

Market opportunities for wood in renewable energy



Joe O’Carroll, a forestry graduate from UCD and a masters graduate from UCC, set up OC Consulting in 2005 following five years as operations manager with COFORD (National Council for Forest Research & Development). OC Consulting provides management services for Imperative Energy Ltd., in developing 70 biomass projects in the UK and Ireland. It has also been involved with the creation of international forestry funds.

The EPA confirmed last week that Ireland will not meet its greenhouse gas (GHG) emissions targets and this will ultimately lead to the State paying a financial penalty. This is despite the enduring levels of depressed economic activity. The nation’s addiction to imported fossil fuels shows no sign of abating – Ireland relies heavily on fossil fuels (95% of total primary energy requirement) and has 88% import dependence for all fuels.

The old adage that the world economy couldn’t sustain crude oil prices above \$50 per barrel has long since been scrapped. Brent Crude hasn’t been below \$100 per barrel for more than a few weeks since mid-2010, despite global economic recession.

The main volume user of biomass for energy generation is the co-firing of Semi-State owned peat burning power stations. While this has obvious carbon reduction merits, this demand seems set to be predominantly satisfied with imported biomass. In ironic defiance of this appalling situation:

- this week also sees numerous schools across rural Ireland issue tenders for the provision of oil boilers
- Despite “Green Public Procurement” sound bites, too many Public bodies continue to avoid looking at low carbon alternatives and are fixated on driving down fuel costs rather than looking at longer term energy efficiency and renewable energy projects
- It is still possible to get capital grants for “high efficient oil and gas boilers” but not for biomass boilers

On the positive side, SEAI has outlined its primary objectives as being:

- Energy efficiency first – implementing strong energy efficiency actions that radically reduce energy intensity and usage;
- Low carbon energy sources – accelerating the development and adoption of technologies to exploit renewable energy sources;
- Innovation and integration – supporting evidence-based responses that engage all sectors, supporting innovation and enterprise for our low-carbon future.

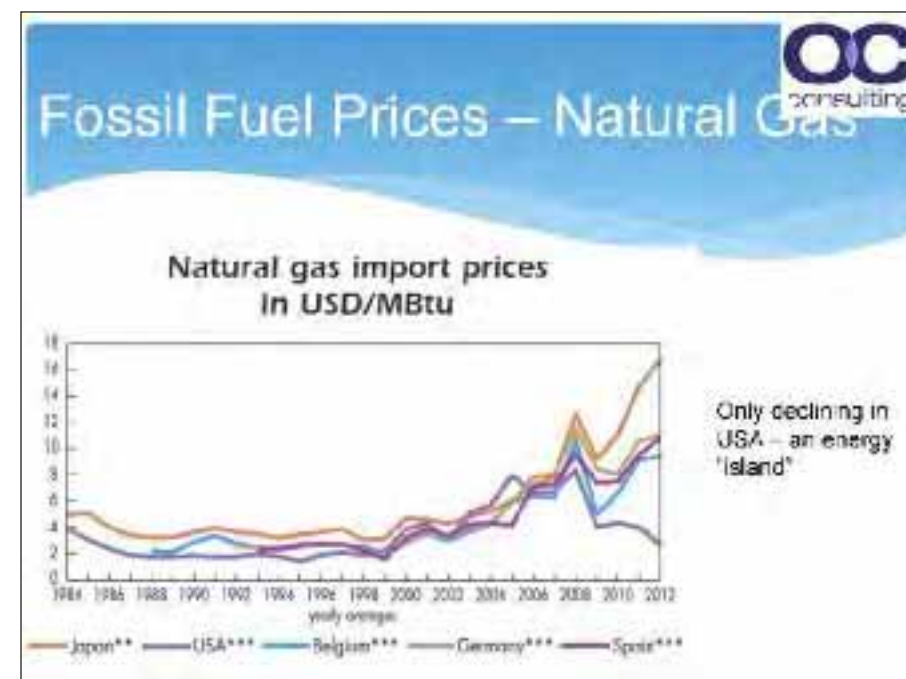
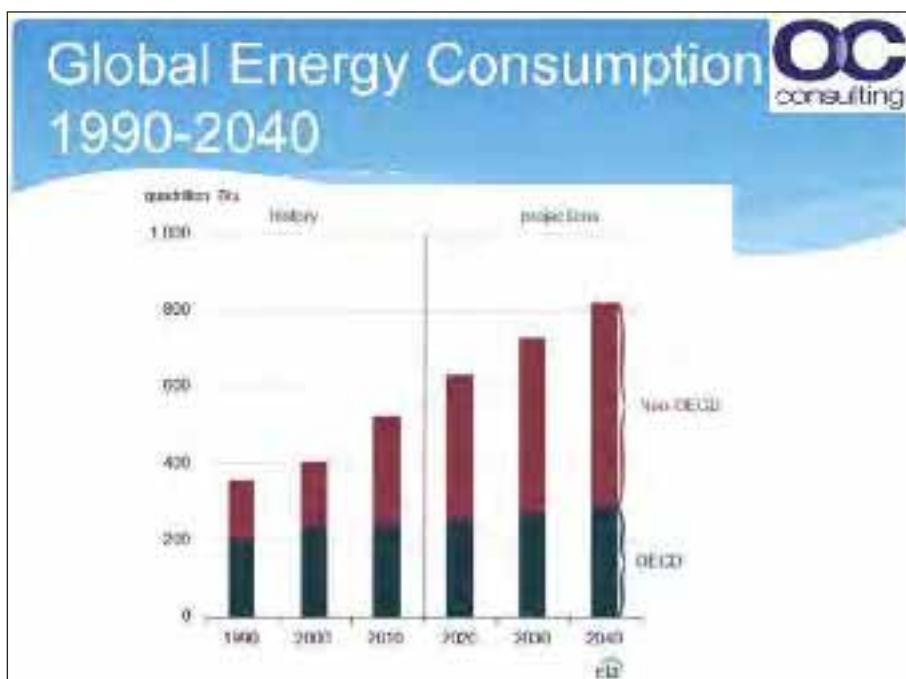
It is making really meaningful strides in pursuit of these objectives and this year has seen the launching of the Energy Efficiency Fund and the development of precedent Local Energy Supply Contracts, both of which will definitely support growth in the biomass to energy sector. New biomass projects at Pharma and Food companies over the past two years is a trend that will continue and these projects typically use locally sourced biomass from thinnings and sawmills.

