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1.0 Irish economy – an overview

2008¹

- In 2008, the output of the Irish economy declined by 3% when measured in real GDP terms.
 - The single biggest contraction in GDP occurred in the final quarter of 2008, with a quarter-on-quarter fall of 5.4%
- Real GNP declined by 2.8%.
- An Exchequer deficit of €12,714 million was recorded in 2008².
- Tax revenue was €8,133 million below profile in 2008.
- Consumer price inflation (CPI) for 2008 was 4.1% compared to 4.9% for 2007.
- Employment growth has turned sharply negative, from year-on-year growth of 2.6% in the first quarter of 2008 to a contraction of 4.1% in the fourth³.
- The Irish rate of unemployment stood at 6.3%⁴.
- Net immigration for 2008 was 38,500. This was a 43% reduction on immigration figures for 2007.
- In 2008, Irish exports declined in volume and value by 1%.
- On an annual basis, investment in housing fell by 34.2% in 2008, while house completions amounted to 51,724.
- In 2008, the Irish housing market was responsible for 13.98% of GNP.
- Personal consumption declined by 1.0%.
- Following a Government announcement on 30th September 2008, a bank guarantee scheme was established by statute. This scheme extends a Government guarantee over all deposits held on 30th September 2008 for two years until 29th September 2010⁵.

¹ Quarterly Economic Commentary – Summer 2009; Alan Barrett, Íde Kearney & Martin O'Brien, The Economic & Social Research Institute; http://www.esri.ie/UserFiles/publications/20080623114553/QEC2008Sum.pdf

² http://www.finance.gov.ie/viewdoc.asp?DocID=5614

³ Economist Intelligence Unit (EIU) Country Report Ireland (March 2009).

⁴ Unemployment figures expressed as a percentage of the labour force.

⁵ http://www.finance.gov.ie/documents/publications/other/2009/masslettrevapril2009.pdf

$2009 - 2010^6$

The Irish economy is experiencing a severe contraction as large domestic imbalances correct, compounded by the global downturn and financial crisis⁷.2009 looks set to be an even more difficult year than 2008.

The Irish Economic & Social Research Institute (ESRI)⁸ forecasts that Ireland will experience a 'very sharp contraction in economic activity in 2009 followed by a more moderate contraction in 2010. Overall, the depth of the recession is such that output could fall by over 13% from its 2007 peak with unemployment exceeding 16 of the labour force by 2010 despite a resumption of net emigration'. Underlying these forecasts is the assumption of a moderate pick-up in economic activity in the second half of 2010. Key figures include.

- The budget deficit is estimated to reach over 12% in 2009⁹.
 - A budget deficit of 12.2% and 11.4 % of GDP is forecast for 2009 and for 2010 respectively.
 - o In 2009, the Irish Exchequer deficit is estimated to reach €25.7 billion, or 18.6% of GNP. By 2010, it is forecast to be €19.3 billion or 14.5 % of forecast GNP.
 - o Irish Exchequer Returns data for August 2009, shows that tax receipts for the first eight months, were €427m behind target, while the Exchequer deficit was €18.7bn; more than €10 billion higher than the samperiod last year¹⁰.
- It is estimated that the Gross National Product (GNP) will decline by 8.9% in 2009 & by 2.3% in 2010.
 - o Forecasts for the Irish economy have been revised substantially downwards since the beginning of 2009 with the IMF, the OECD and the European Commission now suggesting that the Irish economy will have contracted, in GDP terms, by a cumulative 14% over the period 2008-2010¹¹.
- Irish exports are forecast to decline by 3.9% in 2009 and by 3.0% in 2010.
- The demand for imports from some of Ireland's key trading partners is shown in Table 1.

⁹ EIU Country Report for Ireland, March 2009.

⁶ This is based on the full implementation in 2010 of the savings measures announced for that year in the Supplementary Budget of April 2009. It does not include any provision in respect of the National Asset Management Agency (NAMA).

http://www.oecd.org/dataoecd/6/15/20213230.pdf

⁸ www.esri.ie

¹⁰ http://www.finfacts.ie/irishfinancenews/article_1017551.shtml

http://www.environ.ie/en/PublicationsDocuments/FileDownLoad,21120,en.pdf

Table 1: OECD forecast for import growth in key markets (2009 – 2010) ¹²

Trading partner	Forecast for import volume growth			
	2008	2009	2010	
UK	-0.6	-13.5	-1.0	
Germany	3.9	-10.8	0.9	
France	0.6	-11.4	-1.8	
USA	-3.5	-15.7	1.2	

- Unemployment is expected to reach 12.6% in 2009 & 16.1% in 2010.
- Inflation as measured by the Consumer Price Index (CPI) is set to decline by 4.6% in 2009 and by 0.3% in 2010.
- Private consumption is forecast to fall by 7% in 2009 and by 3% in 2010.
 - o Factors that will negatively affect purchasing power and sentiment are falling employment and rapidly rising joblessness, fears about the banking system, further tax increases and the negative wealth effect of declining house prices and equity values¹³.
- The severity of the economic recession is such that the construction industry will experience its most severe contraction in almost thirty years. Following an estimated contraction in construction output of close to 18% in 2008, the output of the Irish construction industry is expected to contract by a further 35% this year ¹⁴.
- Thus, by the end of 2009, the Irish construction industry is projected to have lost 46% of its value at it's' peak in 2007.
- Housing output is forecast to decline further in 2009 and in 2010.
- In the first five months of 2009, the number of house completions registered in Ireland was just over 12,000; just under half the number of completions of 23,000 in the same five-month period of 2008.
 - Estimates of housing completions for 2009 range from 15,000 to 20,000¹⁵.
 - Estimates of housing completions for 2010 range from 10,000 to 15,000.
- Investment in non-residential construction is expected to contract by 20% in 2009 and by a further 20% in 2010.
- It is forecast that investment in commercial and retail buildings will decline by 29% in 2009and 37% in 2010.
- According to forecasts, construction should account for just over 4 per cent of national output in 2010, down from its peak of 10 per cent in 2006¹⁶.
- The ESRI states that 'it is expected that economic activity will recover in 2010 but at a slow pace, 17.
- However, a recent report by AIB Bank states that it does not see the Irish economy recovering until 2011, when it expects Irish GDP to rise by 3.5%. 'Furthermore, a

¹² OECD Economic Outlook; June 2009; www.oecd.org/ireland

¹³ EIU Country Report for Ireland; March 2009.

¹⁴ http://www.environ.ie/en/Publications/StatisticsandRegularPublications/ConstructionIndustryStatistics/FileDownLoad,20339,en.pdf

¹⁵ Source: Department of the Environment; www.environ.ie

¹⁶ These figures are on a gross value-added basis. The corresponding figures on an expenditure basis would be 20 per cent of GNP in 2006 and 10 per cent in 2010, with housing alone being 15 per cent in 2006 and 5 percent in 2010.

17 http://www.peed.org/de/cood/fc/15/2021/2020

http://www.oecd.org/dataoecd/6/15/20213230.pdf

- tight fiscal policy and subdued housing market are likely to act as constraints on growth in the first half of the coming decade¹⁸.
- However, in 2009, construction activity in Ireland is very subdued and the €/sterling exchange rate remains at a level that makes exporting to the UK a difficult proposition for both Wood Based Panel (WBP) manufacturers and for sawmillers.

2.0 Market drivers

2.1 Housing

Ireland's construction sector has expanded rapidly since the early 1990s. In 2007, it accounted for more than one-fifth of Irish Gross Domestic Product (GDP) in terms of gross value added, almost twice the EU average. Between 1994 and late 2007 employment in the sector increased from 100,000 (8% of total employment) to 279,000 (13% of total employment). Demand was underpinned by rapid economic and demographic growth as well as a speculative aspect, which is now in reverse¹⁹. However, after ten years of unprecedented increases in both prices and activity levels, the Irish housing market has entered a period of significant decline²⁰.

House building is a key driver of Irish timber sales, with residential construction responsible for 65% of total construction output in Ireland. In recent years, timber frame housing has accounted for 30% of Irish house completions.

The buoyant housing market helped to sustain strong economic growth in recent years as housing investment reached almost 16% of gross national income (GNI), the highest in the OECD. However, the market has turned since 2006²¹.

In 2008, though, the downturn in housing activity gathered momentum, while there was a sharp slowdown in virtually every other sector of the economy in the face of a global recession, severe credit crunch and knock on effects from the sharp downturn in housing activity²².

2.1.1 Irish housing output

Housing is an important driver of timber sales (an average new house uses 7 m³ of forest products). However, since 2007, the Irish housing sector has been in severe decline, with 2008 the most difficult year in many decades. In 2008, the total number of planning permissions for houses and apartments fell to its lowest level in ten years, to just 67,584 units²³. Moreover, in 2008, the Irish Construction Industry Federation (CIF) estimates that 35,000 homes and apartments remain unsold in Ireland.

