was for the [promotion of SMARTPLY OSB](#) to the building sector in the UK.
- In 2019, MEDITE SMARTPLY is commissioning its factory in Hull, UK to support the ongoing development of its outdoor [MEDITE TRICOYA](#) product.
- In 2018/2019 MEDITE SMARTPLY extended its product range to include:
 - Full press size OSB3 to support the use of OSB in offsite office construction.
 - [SMARTPLY Ultima](#), an OSB4 product for most demanding structural applications in offsite manufacturing and construction.
 - [SMARTPLY Pattress Plus](#), 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.

7.2 Wood Props

[Wood Properties for Ireland \(WoodProps\)](#) is a joint project between the [Timber Engineering Research Group](#) at NUI Galway and the [Centre for Wood Science and Technology](#), Edinburgh Napier University. It is focused on addressing issues related to characterisation of Irish-grown timber and associated work at National and European level in the standardisation for structural timber quality and production, with a particular focus on grading. Over the course of the project, researchers will undertake an exchange of knowledge related to wood quality, products and standards with forestry and processing industries, and will provide expert advice to regulatory bodies related to the construction of modern timber buildings.

7.3 Timber Information Resource Centre

The [Timber Information Resource Centre](#) is a source of scholarly and technical documents to inform architects, developers, engineers, product manufacturers and other industry stakeholders on all aspects of wood products and design. The "[Timber Information Resource Centre](#)", developed as part of the [WoodProps Programme](#) funded by the Department of Agriculture, Food and the Marine, is designed to be a living database updated frequently to keep pace with a fast-moving and innovative industry and is available to anyone interested in learning more about timber and its uses in construction.

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

In June 2019, 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 Cork and Laois. 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.

7.5 New COFORD reports

In 2018, COFORD has published reports on the following:

- [A Report on Policy Implementation with Recommendations](#)
- [Forest Land Availability Implementation Group Implementation Group Report](#)
- [Wood Supply and Demand on the Island of Ireland to 2025](#)
- [Mobilising Irelands Forest Resource - Meeting the Challenges](#)
- [Longer Term Forest Research](#)
- [Species Mixtures in Irish Forests - A Review](#)

8.0 Irish forest outlook to 2035

Irish forests continue to supply increasing amounts of wood fibre for sawmilling, panel board mills and the wood energy markets. Significant increases in potential timber supply are forecast over the medium term to 2025 which will exclusively come from private forests. It is estimated that there will be a doubling of roundwood output on an all-Ireland basis from approximately 4 M m³ in 2017 to 7.86 M m³ by 2035.

The Irish sawmilling sector is well placed to process this increased production in supply with the majority of products exported to markets in the UK and further afield. This increased production will require increased mobilisation of timber with significant increases required in the construction of forest roads. The lack of independent forest certification within the private forest estate must be addressed if this increased timber supply is to access existing markets both home and abroad. Initiatives by the DAFM provide targeted funding to encourage forest certification and recently increased grant rates will facilitate forest road construction and mobilisation of timber. With over 22,000 individual forest owners with forest holdings averaging just 8.8 hectares, [co-operative approaches](#) such as knowledge transfer and timber producer groups will prove important.

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