The potential for this type of project is significant and with the right supporting environment could stimulate demand for over 1 million tonnes of biomass within the next few years. All of this would be sourced in the locality of these installations with a resulting lower transportation cost and higher price paying potential than the traditional outlets for such material.

The Irish forest resource is a wonderful asset with myriad end use options which are not entirely mutually exclusive. The resource is sustainable, but the number of processing facilities it can sustain is finite. Whether or not the forest resources can be all things to all men is doubtful. All end uses generate employment and economic activity.

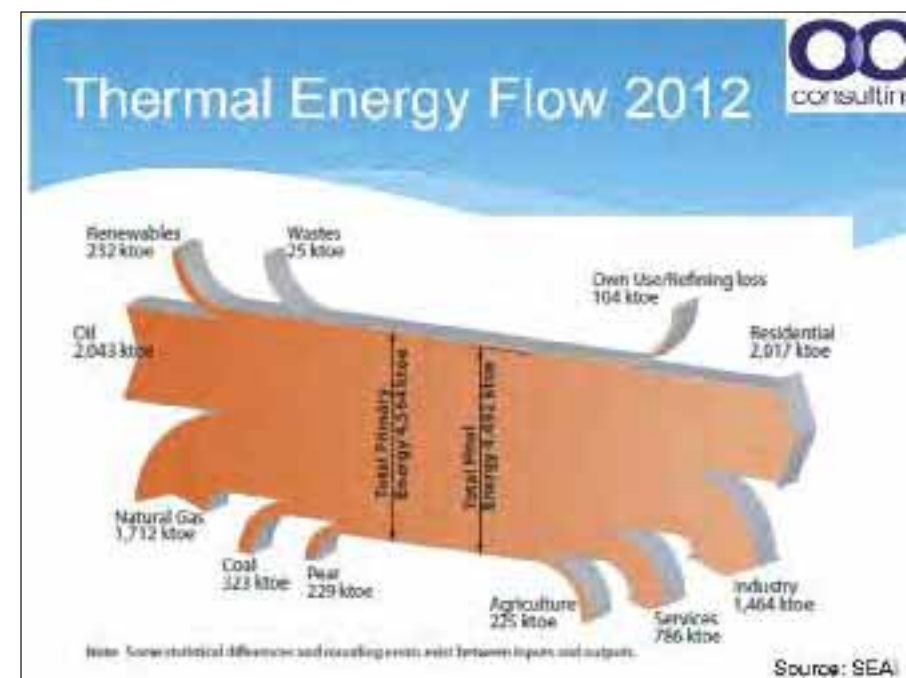
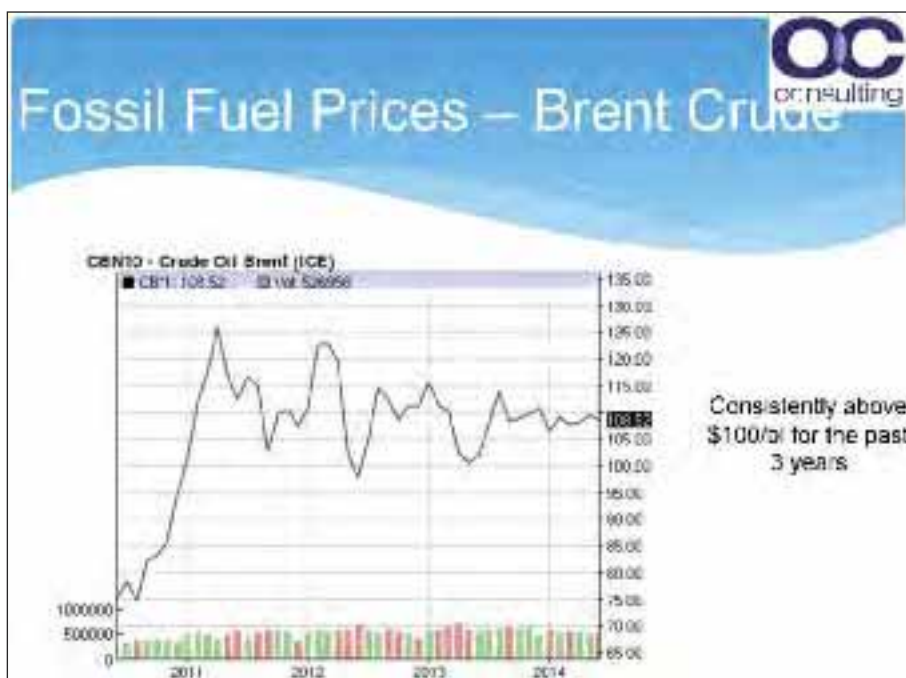
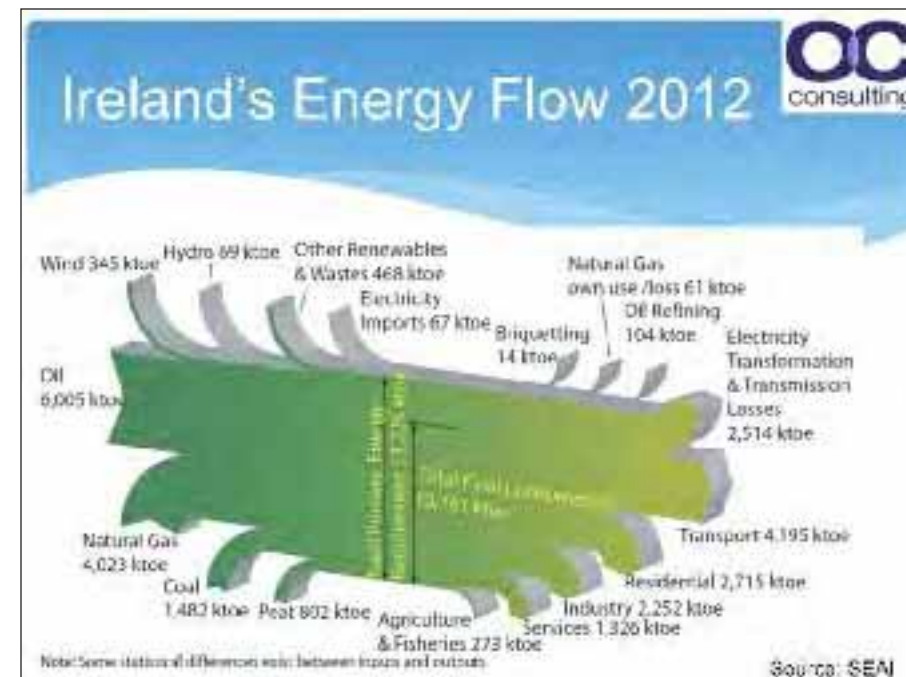
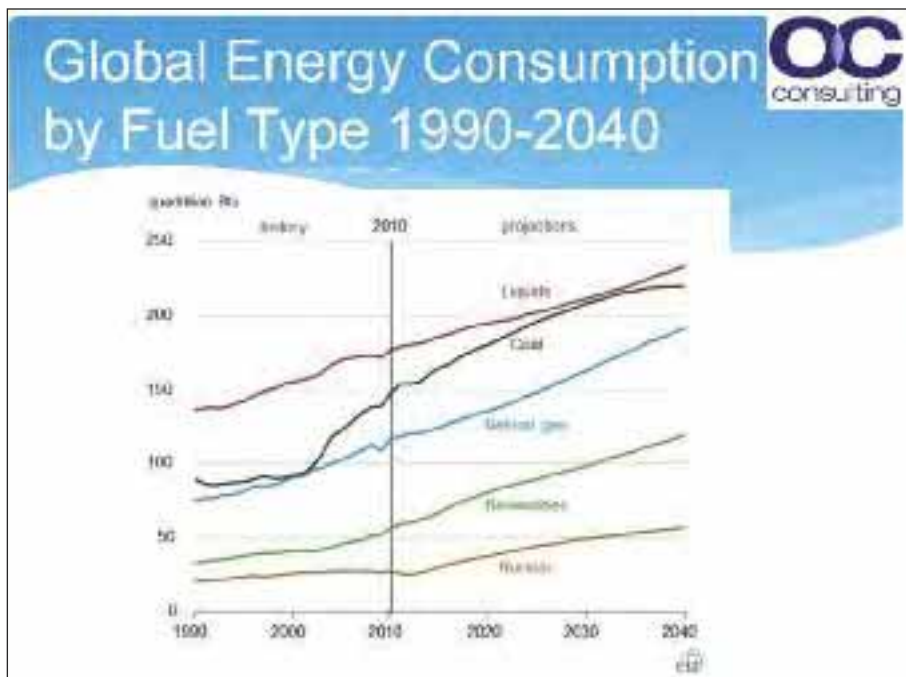
The question for the State is: “Which end uses are really important in a national context to merit promotion and support?” Displacing imported fossil fuels and lowering GHG emissions would seem like a pretty good place to start.