¹⁸ http://www.aibeconomicresearch.com/PDFS/irish%20economic%20outlook%202009%20-2010.pdf

Monthly Report for Ireland, March 2009, The Economist Intelligence Unit Limited 2009, www.eiu.com

²⁰ http://www.rte.ie/business/2009/0904/houses.html

²¹ OECD Economic Surveys: Ireland 2008; http://www.oecd.org/dataoecd/38/12/40448199.pdf

http://www.aibeconomicresearch.com/PDFS/irish%20economic%20outlook%202009%20-2010.pdf

This showed a 20% decline on 2007.

In January 2009, employment in the construction sector stood at 190,000, down 90,000 from its peak in Q3 2007²⁴. As a result, the industry is going through a severe readjustment. This retrenchment is having a significant effect on the demand for forest products. House completions over the period 1990-2008 are shown in Table 2.

Table 2: House completions in the Republic of Ireland (1990–2010f) ^{25,26}

Year	House completions	Growth rate 1990 = 100
1990	19,539	100.00
1991	19,652	100.58
1992	22,464	114.97
1993	21,391	109.48
1994	26,863	137.48
1995	30,575	156.48
1996	33,725	172.60
1997	38,842	198.79
1998	42,349	216.74
1999	46,512	238.05
2000	49,812	254.94
2001	52,602	269.22
2002	57,695	295.28
2006	68,819	352.21
2004	76,954	393.85
2005	80,957	414.34
2006	93,419	478.12
2007	78,027	399.34
2008	51,724	264.72
2009f ^{27,28}	17,000	87.00
2010f ²⁹	10,000	51.18
2011f	10,000	51.18

There is limited data available for 2009 so far but the trends suggest that activity level continued to decline in the opening months of the year, with the number of house registrations down 73% in the first quarter and total completions down by 47% in the first two months³⁰.

Measures announced in the April Budget, including the new income levy, changes to mortgage interest relief and speculation about a future property tax, will all impact on

²⁴ Source: Construction Industry Federation (CIF); www.cif.ie

²⁵ House completion data is based on the number of new dwellings connected by the Electricity Supply Board (ESB) to its electricity

supply network.

²⁶ Department of the Environment, Heritage and Local Government; www.environ.ie

²⁷ House completion figures for 2009 and for 2010 are forecast.

http://www.environ.ie/en/PublicationsDocuments/FileDownLoad,20339,en.pdf
 Source: ESRI Recovery Scenarios for Ireland, May 2009 Page 36.

 $[\]frac{30}{\text{http://www.dkm.ie/uploads/pdf/reports/2009\%2005\%20Prelim\%20Construction\%20Forecast\%20for\%20DEHLG.pdf}$

potential buyers' ability to raise a mortgage, notwithstanding the favourable reductions in house prices, mortgage interest rates and consumer prices to date³¹.

Timber frame construction is an important part of the Irish construction sector. The sector is a key end user of structural timber and panel products, notably Oriented Strand Board (OSB). However, the output of the sector has contracted in line with the overall fall in construction output. A number of timber frame manufacturers have taken short time or have ceased operations.

2.1.2 Repair, Maintenance and Improvement (RMI)

In 2008, the value of the Irish Repair, Maintenance and Improvement (RMI) sector was €8.62 billion (Table 3). This was an 8% increase over 2007.

Table 3: RMI output in the Republic of Ireland [constant 2007 prices] (2005 – 2009f) ³²

Sector	2005	2006	2007	2008	2009f
Residential RMI	€4.00	€4.54	€4.95	€5.5°	3 €4.6
€ billion					
Non Residential RMI	€2.62	€2.90	€2.97	€ 3.09	€ 2.90
€ billion					
Total RMI spend	€6.62	€744	€7.92	€8.6	2 €7.5
€ billion					

However, the current economic recession is putting some companies and businesses under pressure to reduce their cost base. Investment in repair and maintenance works is likely to be reduced or postponed unless deemed to be necessary. Thus the total volume of repair, maintenance and improvement (RMI) expenditure on building and construction is projected to decline by 15% this year, made up of a 10% reduction in housing RMI, a 13% reduction in general contracting RMI and just over an 18% reduction in civil engineering RMI³³.

2.1.3 Demographics

Over the period of a few short years Ireland has moved from being a country of emigration to one of immigration. However, the total number of immigrants into the State in the year to April 2008 fell by 26,000 to 83,800, while the number of emigrants has shown a marginal increase on the previous year to 45,300. As a result net migration is estimated to have fallen from 67,300 in the year ending April 2007 to 38,500 in 2008³⁴.

³¹ http://www.environ.ie/en/Publications/StatisticsandRegularPublications/ConstructionIndustryStatistics/FileDownLoad,20505,en.pdf

http://www.environ.ie/en/PublicationsDocuments/FileDownLoad,21120,en.pdf

http://www.environ.ie/en/Publications/StatisticsandRegularPublications/ConstructionIndustryStatistics/FileDownLoad,20339,en.pdf

http://www.cso.ie/releasespublications/documents/population/current/popmig.pdf

2.2 € / £ Exchange rate

Since late 2007, the euro has strengthened against Sterling by 24%. This has made Irish timber exports less competitive in the UK, and has of course improved the competitiveness of UK producers in the Irish market. Movement in the €/£ exchange rate is shown in Table 4. Forecasts by Barclays Bank anticipate no major change in rates up to July 2010.

Table 4: Historic & forecasted €/£ exchange ra	tes ³⁵
-------------------------------------------------------	-------------------

Period	€/£	£/€
Q3 2007	0.680	1.47
Q4 2007	0.709	1.41
Q1 2008	0.758	1.32
Q2 2008	0.794	1.26
Q3 2008	0.807	1.24
Q4 2008	0.852	1.17
Q1 2009	0.923	1.08
Q2 2009 ³⁶	0.896	1.12
Forecast ³⁷		
1-month	0.83	1.21
3-month	0.82	1.22
6-month	0.82	1.22
12-month	0.75	1.33

2.3 UK construction market

The UK construction market is a key export market for forest products manufactured in Ireland. However, since late 2007 new house building starts in the UK have slowed considerably. Conditions in early to mid 2008 deteriorated further, with housing starts and completions well down on 2007, followed by a series of increasingly pessimistic announcements from builders indicating severe problems in the sector³⁸. Persimmon Homes a UK house builder states that the 'UK housing market has experienced one of the most severe downturns in activity due to a significant reduction in mortgage availability and the loss of buyer confidence', 39.

This is echoed by the UK's National House Building Council (NHBC)⁴⁰. Statistics released in July 2008 by the NHBC⁴¹ show that there was a serious decline in UK

³⁵ http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-gbp.en.html

³⁶ Q2 data is to 24/06/2009.

³⁷ Forecast date is from 19/06/2009; Barclays Wealth Research 2009; http://www.barclayswealth.com/files/FX_Weekly.pdf

³⁸ AMA Research's report; House Building Market - UK (2008 – 2018).

http://corporate.persimmonhomes.com/psn/investor/reports/2008/annual_rep_08/annual_rep_08ind/2008review.pdf

⁴⁰ NHBC, (the National House-Building Council), is the standard setting body and leading warranty and insurance provider for new and newly converted homes in the UK; www.nbbc.co.uk

and newly converted homes in the UK; www.nhbc.co.uk/Newscentre/Recentnews/Name,33966,en.html

housing output during Q2 2008. Over 2008 as a whole, the number of NHBC⁴² registrations for new build fell to under 107,000, a drop of 47% on 2007⁴³. Moreover, the prospects for the UK housing market have not improved in the first half of 2009. NHBC figures show that private housing starts for the three months to the end of February 2009 have plunged 72% against the same period last year⁴⁴. Furthermore, the NHBC anticipates that the volume of new home starts in the UK will remain relatively low throughout 2009.

Although NHBC figures show that activity levels during the three months to the end of April 2009 were still severely depressed, with a 53% reduction in the number of applications received compared to the same period a year ago, some encouragement can be taken from April's figures, which shows that applications to start new homes in the combined private and public sectors rose for the fourth successive month in a row⁴⁵.

In the second quarter of 2009, demand in the British softwood lumber market has been picking up from a low level⁴⁶. From mid 2009, there are signs that the Irish sawmilling sector is winning market share in the UK⁴⁷. This is largely due to a lack of availability of Scandinavian timber in the UK. In the last two months, production shutdowns in the Scandinavian sawmilling industry for company holidays have led to corresponding shortages in lumber supplies⁴⁸.

3.0 Policy measures

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

3.1 The National Development Plan [NDP] (2007-2013)

Over the period 2007 – 2013, the Irish National Development Plan (NDP) will invest €184 billion in the Irish economy. The areas in which the NDP will influence the Irish forestry and forest product sector include.

