

An overview of wood fibre use in the Republic of Ireland (2008)

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In 2008, the volume of roundwood available for processing was 2,272,000 m³ a reduction of 24% on the 2007 level. Coillte supplied 90% of this roundwood, with the balance coming from privately-owned forests and from imports). The sources of the roundwood available for processing in the

Table 1: Roundwood available for processing (000 m³ overbark).

Sector	Roundwood available for processing
Coillte	2,050
Private	118
Imports less exports	104
Total	2,272

Republic of Ireland for 2008 are shown in Table 1 and roundwood availability for sawlog, pulp and stakewood is shown in Table 2.

Demand for sawn timber and for wood based panels (WBP) declined in 2008 due to a sharp reduction in Irish construction activity. Roundwood prices also declined.

Table 2: Roundwood available for processing by assortment (000 m³ overbark).

Assortment	Top diameter cm	Roundwood available
Sawlog	> 14	1,455
Pulpwood	7 – 14	761
Stakewood	7 – 14	56
Total		2,272

Sources and uses of wood fibre in the Republic of Ireland (2008)

Sources and uses of wood fibre in the Republic of Ireland are in Tables 3 and 4

*Table 3: Sources of wood fibre (000 m³ overbark)** *Table 4: Uses of wood fibre (000 m³ overbark).*

Fibre source	Volume
Roundwood	2,272
Sawmilling residues	758
Wood based panel (WBP) residues	106
Post consumer recovered wood (PCRW)	208
Total	3,344

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

Uses of wood fibre	Volume
Sawmilling sector	1,455
WBP sector	1,406
Round stakes	56
Wood biomass use by the forest products sector	317
Other uses	
- Horticultural bark mulch	50
- Wood chip for biomass use	30
- Exports of forest product residues	30
Total	3,344

Irish timber products trade (2008)

Despite difficult market conditions, the exports of Irish sawn timber (in volume terms) increased slightly over 2007.

Imports of forest products exceeded €789 million, mainly pulp and paper products (over

66%), with sawn timber and wood based panels making up the remainder. A reduction in Irish construction output led to a significant reduction in sawn timber imports in 2007 and in 2008 (Table 5).

Table 5: Irish timber imports and exports (2007-2008)

Product	Imports			
	000 m ³		€million	
	2007	2008	2007	2008
Sawnwood	724	412	251	141
Wood Based Panels (WBP)	358	264	146	108
	000 t		€million	
Pulp products	31	29	22	20
Paper & paperboard products	546	526	467	520
Total			886	789
	Exports			
	000 m ³		€million	
Sawnwood	381	389	71	54
WBP	757	614	262	195
	000 t		€million	
Pulp products	0	2	0	0
Paper & paperboard products	85	77	92	69
Total			425	318

Source: Central Statistics Office (CSO); www.cso.ie

Sawmilling overview

Eight companies form the core of the Irish sawmilling sector, providing the main market for sawlog and stakewood. In 2008, sawmills utilised 1.511 million m³ of roundwood. Output was 753,000 m³ of sawn timber. The primary products included construction timber, pallet and fencing products. While Irish construction timber is largely sold on the home market, pallet and fencing products make up the bulk of sawn timber exports.

Wood Based Panels (WBP) overview

The Irish panel products sector had a wood fibre requirement of 1.406 million m³, producing 779,000 m³ of finished product.

Products manufactured include chipboard, oriented strand board (OSB), medium density fibreboard (MDF) and moulded door facings. The sector is export orientated, selling more than 75% of its products in overseas markets. The companies involved are listed in Table 6.

Wood residues and biomass

Wood residues include bark, sawdust and wood chip. Together with post consumer recovered wood (PCRW), they are primarily used as a feedstock for board manufacture. A small volume of wood residues are exported. However in recent years, other uses for wood residues have emerged. These include the production of bark mulch, wood pellets and biomass energy.

Table 6: Wood based panel manufacturers in the Republic of Ireland

Company	Established	Product(s)	Location
Finsa Forest Products	1984	Chipboard / Particleboard	Scariff, Co Clare
Masonite Ireland	1997	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

Wood biomass use in Ireland (2007–2008)
The use of wood biomass in Ireland is dominated by the forest products sector, where it is used for process drying and for energy pur-

poses. However, since 2006, the use of wood energy by commercial and domestic users has risen considerably (Table 7).

Table 7: Feedstock used by the wood biomass sector in Ireland (2007–2008)

Biomass type	End use	Usage 000 m ³ overbark	
		2007	2008
Firewood	Domestic heating	44	57
Wood chips	Commercial heating	35	63
Short rotation coppice (SRC)	Commercial heating	1	1
Wood pellets & briquettes	Domestic & commercial heating	67	82
Charcoal	Domestic use	2	2
Biomass use by the energy & forest products industry	Process drying / heating / CHP	669	611
Total		818	816
Percentage of input which is used by the forest products sector		81%	75%

Endeavours such as the Clare Wood Energy Project show that the biomass sector can provide new markets for roundwood from farm

woodlands. Since 2007, the use of wood biomass for domestic and commercial heating has grown by 41% (Table 8).

Table 8: The use of wood biomass in domestic & commercial heating (2007–2008)

Feedstock	Biomass input in 000 m ³ overbark	
	2007	2008
Firewood	44	57
Woodchips	35	63
Wood pellets & briquettes	30	37
Short rotation coppice (SRC)	1	1
Total	110	158

Energy output

The energy output from the wood biomass sector is shown in Table 9.

Table 9: Energy output of the wood based biomass sector (2007–2008)

Item	Unit	Output	
		2007	2008
Heat output	TJ	4,931	4,857
Electricity output	TJ	51	112
Total	TJ	4,982	4,969
Tonnes CO ₂ abated	000 tonnes	381	380

Biomass benefits

The benefits of using wood biomass include

- It is a renewable, environmentally friendly fuel.
- Is a cost effective alternative to fossil fuels.
- Provides an alternative market for roundwood
- Is carbon neutral.

Since 2006, the use of wood biomass has reduced fossil fuel carbon dioxide (CO₂) emissions by 1.14 million tonnes, over and above the amount of carbon which was sequestered in Irish forests over the same period.

Future use and supply issues

Projections to 2020 indicate that to meet Irish targets for biomass use a supply of 4 million green tonnes of biomass will be required per annum.

- The challenge of achieving the heat and co-firing targets alone would require 3.1 million tonnes of wood chip at 50% moisture content.
- In addition the transport (biofuels) target would be exclusively derived from biomass energy crops.
- The demand from the biomass sector together with existing demand from sawmilling & wood based panel sector

shows that there is a growing demand for the wood fibre harvested from Irish forests.

- It is unlikely that the forest sector could supply more than half of this volume – but it is a target that highlights the need for afforestation to get back to a level of at least 10,000 ha per year
- There is a need to increase the supply of wood fuels from short rotation forestry and from other sources.
- There is also scope to considerably expand supply of wood biomass from final harvesting residues and more intensive thinning of both publicly and privately owned forests.

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