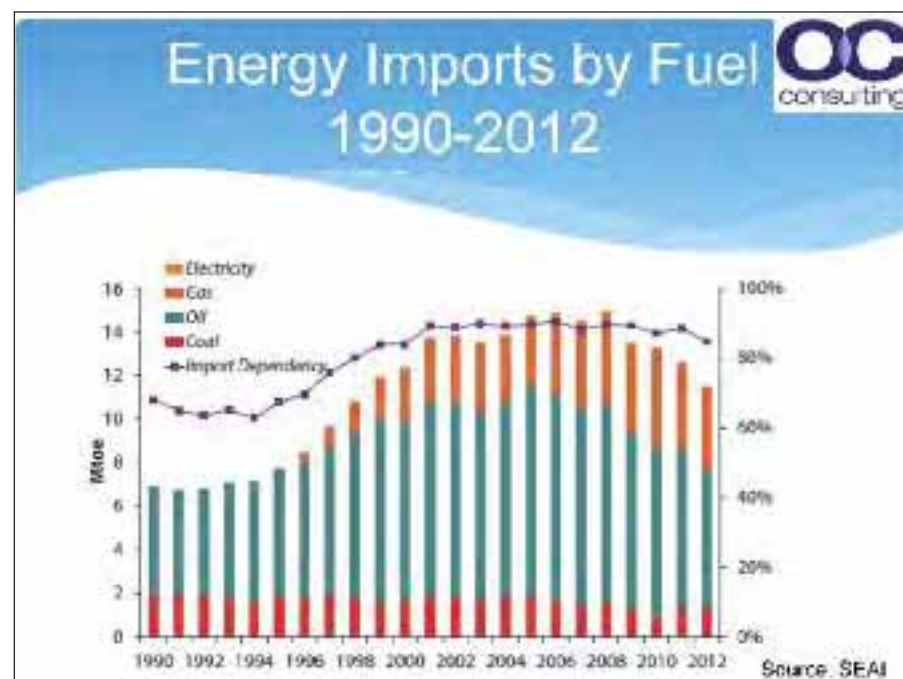




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Joe O'Carroll





Economic & Environmental Challenges for Ireland

Market opportunities for wood in renewable energy

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Imported Energy by Fuel

OC consulting

	Net Imported Energy (ktoe)							Shares %	
	1990	2007	2008	2009	2010	2011	2012	1990	2012
Coal	1,992	1,442	1,608	1,302	966	1,415	1,324	28.9	11.4
Peat Briq.	4	8	10	5	10	9	9	0.1	0.1
Oil	4,912	9,051	9,162	8,079	7,800	7,180	6,300	71.2	54.4
Natural Gas	-	3,924	4,174	4,037	4,487	3,963	3,845	0.0	33.2
Electricity	-	114	39	66	40	42	36	0.0	0.3
Renewables	-	25	42	59	82	83	79	0.0	0.7
Total	6,899	14,549	15,014	13,538	13,365	12,674	11,577		

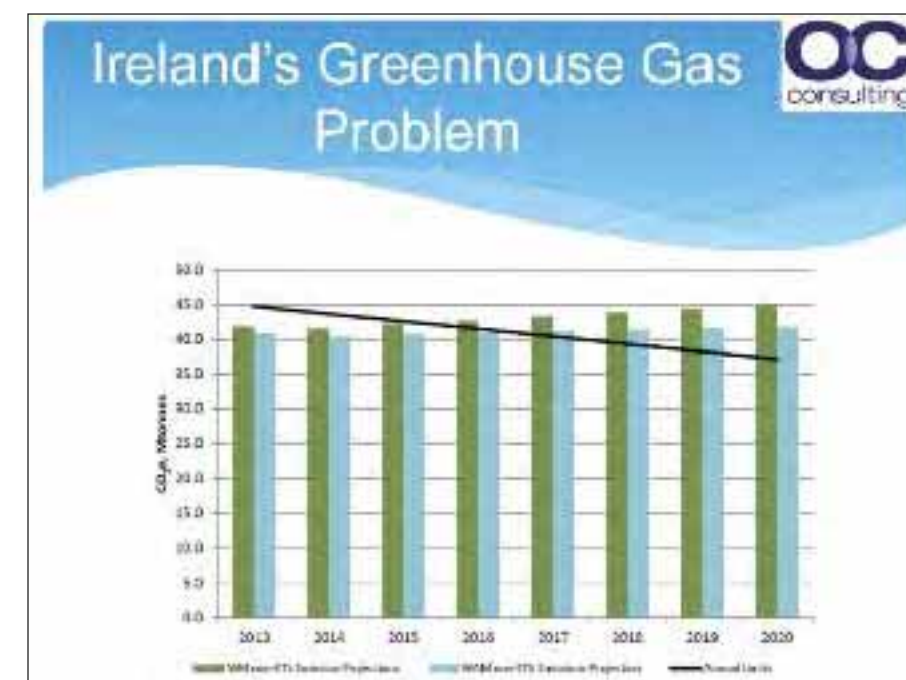
- ## The Perfect Storm?
- OC consulting
- * Energy Imports up by 68% since 1990
 - * Imported Energy cost rising
 - * National Greenhouse Gas Emissions will exceed limits