- Support for afforestation and for the integration of forestry with agriculture.
- The cultivation of fast-growing species, for the purposes of biomass production.
- Skills training for farm foresters.
- The mitigation of climate change.
- Funding for the continuation of the COFORD forest research programme.
- Investment in sustainable energy with a view to meeting the target of 15% of electricity production from renewable sources by 2010.

products.com/news_single.html?&tx_ttnews%5Btt_news%5D=776&tx_ttnews%5BbackPid%5D=13&cHash=e91f683e82

⁴² NHBC is the leading warranty and insurance provider for new homes in the UK; www.nhbc.co.uk

⁴³ http://www.contractjournal.com/blogs/brickonomics/2009/01/nhbc-figures-show-new-home-sta.html

⁴⁴ http://www.contractjournal.com/Articles/2009/04/02/66527/private-housing-starts-plunge-72-in-latest-nhbc-figures.html

⁴⁵ http://britishprecast.info/documents/HFMarketInsightsJan09.pdf

⁴⁶ http://www.euwid-wood-

products.com/news_single.html?&tx_ttnews%5Btt_news%5D=627&tx_ttnews%5BbackPid%5D=13&cHash=540afd259c

⁴⁷ Source: Drima market research interviews.

⁴⁸ http://www.euwid-wood-

- A target has been set to achieve 30% co-firing with biomass in the three peat fired power stations by 2015.
- A target has been set for biomass to supply 12% of the renewable heat market by 2020.
- For further information see.
 - Energy White Paper: Section 3.3.1 and
 - Bioenergy Action Plan: Section 3.3.3.
- The development of indigenous rural forestry enterprises.
- Support for downstream investment in the forestry sector.
- An investment of €54.7 billion in infrastructure projects.
 - €13.3 billion investment in national roads.
 - €4.3 billion investment in non-national roads.
 - €12.9 billion investment in public transport.
- □ An investment of €21.2 billion in social, affordable and voluntary housing schemes.

These projects will support the expansion of the forest estate, provide significant markets for forest products and will help to develop the Irish bioenergy sector.

3.1.1 Research, Technological Development & Innovation $(RTDI)^{49\,50}$

In 2008, RTDI / Research spending within the Irish forest products sector averaged 2%. The changes in RTDI policies that will affect the Irish forest and forest products sector include.

- The newly established Irish Energy Research Council will advise on priorities for Irish energy research to 2013 and for the longer term. The Council will coordinate existing energy Research Technological Development and Innovation (RTDI) activities and provide analysis and advice.
- Environment Research Sub-Programme
 - Some €93 million will be invested in environmental research over the period 2007 to 2013.

⁴⁹ Enterprise – Ireland; <u>www.enterprise-ireland.com</u>

⁵⁰ Ireland National Development Plan (2007-2013); Government Publications, Dublin, Ireland; www.ndp.ie/viewdoc.asp?fn=/documents/NDP2007-2013/NDP-2007-2013-English.pdf

3.1.2 Forest research⁵¹

The Irish forest research programme is managed by COFORD (The National Council for Forest Research & Development)⁵². It undertakes research in the following key areas.

- Forest reproductive material
- Silviculture
- Forest planning and management
- Forest economics and policy
- Forest health and protection
- Forest harvesting and transport
- Wood products
- Wood energy
- Non-wood products
- Forests and climate change
- Forest biodiversity
- Forests and water
- Forests and recreation

In 2009, COFORD was amalgamated within the Forest Service⁵³, Department of Agriculture, Fisheries and Food.

3.2 **Support for afforestation**

Support measures for afforestation in Ireland include.

3.2.1 Forest Environment Protection Scheme [FEPS]⁵⁴

This grant scheme was introduced on a pilot basis in 2007 and was formally introduced in 2008;

- It encourages farmers to combine the establishment of high nature-value woodland with their participation in the Rural Environment Protection Scheme (REPS)⁵⁵.
 - For the first five years, the premium payable under this scheme exceeds that paid under the Afforestation Scheme.

⁵¹ http://www.coford.ie/iopen24/pub/pub/annualreport2007english.pdf

www.coford.ie

⁵³ http://www.agriculture.gov.ie/forestservice/
54 www.agriculture.gov.ie/forestry/files/FEPS_scheme/06-fep%20scheme.pdf

http://www.client.teagasc.ie/forestry/financial_info/fin_suppt/feps_questions.asp

- Farmers planting under FEPS have to adhere to enhanced environmental objectives, some of which are mandatory.
- The new scheme operated on a pilot basis during 2007 and is administered under State Aid Approval Number 161/2007.

Changes in premium payments

In 2009, the Department of Agriculture, Fisheries & Food (DAFF) announced that, following April's Supplementary Budget that the annual forestry premium rates would be cut by 8%. This move has been resisted by groups including the Irish Timber Growers Association (ITGA)⁵⁶ and the Irish Farmers Association (IFA)⁵⁷. However, the annual premium payments made in May 2009 included the 8% reduction. As of September 2009, DAFF has no plans to reverse this reduction.

3.3 Energy policy and support measures

The policy framework and support measures for wood energy are detailed below.

Biomass and the National Development Plan (NDP) [2007-2013]

Over the next seven years, the Irish National Development Plan will invest €184 billion in the Irish economy. The areas in which the NDP will influence the Irish biomass sector include:

- Provision of support for the cultivation of fast-growing species, for the purpose of biomass production.
- The mitigation of climate change.
- Investment in sustainable energy with a view to meeting the target of 15% of electricity produced from renewable sources by 2010.
 - A target has been set to achieve 30% co-firing with biomass in the three peat-fired power stations by 2015.
 - A target has been set for biomass to supply 12% of the renewable heat market by 2020.

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⁵⁶ www.itga.io

⁵⁷ http://archives.tcm.ie/irishexaminer/2009/04/22/story89849.asp

3.3.1 Energy White Paper ⁵⁸

In 2006, a Green Paper on energy policy was published by the Irish Government. Following a consultation process, a White Paper on energy policy was introduced in early 2007. This outlines Irish Government energy policy for the period 2007-2020. Its primary objectives are security of supply, environmental sustainability and economic competitiveness. From a forestry perspective, the sustainable energy sub-programme outlines how the renewable energy sector is to be developed.

3.3.2 Sustainable energy sub-programme

At least €276 million will be invested in the Irish sustainable energy sector over the period of the NDP. This is in support of the targets for sustainable energy including the promotion of renewable energy, energy efficiency and innovation. Key objectives of this programme include.

- A commitment to delivering significant growth in the use of renewable energy in power generation.
- □ A target of 33% of electricity consumption from renewable sources by 2020.
 - The Irish Electricity Supply Board (ESB)⁵⁹ and Bord na Móna⁶⁰, its supplier of milled peat will work with the biomass sector to develop the potential of co-firing at the three State owned peat burning stations.
 - A target has been set to achieve 30% co-firing with biomass in the three peat fired power stations by 2015.
 - A target for biomass co-firing at the Moneypoint generating station is to be set by 2010.
 - Biomass power generation projects will be supported through the Renewable Energy Feed-in Tariff (REFIT) scheme.
 - Under this scheme, the tariff price for non-landfill gas biomass electricity is set at 7.2 c per kWh compared to 5.7 c per kWh for wind.
 - For biomass CHP, the REFIT tariff has been set at 12 c per kWh.
- The use of biomass in power generation will be supported by means of technology transfer, by investment in specific research & development programmes and by tackling supply issues.
- The need to develop Combined Heat and Power (CHP) and district heating schemes has been identified as an area where energy efficiency could be improved.
 - The White Paper targets for CHP output are shown in Table 5. No specific target has been set for biomass CHP⁶¹.

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 $[\]underline{\text{www.dcmnr.gov.ie/Energy/Energy+Planning+Division/Energy+White+Paper.htm}}\\$

⁵⁹ www.esb.ie

⁶⁰ Bord na Móna supply milled peat to three thermal power plants, owned by both the Electricity Supply Board and by itself, for the generation of electricity. www.bnm.ie

Table 5: Combined Heat and Power (CHP) output targets to 2020⁶².

Item/Year	Unit	2010	2020
Target for CHP generated electricity	MW	400	800
Target for CHP generated heat	%	5	12

3.3.3 Bio – energy action plan for Ireland ⁶³

The National Bioenergy Action Plan aims to increase the use of renewable energy in three key sectors: transport, heat and electricity. The objectives of this policy include

- By 2020, a third of all electricity consumed in Ireland will be generated from renewable sources. This target has since been increased to 40%.
- By 2020, all peat fired power generation stations will be co-fired with biomass. The biomass content will be 30%.
 - This will reduce Irish carbon dioxide (CO₂) emissions by 900,000 tonnes per year.
 - To encourage the development of biomass generated electricity, the tariff price for non-landfill gas biomass electricity is set at 7.2 cent per kWh compared to 5.7 cent per kWh for wind.
- By 2020, 12% of the total heating (process, space, water, etc.) in all sectors to be provided by renewable sources
 - A target of 5% is set for 2010.
- Within twelve months, new regulations for the energy efficiency of buildings will be introduced.
- New energy efficient designs for schools will be piloted in 40 new schools.