Biomass' Role

OC consulting

	Renewable Contribution to Gross Energy (ktoe)							Shares %	
	1990	2007	2008	2009	2010	2011	2012	1990	2012
Hydro	60	57	83	78	52	61	59	55.7	8.2
Wind	0	168	297	254	292	377	545	0.0	41.1
Solid Biomass	105	182	176	193	211	213	258	62.9	30.5
Landfill Gas	-	36	39	42	44	44	45	-	5.1
Biogas	2	10	10	13	14	14	13	1.4	1.5
Biofuels	-	22	56	78	93	100	85	-	10.1
Solar	-	1	3	4	7	8	10	-	1.2
Geothermal	-	12	16	17	17	18	18	-	2.1
Total	168	490	580	679	679	834	834		
Share of GFC	2.3%	3.3%	4.0%	5.0%	5.3%	6.4%	7.3%		

Note that solid biomass refers to wood, wood wastes and other wastes (such as cattle).



The Biomass Opportunity

Cost Competitiveness



Technology Proven



- * Three years ago, biomass technology was seen as a major concern.
- * Multiple reference sites across the country have removed this concern
- * Biomass now used to heat Dail Eireann, Seanaid Eireann, many Government Departments, universities, schools, leisure centres, hospital and country estates

Market Opportunity



- * Best used to displace LPG and Oil (8-12c/kWh)
- * Off Natural Gas grid
- * NW: Donegal-Sligo-Leitrim-Roscommon-Mayo
- * SW: West Cork-Kerry-West Limerick
- * Conservative market potential for 1m tonnes of woodchip in these areas (excl power generation)
- * Significantly higher price paying potential than panelboard sector, in these areas

Market Opportunity



- * Best use for biomass is still where there is a continuous demand for thermal energy – hot water, steam or thermal oil
- * Target sectors:
 - + Wood processing
 - + Food & Drink manufacturing
 - + Hospitality sector
 - + Healthcare
 - + District Heating – Roscommon Town, Tralee, Killarney, Sligo, Letterkenry, etc

Seizing the Opportunity

Market opportunities for wood in renewable energy

Joe O'Carroll

Positive Momentum

- * Continuing number of high profile projects:
 - * Monaghan Education Campus
 - * Connaught Gold
 - * Astellas
 - * GSK
- * Development of Local Energy Supply Contracts by SEAI/DCENR
- * Launch of Energy Efficiency Fund – managed by SDCL

Barriers

- * Continuing, if misplaced, concern over the biomass supply chain
- * Continuing preference for oil and gas boilers in State sector – eTenders
- * Lack of clarity on air quality standards – festering concern for each new large project
- * Lack of National Bioenergy Policy – continuing delays in Bioenergy Strategy
- * Rumours of RHI – causing inertia

Additional Needs

- * Clarity
 - * Will an RHI be introduced or Not
 - * Will there be a Bioenergy Strategy or Not
- * Dynamism
 - * Bioenergy section of DCENR hopelessly under resourced – too much expected of too few

Barriers

- * Confusion over NewERA role in Bioenergy sector
 - * Adding to already excessive State overhang in the energy sector
- * REFIT – Not FIT for purpose. Needs to be scrapped, start again
- * Capital still difficult to access but improving
 - * Need for asset finance options for small biomass

Continuing Barriers

Impact on Forestry Sector

OC consulting

Positive Impacts

- * Employment is a given – growing resource will create employment regardless of the end use
- * Upward price pressure for sawmill and small diameter roundwood
- * True market forces – multiple suppliers/multiple buyers
- * Myriad small business opportunities in:
 - * Harvesting
 - * Processing
 - * Transportation
 - * Biomass boiler sales and associated activity

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Policy Questions

- * Is maximising the contribution of biomass to the energy mix compatible with sustaining traditional uses for this material?
- * Can the Industry be “all things to all men”?
- * What forest derived products are strategically and tactically more important for Ireland?
- * Is the State willing to introduce the necessary policy changes to ensure that bioenergy plays a significant role in Ireland’s energy supply?