From a forestry perspective key elements of this plan include:

- The introduction of additional 'top up' payments of €80 per hectare for energy crops. This is additional to the EU energy crops premium payment of €45 per hectare.
 - The additional payment of €80 will apply for threeyears
 - Scheme value: €6 m
- The introduction of a Bioenergy Scheme to encourage farmers to plant new energy crops such as miscanthus and willow.
 - Scheme value: €8 m.
- The Research Stimulus Fund Programme will fund research into biofuels and energy crops

⁶¹ Source: Sustainable Energy Ireland (SEI);

http://www.sei.ie/Publications/Statistics Publications/EPSSU Publications/CHP in Ireland 2007 Fnl rpt.pdf

The targets for "biomass generated electricity" in this table are actually the targets for CHP with an "emphasis on biomass CHP",

i.e. they include fossil fired CHP. No specific target has been set for biomass CHP.

63 www.dcmnr.gov.ie/NR/rdonlyres/4FFF6234-26CA-46B5-878AA04A7288DA4/0/FinalBioenergyReport.pdf

- Scheme value: €1.5 m.
- The introduction of a grant scheme for wood biomass harvesting machinery to include wood chippers and forest residue bundlers.
 - Scheme value: €1.2 m.
- The encouragement of a rate of afforestation that is sufficient to meet increased market demand for wood fibre in the medium to long term.
 - This will be supported by the continuation of the FEPS scheme to facilitate increased levels of afforestation.
 - For further details see section 3.2.1.
- Develop and support the wood energy chain to enable it to deliver quality wood fuel at a competitive price.

3.3.4 Promoting wood energy ⁶⁴

In 2006, the Irish Government introduced a five year capital programme to underpin the growth of the Irish renewable heat sector. The grant schemes for this programme have been developed in conjunction with Sustainable Energy Ireland (SEI). The total funding package for this programme is €89 million. The grant schemes contained within this programme are detailed below

It is estimated that 272 ktoe⁶⁵ of renewable heat energy will be required in 2010 to meet the renewable energy for thermal applications target⁶⁶. Under the EU renewable energy directive⁶⁷, Ireland's target for 2020 is for renewable energy sources to provide 16% of final energy consumption⁶⁸.

Combined Heat & Power (CHP) grant scheme 69

This programme provides grants for the installation of CHP units. It aims to develop small-scale CHP units (up to 1 MW) fired by fossil fuels that can be deployed in buildings with a substantial heat requirement. A second strand covers grant-aid for biomass-fired CHP. The new SEI Biomass CHP/AD⁷⁰ scheme has an indicative budget of €5-8 million. This provides grant support to assist the deployment of biomass CHP systems.

This programme aims to deliver 10-15 MWe biomass CHP, and 10-20 MWe of electricity from small-scale fossil fuel CHP. There is no limit on the size of installations that can be grant-aided if they are fuelled by biomass. To date, one biomass CHP project has been commissioned under this scheme⁷¹. A number of others are in the early stages of development.

⁶⁴ Section 3.3 provides details on Ireland's energy policy and on the promotion of bioenergy / renewable energy.

⁶⁵ ktoe = 1,000 tonnes of oil equivalent.
66 Source: Sustainable Energy Ireland (SEI) www.sei.ie

⁶⁷ Official Journal of the European Union, L140/16 to L140/62, 5.6.2009.

⁶⁸ Source: Sustainable Energy Ireland (SEI) <u>www.sei.ie</u>

⁶⁹ www.sei.ie/chpgrants/

⁷⁰ AD: Anaerobic digestion.

⁷¹ This is operated by Munster Joinery Ltd.; http://www.munsterjoinery.ie/index.html

Biomass for households and medium-sized businesses

In recent years, wood biomass systems have been promoted and developed for use in households and in medium-sized industrial premises. This is being promoted by State Agencies including COFORD⁷², the Forest Service⁷³, Teagasc⁷⁴ and Sustainable Energy Ireland (SEI)⁷⁵.

Greener Homes Scheme (GHS) 76

This grant scheme was established in 2006. It allows householders to obtain grants for the installation of renewable heat technologies including wood pellet stoves, boilers, solar panels and geothermal heat pumps. Up to February 2009, 26,352 applications had been approved under the GHS, the uptake of which is shown in Table 6.

Table 6: Uptake of the GHS to February 2009⁷⁷

GHS scheme type	% of total schemes
Solar	54%
Heat pump	23%
Biomass	23%

ReHeat Programme 78

This grant support scheme enables community groups, commercial sector, public sector and industrial sector organisations to obtain grants for the installation of wood chip and wood pellet boilers. Grant aid is up to 30% of overall cost. By June 2009, 142 biomass projects had been completed under this scheme with a total output of 60.74 megawatts. The average biomass boiler installed under this scheme had a heat output of 428 kW⁷⁹.

 $\frac{http://www.sei.ie/Grants/Renewable_Heat_Deployment_Programme/List\%20of\%20Organisations\%20supported\%20by\%20ReHeat\%20programme\%20Oct08.pdf$

⁷² http://www.woodenergy.ie/iopen24/

⁷³ http://agriculture.gov.ie/forestry/woodbiomasscheme/biomassscheme.pdf

http://www.teagasc.ie/forestry/wood_energy/

http://www.sei.ie/Renewables/Wood_Energy/

⁷⁶ www.sei.ie/greenerhomes/

⁷⁷ Source: SEI; www.sei.ie

⁷⁸ www.sei.ie/reheat/

Renewable Energy Feed-In Tariff (REFIT) 80

The REFIT scheme was launched in May 2006. It provides support to renewable energy projects over a fifteen year period. The new support mechanism differ from the previous programme in that it operates as a fixed feed in tariff mechanism rather than as a competitive tendering process. Applicants in REFIT must have planning permission and a grid connection offer for their projects and they will then be able to contract with any licensed electricity supplier up to the notified fixed prices.

The fixed price tariffs are:

Large wind energy (over 5 Megawatts):
 Small wind energy (under 5 Megawatts):
 Biomass (landfill gas):
 Hydro and other biomass technologies:
 5.7 cent per Kilowatt hour
 7.0 cent per Kilowatt hour
 7.2 cent per Kilowatt hour

It is anticipated that the REFIT tariff for biomass CHP of 12 cent /kWh⁸¹, initially announced in January 2008 will be available for applicants from July 2009.

3.3.5 Energy Performance of Buildings Directive (EPBD) 82

The EU Directive on the Energy Performance of Buildings (EPBD) was transposed into Irish law on 4th January 2006. The directive will be implemented on a phased basis over the next three years. As part of the EPBD, a Building Energy Rating (BER)⁸³ certificate will be required at the point of sale or rental of a building, or on completion of a new building, and will be implemented as follows:

- A BER is required for new dwellings constructed on or after 1st January 2007.
- A BER is required for new non-domestic buildings constructed on or after 1st July 2008
- A BER is required for existing buildings when offered for sale or letting on or after 1st January 2009

A lead-in period is allowed for each of the above steps.

⁸⁰ http://www.sei.ie/index.asp?docID=-1&locID=1213

⁸¹ kWh: Kilowatt hour.

⁸² www.sei.ie/epbd/

⁸³ Building Energy Rating (BER) is a requirement of the EU Directive on the Energy Performance of Buildings (2002/91/EC of 16th December 2002), which has now been transposed in Ireland by the European Communities (Energy Performance of Buildings) Regulations 2006 (S.I. No. 666 of 2006).

3.4 National climate change strategy $(2007 - 2012)^{84}$

Ireland signed the United Nations Framework Convention on Climate Change (UNFCCC⁸⁵) in June 1992 and ratified it in April 1994. As a signatory to the Kyoto Protocol⁸⁶, Ireland is committed to limiting its greenhouse gas (GHG) emissions to 13% above the 1990 level by 2008–2012.

The Irish forestry sector has a key role to play in addressing climate change, through carbon sequestration and through the development of renewable energy resources. Forest areas established as a result of grant-aid under the State/European Union (EU) funded afforestation schemes since 1990 are expected to contribute an annual average emission reduction of 2.074 million tonnes of carbon dioxide (CO₂) over the Kyoto period (2008 – 2012). There is also significant potential for wood fuel to displace fossil fuel, particularly in the generation of heat in industrial, commercial, domestic and institutional markets. In doing so, it can help reduce Ireland's GHG⁸⁷ emissions.

Since 2006, the use of wood biomass in Ireland has resulted in a total emissions saving of 1.14 million tonnes of carbon dioxide (CO₂).

4.0 Developments in forest products markets

Developments in the Irish forestry and forest products sector are outlined below.

4.1 Irish roundwood harvest

2008 was a difficult year for Irish sawmillers and WBP (Wood Based Panel) manufacturers.

- The demand for commercial timber declined due to a sharp reduction in Irish construction activity.
- Many large sawmills therefore re-configured their mills to supply pallet and fencing products into the UK marketplace.
- The four Wood Based Panel mills operating in the Republic of Ireland utilized short time working to better match output with demand

In 2008, the volume of roundwood available for processing was 2,272,000 m³ (Table 7), a reduction of 24% on the 2007 level. This was mainly as a result of the sharp decline in construction activity. In addition, the prices paid for roundwood declined sharply to reflect market conditions

Coillte supplied 90% of this roundwood, with the balance coming from privately-owned forests and from imports. The private harvest output declined sharply on 2007

 $^{{\}color{red}^{84}} \ \underline{www.environ.ie/en/PublicationsDocuments/FileDownLoad,1861,en.pdf}$

⁸⁵ unfccc.int

⁸⁶ unfccc.int/kyoto_protocol/items/2830.php

levels, by some 70%, to 118,000 m³. Net imports of roundwood contributed an additional $104,000 \text{ m}^3 \text{ (Table 7)}^{88}$.

Table 7: Roundwood available for processing in the Republic of Ireland (2008) 89

Sector	Roundwood available for processing 000 m ³ OB
Coillte	2,050
Private	118
Imports less exports	104
Roundwood available for processing	2,272

The split between sawlog, pulp and stake (for 2008) is shown in Table 8^{90} .

Table 8: Roundwood available for processing by assortment (2008) 91

Assortment	Top diameter cm	Roundwood available for processing 000 OB m ³
Sawlog	> 14	1,455
Pulpwood	7 – 14	761
Stakewood	7 – 14	56
Total		2,272

4.2 **Private forest estate**

In the period (1981-2008), over 232,000 hectares of forest have been established by private growers in Ireland.

- 211,712 hectares of this estate has been planted since 1990.
- 84% of private forest owners are farmers ⁹².

However, in recent years, a decline in the rate of farm afforestation has occurred. This is despite the presence of forest grants and premium payments and the recent introduction

⁸⁸ http://www.coford.ie/iopen24/pub/ccn09-pp21.pdf

⁸⁹ OB: Overbark.

⁹⁰ This harvest excludes firewood.

⁹¹ OB: Overbark.

of the Forest Environment Protection Scheme (FEPS)⁹³. As well as these support payments, the development of emerging markets such as wood energy offers the potential for significant growth in the long-term demand for timber. Nevertheless the afforestation rate continues to decline annually, reflecting hesitancy amongst many Irish farmers to consider investing in forestry⁹⁴. However the recent decline in returns from alternative agricultural activities may boost planting rates over the next few years.

In addition, the full potential of this farm forest resource for rural development in Ireland has not yet been fully realised. Currently, it is estimated that a potential harvest of 876,000 m³ of wood fibre is available from thinning operations in private / farm plantations that are at or have passed their first thinning age⁹⁵. Furthermore, the potential for farm forests to sequester carbon and to mitigate greenhouse gas emissions may become an important factor in future planting decisions⁹⁶.

4.3 Private forest forecast 97

In 2008, COFORD⁹⁸ funded an updated forecast of the roundwood volumes available from the Irish private forest estate. This project was undertaken by a team at University College Dublin (UCD). An overview of this forecast is outlined below.

- ¹ In 2008, according to the Irish National Forest Inventory (NFI)⁹⁹, the area of privately-owned forest was 320,000 ha.
- Total growing stock is estimated as 18.5 million cubic metres of roundwood.
- Most of this private forest estate has been established over the past two decades, with many areas now entering the first thinning stage.
- The COFORD forecast study has shown that the annual potential level of roundwood supply from privately-owned forests is predicted to increase eight fold over present levels, to reach almost 3 million m³ by 2028.
- This shows that the overall net roundwood production from privately owned forests will increase from an estimated 0.38 million m³ in 2009 to 2.95 million m³ by 2028.
- An assessment is also made of the potential to harvest energy crops from this resource. This is detailed in Table 9.

 $\frac{http://www.agriculture.irlgov.ie/media/migration/forestry/nationalforestinventory/nationalforestinventorypublications/4330NFIResults.pdf$

⁹³ www.teagasc.ie/environment/schemes/feps.asp

http://www.teagasc.ie/forestry/docs/technical_info/articles/teagasc_outlook_forestry_0809.pdf

⁹⁵ Scenario modeling undertaken by Teagasc suggests that if 50% of these plantations were suitable for thinning, then an estimated 876,000 m³ of wood fibre is currently available from these forests through removals from thinning operations.

⁹⁶ Source: Teagasc; <u>www.teagasc.ie/forestry</u>

⁹⁷ http://www.coford.ie/iopen24/pub/forecast-fnl.pdf

⁹⁸ www.coford.ie

Table 9: Forecast harvest from the Irish private forest estate (2009 to 2028)

Year	Net volume in 000 m ³ OB		Potential energy volume 100		
	Pulp	Pallet	Sawlog	Total	000 m^3
2009	257	11	15	381	302
2014	330	209	56	595	388
2019	515	362	209	1,086	607
2024	576	627	539	1,793	675
2028	530	951	1,472	2,953	626

- Realising this increase in potential production will entail significant capital investment in roads, harvesting equipment and IT systems by forest owners, contractors and by the State.
- The total thinning area, from first, second, third and subsequent thinnings increases over time and peaks at circa 30,000 ha in 2022. This scale of thinning, to be achieved within the next thirteen years, represents a significant challenge to the overall forestry sector.
- Given the disperse nature of the private forest resource and the small average plantation size, innovation in wood procurement, harvesting and transport is essential to drive down costs, reduce measurement overheads, and eliminate double handling.
- Existing sales/procurement systems are too costly and are in need of radical overhaul. Savings due to economies of scale by combined selling of wood from clusters are also possible

Sources & uses of wood fibre 101 4.4

The wood fibre sources which provide the Irish forest industry with its raw material are shown in Table 10, while the products produced by the sector are shown in Table 11.

Table 10: Sources of wood fibre in the Republic of Ireland (2008)

Fibre source	Volume 000 m ³ OB
Roundwood	2,272
Sawmilling residues	758
Wood based panel (WBP) residues ¹⁰²	106
Post consumer recovered wood (PCRW)	208
Total	3,344

 $^{^{100}}$ Energy forecast data is based on the use of biomass expansion factors.

¹⁰¹ Source: EUROSTAT JWEE report for Ireland (2008) & EUROSTAT JFSQ report for Ireland (2008).
102 This includes bark (from the debarking lines at Medite & Smart*Ply*) and sawdust produced from the sanding of wood based panels.

Table 11: Uses of wood fibre in the Republic of Ireland (2008)

Uses of wood fibre	Volume 000 m ³ OB
Sawmilling sector	1,455
WBP sector	1,406
Round stakes	56
Wood biomass use by the forest products sector ¹⁰³	317
Other uses	
Horticultural bark mulch	50
Wood chip for commercial biomass use	30
Exports of forest product residues	30
Total	3,344

4.5 **Wood residues**

The wood residues arising within the Irish forest products sector are outlined below. These are primarily used as feedstock for sawmill kilns and for the wood based panel sector (WBP). Recovered wood fibre is increasingly being used for wood energy and for the manufacture of particleboard.

Since 2007, the production of wood residues has declined by 30%. This is in line with the reduction in construction output.

Table 12: Wood residue output for the Republic of Ireland (2007 - 2008)¹⁰⁴

Wood residue type		Volume ¹⁰⁵ in 000 m ³	
	2007	2008	
Bark	271	203	
Chips & particles	687	470	
Wood residues	229	152	
Post consumer recovered wood (PCRW)	279	208	
Total residue output	1,466	1,033	
Residue output relative to 2007			70.4%

¹⁰³ Wood biomass is used by the forest products sector for process drying, heating and for the generation of electricity.

¹⁰⁴ Source: EUROSTAT Joint Wood Energy Enquiry [JWEE] for Ireland (2008 & 2009).
105 Roundwood equivalent.

4.6 Certification

4.6.1 Certified forests

Since May 2001, Coillte's forests have been certified to the Forest Stewardship Council (FSC) scheme. In 2007, Coillte had its Forest Stewardship Council (FSC) certificate for responsible forest management renewed until 2012 by Soil Association Woodmark, an independent firm of environmental auditors¹⁰⁶. A small number of privately-owned forests have also been certified by FSC.

4.6.2 Certified forest products

All major sawmills and panel mills have chain-of-custody procedures. The demand for certified timber products in the Irish market is still relatively small and there is no strongly developed public procurement policy for them.

4.7 Value added products – furniture

- In 2007, the Irish furniture sector had a market value of €1.7 billion¹⁰⁷.
 - The household furniture market was worth €1.0 billion ¹⁰⁸.
 - The contract furniture market was worth €0.7 billion.
- Irish companies have a 30% share of this market.
- To compete on home and export markets, Irish furniture manufacturers have moved to outsource their production.

The value of wooden furniture imported and exported to / from Ireland for the period 2007 to 2008 is detailed in Table 13.