David Murray

Opportunities for increasing international market share for Irish panel board products



David Murray is Innovation Manager with Coillte Panel Products, heading up the company’s R&D drive. A UL graduate in Wood Science & Technology, David has 16 years’ experience working in the timber industry in Ireland and the UK. His areas of expertise include Wood Panel Products, Off Site Construction and Engineered Wood Products. David is passionate about developing sustainable new value-added panel products that meet the needs of CPP’s customers, specifiers and end users alike.

Coillte is playing a key role in the export led recovery and growth in the timber and forest products sector in Ireland. Since 2007, the company has focused increasingly on export markets for its timber panel products and, working with our sawmill customers, on developing export markets for Irish construction timber.

Coillte is an integrated forestry and forest products company, with businesses in land management and renewable energy, as well as the manufacture of market leading panel products, Medite MDF (Medium Density Fibreboard) and SmartPly OSB (Oriented Strand Board). Coillte Panel Products (CPP) is strongly dependent on export markets, selling more than 90% of what it manufactures outside of Ireland. Its focus is primarily on the UK and Europe, but in response to the Eurozone crisis, CPP has successfully developed new markets and now sells into 32 countries globally.

My presentation discusses how CPP adds real value to small diameter wood fibre – mainly sourced from first thinnings – and how panel products present the optimum use of valuable natural fibre resources.

CPP has a strong track record of developing new products and excels in collaboration with academia, key suppliers, industry experts and customers. Sustainability and Value for Money are the recurring customer requirements, and both are central to CPP’s Innovation focus. This underpins Coillte’s Strategy “Sustainable Value from Sustainable Living”.

In the past two years alone, CPP has introduced several new innovative products in response to clearly identified market opportunities and these are gaining steady traction with our customers. These include SmartPly DryBacker which is designed to provide structural grounds for heavy fixtures and fittings on lightweight metal frame plaster-board partitions, with particular focus on hospitals and health care buildings due to its zero added formaldehyde resin technology. Medite Vent is a highly vapour permeable sheathing panel with high structural racking strength, for use in vapour diffusion open, low energy and passive buildings. SmartPly FR OSB sheathing and FR Build OSB flooring panels are flame retardant products developed in response to new fire safety guidance in the UK.

These brand new additions build on the success of other recent product launches by the company, most notably Medite Tricoya, lauded as the first major innovation in the wood composites industry in more than 30 years. Backed by a 50 year warranty, it is a modified wood panel with extreme durability and dimensional stability built in, that quite simply is in a league of its own.

With a strong pipeline of new ideas and current innovation projects, this is just the beginning. CPP is committed to meeting the requirements of its customers and end users, by solving industry ‘problems’ – or opportunities as I prefer to call them – created by various market drivers across Europe.

CPP’s focus is to become the leading European supplier of innovative, market led MDF and OSB specialities, based on sustainable fibre and resin technology, thereby maximising the value from Irish small diameter fibre.

Exports by Coillte

Supporting Irish exports throughout the globe.

International Market Opportunities for Innovative, Value Added Irish Wood Panel Products

David Murray
Innovation Manager
Coillte Panel Products



Opportunities for increasing international market share for Irish panel board products

David Murray

Coillte 2018

CPP Strategic Vision:

To become the leading European supplier of innovative, market led MDF and OSB specialties, based on sustainable fibre and resin technology, thereby maximising the value from Irish small diameter fibre.

IFFPA
Irish Forest Products Association

Sustainable Value from Sustainable Living

Our purpose
enriching lives locally, nationally and globally through innovative and sustainable management of natural resources.

coillce
panel products

medite
Defining the standard of MDF

SmartPly
The Smart OSB Alternative Plywood

- Established in 2006, incorporating the brands Medite Europe and SmartPly Europe.
- Both leading brands in their respective markets.
- Combined strength and market position provide a solid platform on which the Group can build a competitive position as an Irish based, international forest products group.
- A clear focus on innovation, successful marketing, and product development.
- The largest user of small diameter wood fibre in Ireland.