Table 13: The value of wooden furniture imports & exports in Ireland (2007 - 2008) ¹⁰⁹

Category	Value € million	Value € million
	2007	2008
Imports	€434	€317
Exports	€47	€35

¹⁰⁶ http://www.coillte.ie/fileadmin/user_upload/pdfs/2007_Annual_Report/CEO_review.pdf

¹⁰⁷ Source: Enterprise – Ireland <u>www.enterprise-ireland.com</u>

http://www.enterprise-ireland.com/SourceIreland/Ireland/Furniture.htm

¹⁰⁹ Source: EUROSTAT JFSQ for Ireland (2008 & 2009).

4.8 **Trade in forest products**

In 2008, 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 2008¹¹⁰ (Table 14).

Table 14: Irish timber trade (2007 - 2008) 111,112

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

4.8.1 Sawn timber

A sharp reduction in Irish construction output led to a significant reduction in sawn timber imports in 2008¹¹³. 57% of this market is served by imports, with the balance supplied by Irish sawmills.

¹¹⁰ Sawn timber imports are reported in Ireland's EUROSTAT JFSQ return for 2007 & for 2008.

111 This table includes import / export figures for sawn timber, wood based panels (WBP) & pulp / paper products only. Data is taken from Ireland's EUROSTAT JFSQ returns (2008 - 2009). Roundwood, sawmill residues and secondary processed timber products are

not included.

112 This data is based on Ireland's EUROSTAT Joint Forest Sector Questionnaire (JFSQ) return for 2008 & for 2009.

Sawn timber market size

In 2008, the Irish market consumed over 724,000 cubic metres (m³) of sawn timber. This was a 55% reduction on 2006 (Table 15).

- Irish sawmills supply 43% of the Irish market for sawn timber.
- In 2008, they exported 389,000 cubic metres of sawn timber. This generated export earnings of €54 million.
- 49% of pallet and fencing production is exported to the UK.

Table 15: Irish sawn timber market size (2006–2008) 114

Sector	Volume of sawn timber in 000 m ³			
	2006	2007	2008	
Domestic production Softwood	1,091	984	701	
Domestic production Hardwood	3	4	595	
Exports	-393	-381	-389	
Imports	911	724	412	
Market size in m ³	1,612	1,331	724	
Market size relative to 2006		83%	45%	

Irish sawn softwood output (2008) 115

Ten sawmills form the core of the Irish sawmill sector. These provide a key outlet for sawlog and stakewood harvested from Irish forests. In 2008, Irish sawmills utilised 1.324 million cubic metres of roundwood. Irish sawmill output for 2008 is estimated at 702,000 cubic metres of sawn timber products.

The primary products produced include 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.

Sources: CSO Trade Statistics www.cso.ie & EUROSTAT JFSQ for Ireland (2007, 2008 & 2009).
 EUROSTAT / FAO Joint Forest Sector Questionnaire (JFSQ) for Ireland for 2008

Sawn softwood imports

- Demand for sawn softwood declined very significantly in 2008, driven by a reduction in house building output. Imports from Russia and from Great Britain declined by more than 50%.
- In 2008, 346,000 cubic metres of sawn softwood was imported into Ireland. This had a value of €91 million.
 - Import volume declined by 42 % over 2007 with import value declining by 49 %.
- The top ten softwood exporters to Ireland for 2007 & 2008 are detailed in Table 16.

Table 16: Top 10 softwood exporters to Ireland (2007 – 2008) 116

Exporting country	Volume of sawn softwood exported to Ireland in 000 m ³		
	2007	2008	
Sweden	122	90	
Great Britain	80	35	
Germany	72	62	
Finland	70	33	
Russia	67	37	
Latvia	63	25	
Northern Ireland	47	28	
Brazil	18	2	
Canada	17	4	
Austria	7	1	
Percentage of total softwood imports	92%	91%	

Sawn hardwood

- Domestic sawn hardwood production is small producing just 595 cubic metres of sawn hardwood timber in 2008.
- In 2008, Ireland imported 65,000 cubic metres of sawn hardwood
- □ These had an import value of €46 million.
- However, the volume of hardwood imports declined by 47% over 2007.
- ⁿ The top ten hardwood exporters for 2007 & 2008 are detailed in Table 17.

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¹¹⁶ Source: Central Statistics Office (CSO); www.cso.ie

Table 17: Top 10 hardwood exporters to Ireland $(2007 - 2008)^{117}$

Exporting country	Volume of sawn hardwoo exported to Ireland in 000 2007 2008	
Cameroon	35	12
United States	27	16
Ivory Coast	11	6
Northern Ireland	11	6
China	10	4
Canada	5	2
Sweden	5	5
Great Britain	4	4
Ghana	3	1
Germany	3	2
Percentage of total hardwood imports	93%	89%

Wood Based Panels (WBP) 118 4.8.2

In 2008, the Irish panel products sector had a combined output of 779,000 m³. Thus output was 15% down on 2007, largely due to a reduction in construction activity in both home and export markets. Raw materials used are pulpwood, sawmilling residues (sawdust, woodchip and bark) and post consumer recovered wood (PCRW). Overall, the wood fibre requirement for WBP manufacture was 1.406 million m³.

Products manufactured by the sector include chipboard/particleboard, 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 18.

Table 18: Wood based panel manufacturers in the Republic of Ireland

Company	Established	Product(s)	Location
Finsa Forest Products ¹¹⁹	1984	Chipboard / Particleboard	Scariff, Co Clare
Masonite Ireland ¹²⁰	1997	Moulded door facings	Drumsna, Co Leitrim
Medite-Europe ¹²¹	1983	Medium Density Fibreboard (MDF)	Clonmel, Co Tipperary
Smart <i>Ply</i> Europe ¹²²	1995	Oriented Strand Board (OSB)	Slieverue, Co Kilkenny

¹¹⁷ Sources: CSO Trade Statistics <u>www.cso.ie</u> & EUROSTAT JFSQ for Ireland (2008 & 2009).

¹¹⁸ EUROSTAT / FAO Joint Forest Sector Questionnaire (JFSQ) for Ireland for 2008.

¹¹⁹ The plant at Scariff was formerly operated by Aicher GmbH/ Chipboard Ltd. It first opened in 1965. This facility is now owned and operated by Finsa; www.finsa.es

¹²⁰ http://www.masonite.com/

¹²¹ Medite – Europe Ltd was established in Clonmel by the Medford Corporation in 1983. It was acquired in November 2006 by

Coillte; www.medite-europe.com
The OSB mill at Slieverue, Co Kilkenny was first established as a joint venture between Coillte and Louisiana – Pacific in 1995. Coillte acquired full ownership of the business in May 2002; www.smartply.com

In 2008, Irish wood based panel (WBP) and sawn timber exports were worth €249 million (Table 5). Wood based panels accounted for 78% of this total 123. Compared with 2007, the value and volume of WBP exported from Ireland has declined considerably (Table 14)¹²⁴. Key export markets for Irish wood based panel producers are the UK, Northern Ireland, Belgium, the Netherlands, France and Germany.

Developments in the Irish WBP sector

Medite¹²⁵

In March 2008, Medite Europe Ltd. announced that they had agreed a supply agreement with Metso Panelboard AB. to provide new fibre preparation equipment for its Clonmel facility. This will enable Medite to significantly increase fibre production, whilst maintaining existing levels of electricity and steam consumption 126. This project has since been completed.

Spanboard ceases chipboard manufacture in Northern Ireland 127

In 1959, chipboard production began at Spanboard Products Ltd., located outside Coleraine, Co Derry. In 1989, the facility was acquired by Sonae Indústria¹²⁸, Portugal's largest privately owned industrial group. However, in January 2009, Sonae announced that it was ceasing production of raw chipboard at the Spanboard facility¹²⁹, referring to the downturn in the construction industry, combined with the rising cost of raw materials 130. Spanboard will however remain open, and will now concentrate on producing value-added products, including manufacturing melaminefaced chipboard ¹³¹ from raw chipboard sourced from Sonae (UK) ¹³².

4.8.3 Pulp & paper ¹³³

- All pulp and paper used in the Irish market is imported.
- Pulp & paper imports represent 45% of Irish forest product imports (by value).
- In 2008, 555,000 metric tonnes of pulp and paper products were imported into Ireland.

 $^{^{\}rm 123}$ Secondary processed wood products are excluded from the total.

These data are taken from Ireland's Joint Forest Sector Questionnaire (JFSQ) returns to EUROSTAT for the period 2006–2008.

www.medite-europe.com/

http://www.medite-europe.com/en/news_item.php?item=36

From March 2009, Spanboard ceased manufacturing of 'raw' chipboard in Coleraine. However it will continue to import furniture grade chipboard from Sonae UK. This will be overlaid with melamine paper for use in furniture and in DIY applications.

http://www.sonae-industria-tafisa.com/

http://www.sonae-industria-tafisa.com/file_bank/press/announcements/Com20090116-eng.pdf

http://www.wbpionline.com/news/fullstory.php/aid/566/Spanboard_makes_70_redundant.html

These are largely used in furniture and in DIY applications.

¹³² http://www.sonaeuk.com/index.htm

¹³³ EUROSTAT / FAO JWEE Return for Ireland for 2008.

- These imports were worth €540 million.
- 448,000 tonnes of recovered paper were exported from Ireland for recycling.

4.8.4 Builders merchanting

The reduction in building output is having a knock on effect on the Irish builder's merchant sector

- Building materials and DIY group Grafton suffered a dramatic fall in pre-tax profits in the first half of 2009, due mainly to the building slumps which it is encountering in its key Irish and British markets¹³⁴.
- In a recent trading update, Wolseley Ireland said the Irish construction market remained 'severely depressed', with new housing activity around 70% down compared with the same period a year earlier'. Wolseley said the 'Irish market was unlikely to return to the levels of activity in the previous decade and it was continuing to adjust its cost base to reflect this, 135.

http://archives.tcm.ie/irishexaminer/2009/08/29/story99709.asp
 http://www.rte.ie/business/2009/0727/wolseley.html

4.8.5 Wood biomass

Biomass overview 136

- There is growing interest in the Irish BioEnergy sector. This is being promoted by the SEI and COFORD schemes as detailed in section 3.3 of this report.
- The output¹³⁷ of the Irish biomass sector is currently dominated by the wood processing sector. In 2008,
 - The Irish forest industry used 349,000 tonnes of wood biomass.
 - The heat generated by the Irish Forest products sector for its own use is estimated to be 3,447 Tera Joules (TJ).
 - The electricity generated by the Irish Forest products sector for its own use is estimated to be 112 Tera Joules (TJ).
 - The total energy produced by the Irish forest sector in 2008 is estimated at 119,000 Tonnes of Oil Equivalent (TOE).

Biomass input & energy output

The use of wood biomass in Ireland is dominated by the forest products sector, which uses it for process drying and for energy purposes. Since 2006, the use of wood energy by commercial and domestic users has risen considerably (Table 19).

Table 19: Feedstock used by the wood biomass in Ireland (2007 - 2008)¹³⁸

Biomass type	End use	Usage 000 m ³	
		2007	2008
Firewood	Domestic heating	44	54
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 ¹³⁹ & forest products	Process drying / heating / CHP	669	611
industry ¹⁴⁰			
Total		669	611
Percentage of input which is used by the forest		81%	75%
products sector.			

The energy output of the wood biomass sector in Ireland is shown in Table 20.

139 This includes co-firing of wood biomass at Edenderry Power; www.edenderrypower.ie

¹³⁶ Harvesting and processing forest biomass for energy production in Ireland; The forest energy 2006 Programme; Pieter D. Kofman and Tom Kent; COFORD; www.coford.ie/iopen24/pub/product_info.php?products_id=966605

¹³⁷ EUROSTAT / FAO Joint Forest Sector Questionnaire (JFSQ) for Ireland for 2008.

¹³⁸ Source: EUROSTAT JWEE return for Ireland (2007 & 2008).

In 2008, the requirement for wood biomass use by this sector declined in line with the decline in Wood Based Panel (WBP) output.

Table 20: Energy output of the Irish wood based biomass sector (2007 - 2008)¹⁴¹

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

Biomass fuelled Combined Heat & Power (CHP)

There are currently two commercial wood fuelled biomass CHP plants in operation in the Republic of Ireland. These are Grainger Sawmills Ltd. and Munster Joinery Ltd¹⁴². The heat and electricity output of these facilities are shown in Table 21.

Table 21: Existing biomass fuelled CHP output in the Republic of Ireland (2008)

Plant name & location	Feedstock	Electricity output MWe	Heat output MWth
Grainger Sawmills, Enniskeane, Co Cork ¹⁴³	Sawmill residues	2.0	4.0
Munster Joinery Ltd., Ballydesmond, Co Cork ¹⁴⁴	Joinery residues	3.0	11.0
Total		5.0	15.0

Biomass costs

The Irish forest industry is rapidly developing a range of quality wood fuels, which includes high quality firewood, as well as refined products such as wood chip and pellets. Wood pellets are increasingly being used for domestic heating. A survey undertaken in 2007 by Sustainable Energy Ireland (SEI)¹⁴⁵ found that the costs of wood biomass in Ireland (for domestic fuel supply) are as shown in Table 22.

¹⁴¹ Source; UNECE Joint Wood Energy Enquiry (JWEE).

http://www.fingleton.ie/pdf/chp/672-MUNSTER-JOINERY-CHP.pdf
http://www.graingersawmills.com/chp.htm

¹⁴⁴ http://www.sei.ie/Your_Business/Large_Industry_Energy_Network/Workshop_Presentations/John_Fingleton_CHP_Projects.pdf

Table 22: Energy costs for wood fuel in Ireland $(10/2007)^{146}$

Fuel	From	Unit	Average price € per unit	Delivered energy cost Cent / kWh ¹⁴⁷
Wood	Pellets bulk delivery	Kg	€0.19	4.06
Wood	Pellets bagged	Kg	€0.31	6.49
Wood	Wood briquettes	Kg	€0.37	7.68

Woodchip quality scheme

Sustainable Energy Ireland (SEI), COFORD and woodchip suppliers are currently developing a woodchip quality assurance ¹⁴⁸ scheme.

Carbon savings

Since 2006, the use of wood biomass in Ireland has reduced Irish carbon dioxide (CO_2) emissions by 1.14 million tonnes. This saving averages 380,000 tonnes of CO_2 per annum.

5.0 New developments

5.1 New Irish timber frame standard – I.S. 440¹⁴⁹

A new Irish Standard for timber frame construction was launched in 2009.

- Following a selection process in January 2006, UK consultants, Building Research Establishment (BRE), were appointed to develop the technical content of an Irish standard for timber frame use.
- Funding for the project was provided by both the Department of the Environment¹⁵⁰ (DoEHLG) and by the Irish Timber Frame Manufacturers Association (ITFMA)¹⁵¹
- In September 2008, a draft of I.S. 440 'Timber frame construction' was sent for public consultation.
- I.S. 44O was launched by the National Standards Association of Ireland (NSAI) in June 2009.

¹⁴⁶ Source: Sustainable Energy Ireland; www.sei.ie

¹⁴⁷ kWh: Kilo Watt Hour.

http://www.thebioenergysite.com/articles/contents/irish_bioenergy_conf.pdf

http://www.nsai.ie/index.cfm/area/news/action/article/newskey/605/information/is440

www.environ.ie

http://www.itfma.ie/

5.2 New wood pellet plants

D Pellet Ltd¹⁵², the first wood pellet production facility to operate in the Republic of Ireland, commenced production in 2008. The plant is located at Knocktopher, Co Kilkenny, and has a capacity to produce 75,000 tonnes of wood pellets per annum.

In early 2009, Laois Sawmills commenced production of wood pellets at its Portlaoise sawmill and is currently supplying wood pellets in bulk form.

In May 2009, Imperative Energy¹⁵³ announced that it is in the process of building a wood pellet, bio-refining and CHP facility at Claremorris, Co Mayo. When fully operational, the facility will have a capacity to produce 60,000 tonnes of wood pellet/annum, together with a 15MWth¹⁵⁴/5MWe¹⁵⁵ CHP plant. The plan also includes a bio-processing plant with an annual capacity of 20,000 tonnes¹⁵⁶.

5.3 Eirebloc¹⁵⁷

In September 2008, Eirebloc, a new manufacturer of composite pallet blocks commenced production at Macroom, Co Cork. The company was established as a joint venture between Mid Cork Pallets¹⁵⁸ and Palfab¹⁵⁹. It uses recycled wood as a raw material to manufacture pallet blocks in an environmentally friendly process. Annual production capacity exceeds 60,000 m³ of finished product, for both the home and export markets.

5.4 Launch of IFFPA

In May 2009, the Irish Forest and Forest Products Association (IFFPA) was officially launched. The new body, which has been formed under the auspices of the Irish Employers Body, IBEC, aims to align all the interests in the forestry sector under one umbrella organisation with a view to maximising the economic, social and environmental benefits of the Irish forestry industry.

5.5 **Dublin Mountains Partnership**

In 2008, Coillte, working in partnership with Local Authorities, the National Parks & Wildlife Service (NPWS)¹⁶⁰ and user groups developed and launched the Dublin

¹⁵² http://www.dpellet.ie/index.html

www.imperativeenergy.ie

¹⁵⁴ MWth: megawatt thermal energy.

¹⁵⁵ MWe: megawatt electricity.

http://www.biospark.ie/the_project.php

www.eirebloc.com

www.midcorkpallets.com

www.palfab.com

¹⁶⁰ www.npws.ie

Mountains Partnership (DMP)¹⁶¹. The objective of the DMP is to manage and improve recreation while balancing it against landowner requirements including timber production, water catchment and nature conservation.

5.6 Support for industry

In 2008, the Irish Government announced two support schemes to help Irish companies to overcome the current economic downturn. These schemes are

- The <u>Enterprise Stabilisation Fund</u> aims to help companies sustain and develop their business during these difficult times. The funding is provided primarily through preference shares, repayable after 5 years and typically at 3% coupon rate¹⁶².
- Employment Subsidy Scheme, supports the retention of jobs in viable exporting enterprises that might otherwise be made redundant as a result of the impact of the current global economic crisis¹⁶³.