"Trees are just the start of it!"

coillce
coillce
coillce

It's official – Coillte is No.1 in Europe for Sustainability

No.1 in Europe for Sustainability

Panel Products = Optimum Use of Fibre Resource

Environmentally sustainable • Economically sound



<p>Wood Fibre from FSC Forest Resource to CPP</p> <p>Over 1m tonnes of fibre p.a.</p> <p>FSC certified as sustainable</p> <p>40+ truck movements p.a.</p>	<p>Manufacture sustainable building products, embedding CO2</p> <p>Embeds 1,336 kg CO2 per tonne of fibre</p> <p>Directly employs 310 and further 900 to 1000 indirectly</p> <p>Spend of €140m p.a. with majority with Irish firms</p> <p>Use recycled wood process fines, forest waste for drying</p>	<p>97% exported (Russia and Belarus – key port customer)</p> <p>28k+ truck movements p.a. to over 20 countries</p>	<p>Utilised to construct and fit out energy efficient, low carbon buildings</p> <p>Structural, decorative, furniture, flooring, RVI</p> <p>Strong focus on innovative, value added products</p>	<p>Recycled at end of useful life for Energy generation</p> <p>Co-fires with energy crops, waste streams (e.g. BOM)</p>
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Some End Uses for **SmartPly** OSB Products



Packaging

Site Boarding

Signage

Versatile panel primarily for structural uses

Culloden battlefield visitor centre, Scotland

Cladding & walling

Shop-front

Building

Furniture

Export focused. Customer led.



- Over 90% of turnover derived from export sales.
- Core markets Ireland, UK & Benelux.
- Exported to a record 32 countries in 2011, including Russia, Middle East, North America, South Africa.
- Strategic partners include Distributors, Merchants and Industrial Users

Some End Uses for **medite** MDF Products



Shop fronts & fit-out

Flooring substrate

Furniture & wallcoverings

Versatile panel primarily for decorative uses

Stairs & door panels

Pre-veneered & veneered panels

Exhibition stands & fixtures

Why do customers buy from CPP?

medite

Defining the standard of MDF

SmartPly

The Smart OSB Answer to Plywood





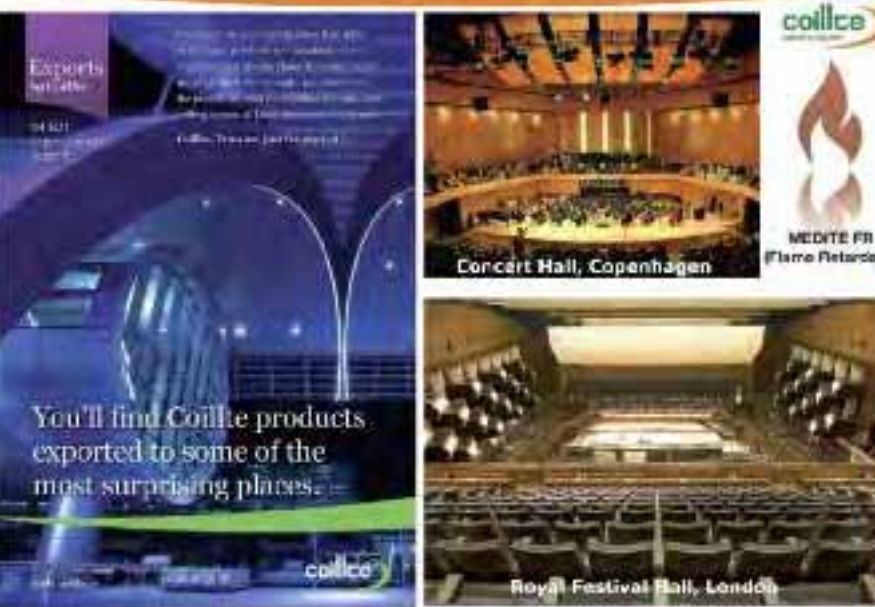












Exports

Concert Hall, Copenhagen

Royal Festival Hall, London

MEITE FR (Flame Retardant)

You'll find Coilce products exported to some of the most surprising places.

Opportunities for increasing international market share for Irish panel board products

David Murray



Opportunities for increasing international market share for Irish panel board products

David Murray



EXTREME
medite Incoyo

Unique Design



Chapel in Titchmarsh, Northamptonshire (UK), 2013.

Medite Vent®

Medite Vent® is a high performance, sustainable external cladding panel suitable for use in all types of timber framed buildings. Offering top ranking strength in terms of Category 1 performance with certified secure fastenability and long service life. It is the perfect choice for its ease of use in offsite construction and its meeting rapid build.



**MEDITE VENT
LET YOUR
BUILDING
BREATHE**



TYPICAL INSTALLATION


1. Vent cladding
2. Timber frame cladding
3. Thermal break
4. Timber studs
5. Insulation
6. Plasterboard
7. Plasterboard
8. Plasterboard
9. Plasterboard
10. Plasterboard
11. Plasterboard

Opportunities for increasing international market share for Irish panel board products


David Murray

EXTREME
medite Incoyo

Design Freedom



The Vrouw Mieder Kind Centrum, Eindhoven (NL)



SmartPly
FR/FR-Build

Added to the heart of the product...

...not just an outer coating



Flame Retardant OSB3: Protection when you need it.

- Flame retardant throughout the entire panel
- No structural degradation in panel unlike many post treated alternatives.
- Easy to cut and fix
- Lightweight
- CE Compliant
- FSC Certified timber from our own forests.
- Zero Ignition® water based fire retardant



SmartPly DryBacker

New



Hidden Strength


Quick and easy. Ready prepared modular OSB3 panels providing secure anchorage for fixtures in drywall systems.