Both schemes are administered on behalf of the Department of Enterprise, Trade & Employment by Enterprise – Ireland.

¹⁶¹ http://www.dublinmountains.ie/home/

http://www.enterprise-ireland.com/AboutUs/Organisation/Enterprise+Stabilisation+Fund.htm

6.0 Tables

Economic Indicators

6.1.1 An Economic Overview of the Irish Economy (2001 – 2010)^{164,165}

Criteria / Year	2001	2002	2003	2004	2005	2006	2007	2008	2009f	2010f
Output										
Real annual growth %										
 Government spending 	9.8	7.1	3.2	1.8	4.6	5.3	6.9	2.6	0	-3.0
 Personal consumption 	5.4	3.8	3.2	3.8	6.6	5.7	5.9	-1.0	-7.0	-3.0
Exports	8.6	4.5	0.5	7.3	3.9	4.4	8.6	-1.0	-3.9	-1.4
Imports	7.2	2.4	-1.2	8.6	6.5	4.4	5.6			
 Consumer Price Index 	4.9	4.6	3.5	2.2	2.4	4.0	4.9	4.1	-4.6	-0.3
(CPI)										
 Gross Domestic Product 	5.7	6.0	4.3	4.3	5.5	5.7	6.0	-3.0	-7.9	-2.3
(GDP)										
 Gross National Product 	3.8	2.8	5.5	3.9	5.3	6.5	4.4	-2.8	-8.9	-2.3
(GNP)										
Expenditure on Gross										
Domestic										
& Gross National Product										
 GDP at Market Prices €m 	€116,800	€129,900	€138,900	€147,600	€ 161,16	3 €17 9 47	€189,751	€181,815	€165,245	€160,83
 GNP at Market Prices €m 	€97,800	€106,200	€117,200	€124,400	€ 135,91	4 €150128	8 €161,244	€154,596	€138,558	€133,68
Other Economic Variables										
 Unemployment 	4.0	4.6	4.7	4.5	4.4	4.4	4.6	6.3	12.6	16.1
(As % of the labour										
force)										

 $^{^{164}}$ Source: ESRI Quarterly Economic Commentary – Summer 2009 <u>www.esri.ie</u> 165 f: Figures for 2009 and 2010 are forecast.

6.1.2 Irish construction output $(2000 - 2010f)^{166,167,168}$

Sector / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009f	2010f
Residential	€9,497	€10,954	€11,928	€14,64	5 €18,05	5 €20,87	73 €1201 0,	€21,542	€15,123	€7,708	€5,870
€ billion											
Non-residential	€3,820	€3,710	€2,962	€2,73	€2,95	8 €3,42					
€ billion											
Productive infrastructure	€3,063	€3,745	€4,581	€4,76	2 €4,83	1 €5,23					
€ billion											
Social infrastructure	€1,207	€1,517	€1,823	€1,684	1 €1,75	0 €2,02					
€ billion											
Total output	€17,587	€19,926	€21,294	€23,820) €27,59	5 €31,55	56 €000 0	€34,893	€28,316	€17,207	€12,70g
€ billion											
Percentage Residential	54%	55%	56%	61%	65%	66%	65%	62%	53%	45%	47%
Housing Construction	9.2%	9.8%	10.2%	11.8%	13.6%	15.4%	15.5%	13.98%	8.5%		
% GNP											
Annual House Building Cost Index ¹⁶⁹	141.0	161.5	171.8	176.5	181.5	186.9	194.2	201.7	209.4		
1991 = 100											
Increase on the previous year			6.4%	2.7%	2.8%	3.0%	3.9%	3.9%	3.8%		
Total construction inflation						4.1%	5.9%	1.8%	-6.9%	-8.5%	
New construction output						15.9%	3.5%	-1.3%	-15.3%	-38.9%	
Repair & maintenance						5.7%	12.5%	6.4%	8.8%	-12.5%	
Total construction output						13.9%	5.1%	0.2%	-10.3%	-32.3%	

http://www.environ.ie/en/PublicationsDocuments/FileDownLoad,21120,en.pdf
Central Statistics Office; www.en.pdf
Central Statistics Office; www.esri.ie/www.esri.ie/esri.ie/www.esri.ie/esri.ie/www.esri.ie/esri.ie/www.qnhsireland.net/statistics/ann_house_building_cost_index.htm

6.1.3 Forest products production in Ireland $(2005 - 2010f)^{170,171}$

Category	Unit	2005	2006	2007	2008	2009 f	2010 f
Roundwood	1000 m^3	2,649	2,671	2,710	2,024	1,867	1,777
Coniferous	1000 m^3	2,630	2,654	2,682	1,994	1,832	1,737
Non-coniferous	1000 m^3	19	17	27	30	35	40
Wood fuel, including wood for charcoal	1000 m^3	20	15	32	52	130	170
Coniferous	1000 m^3	5	5	12	24	95	125
Non-coniferous	1000 m^3	14	11	20	28	45	45
Industrial roundwood (wood in the rough)	1000 m^3	2,629	2,656	2,678	1,972	1,737	1,607
Coniferous	1000 m ³	2,625	2,650	2,671	1,971	1,735	1,605
Non-coniferous	1000 m^3	4	6	7	1	2	2
Sawlogs and veneer logs	1000 m^3	1,763	1,789	1,725	1,210	1,150	1,050
Coniferous	1000 m ³	1,759	1,782	1,718	1,208	1,148	1,048
Non-coniferous	1000 m^3	4	6	7	1	2	2
Pulpwood (round & split)	1000 m^3	759	760	828	698	650	650
Coniferous	1000 m^3	759	760	828	698	650	650
Non-coniferous	1000 m^3	0	0	0	0	0	0
Other industrial roundwood	1000 m^3	107	107	125	65	65	75
Coniferous	1000 m^3	107	107	125	65	65	75
Non-coniferous	1000 m^3	0	0	0	0	0	0
Wood chips and particles	1000 m^3	562	606	545	467	445	437
Wood residues	1000 m^3	236	254	229	151	140	138
Sawnwood	1000 m^3	1,015	1,094	985	696	590	500
Coniferous	1000 m^3	1,014	1,091	981	696	590	500
Non-coniferous	1000 m ³	1	3	4	1	1	1
Of which: tropical	1000 m^3	0	0	0	0	0	0
Wood-Based Panels (WBP)	1000 m^3	875	937	918	779	630	625
Particle board (including OSB)	1000 m^3	435	436	440	377	330	325
Of which: OSB	1000 m ³	307	308	310	270	225	225
Fibreboard	1000 m^3	440	501	479	402	350	350
Hardboard	1000 m ³	0	0	0	0	0	0
MDF (Medium Density Fibreboard)	1000 m ³	389	413	396	340	300	300
Insulating board	1000 m ³	0	0	0	0	0	0
Other fibreboard	1000 m^3	51	88	83	61	50	50
Recovered paper	1000 mt	443	444	458	448	425	425
Paper and paperboard	1000 mt	45	0	0	0	0	0
Packaging materials	1000 mt	45	45	45	45	45	45
Case materials	1000 mt	45	45	45	45	45	45

 $^{^{170}}$ EUROSTAT / Irish JQ1 Return (2009). 171 F: figures for 2009 & 2010are forecast.

6.1.4 Irish Timber Imports and Exports (2007 - 2008)

The breakdown of Irish forest product imports and exports for the period 2007 to 2008 are shown in Table 23.

Table 23: Irish timber imports and exports (2007 - 2008) ¹⁷²

Product	Imports						
	000	m ³	€ million				
	2007	2008	2007	2008			
Sawnwood	724	412	251	141			
WBP	358	264	146	108			
	000	0 t	€ mil	llion			
Pulp products	31	29	22	20			
Paper & paperboard products	546	526	467	520			
Total			886	789			
		Expo	orts				
	000) m ³	€ million				
Sawnwood	381	389	71	54			
WBP	757	614	262	195			
	00	0 t	€ mi	llion			
Pulp products	0	2	0	0			
Paper & paperboard products	85	77	92	69			
Total			425	318			

In 2008, imports of forest products exceeded €779 million.

- Pulp and paper products were responsible for over 68% of this volume with sawn timber and wood based panels making up the remainder
- Wood based panels were responsible for 61% of the value of Irish timber exports.
- The majority of the timber produced by Irish sawmills is sold on the home market.
- In 2008, sawn timber exports from Ireland were worth €54 million, a decline of €17 million on 2007. These exports are dominated by pallet and by fencing products
- A reduction in Irish construction output led to a significant reduction in sawn timber imports for 2008^{173} .

 ¹⁷² Source: Central Statistics Office (CSO); www.cso.ie
 173 Sawn timber imports are reported in Ireland's EUROSTAT JFSQ return for 2007 and 2008.

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