UCH, Cork
Temple St. Hospital, Dublin




SmartPly - building for the future



New Building



Dr. Annette Harte

Exploring new products for Irish timber including engineered wood



Dr. Annette Harte is Senior Lecturer in Engineering at the College of Engineering and Informatics, NUI Galway. Her research includes the development of engineered wood products, numerical modelling, design and optimisation of timber structures and sustainable construction. She is leader of an EU COST network on the Reinforcement of Timber Structures, comprising international researchers.

The largest consumer of solid wood products globally is the construction industry. Wood is one of the oldest building materials known to man and many examples of ancient wooden structures exist today. In the last century, steel and concrete displaced wood as the material of choice, particularly in the non-domestic market. In recent times, however, there has been a re-evaluation by designers of the materials used.

This has been driven largely by issues of sustainability and enabled by the development of new engineered wood products that have excellent structural, thermal, economic and environmental properties.

Engineered wood products are manufactured by gluing together smaller pieces of wood to produce larger products with greater load-bearing capacity and less variability in properties than solid wood. These products include panel products, such as plywood and OSB, engineered I-joists, LVL, PSL, and glued laminated timber.

These products are well established in the market and are widely used. The most recent development in this field is the introduction of Cross Laminated Timber (CLT).

This is a massive wood panel product with high load bearing capacity that can rival steel and reinforced concrete, has a low weight and so reduces construction costs, has very predictable behaviour in fire and has the capacity to store significant quantities of carbon over the life of the building.

CLT has been used in a number building projects across the world. The Stadthaus in London is a nine-storey apartment building having a concrete ground floor and eight upper floors of CLT. When completed in 2008 it was the tallest timber building in the world. The success of this project has sparked considerable interest in this form of construction for multi-storey buildings. In Melbourne, a 10-storey apartment building has been completed. There have been preliminary designs prepared for other buildings of up to 30-storeys.

Recently, design codes for CLT have been approved in the US and Canada and the EU equivalent is nearing completion. This development should see an acceleration in the use of CLT in the construction sector.

The Timber Engineering Research Group at NUI, Galway is currently investigating the feasibility of producing CLT using Irish-grown Sitka spruce. This work is being carried out as part of the project 'Innovation in Irish Timber Usage' funded by the Department of Agriculture, Food and the Marine. Preliminary findings show excellent promise for the suitability of Irish timber for CLT production.

Exploring new products for Irish timber including engineered wood

Dr. Annette Harte, NUI Galway

National Forestry Conference
6th June 2014



Dr. Annette Harte
NUI Galway

Civil Engineering, College of Engineering & Technology



Ryan Institute

Historical timber structures



Bailing Bridge in Gansu Province, China
Completed in 1384, rebuilt in 1918 and 1923.
Total length 40.2m

(Yang, 2007)



Five-storied pagoda at Horyu-ji Temple, Japan
Built about 1,300 years ago

(pic.comstockphoto)



Historical timber roof Glastonbury
14th century medieval barn

(Picapix.com)

Outline of presentation

- Timber in Building
- Engineered Wood products
- Cross-laminated timber – CLT
- CLT Buildings
- CLT using Irish Sitka spruce - current research

Timber structures today



Leonardo da Vinci bridge across E-18 near Oslo

(Dyker, 2000)



Credit Valley Hospital in Ontario

(Havell and O'Brien & Associates, 2012)



Stadhuis, Hackney, London
9-storey apartment building

(p.schneiders.ie)

Timber in buildings

- Timber is one of the oldest construction materials
 - Competition from steel and concrete led to decline in use
- Resurgence in interest in timber for construction due to sustainability requirements and the emergence of new high-performance engineered wood products
- Research has led to greater understanding of behaviour leading to the development of new approaches to construction

Timber structures of the future



Stockholm:
Proposed 34-storey tower



Vancouver:
Proposed 30-storey tower

(Dore, 199, 2019)

Timber engineering

- Traditional timber structures – solid wood sections
 - Section and length limited by size of tree
- Requirement for large span, high structural capacity members
- Advances in timber engineering has led to the development of Engineered Wood Products (EWPs)
 - use of timber in more demanding applications
 - small size timber bonded together with adhesive to form composite

Engineered wood products

- **Glued laminated timber (Glulam)**

Duo, Trio, Quattro Beams



[sustainable.co.uk]

[gb-wglam.com]

Engineered wood products

- **Oriented strand board (OSB)**
- **Structural insulated panels (SIPs)**



[kempell.org/wiki/OSB]



[timber.com]

- **Timber frame**



[urbanwale.com]

Engineered wood products – the next generation

- **Cross laminated timber (CLT)**

- High performance material
- Massive timber construction
- Utilises small timber sizes



- Panels made of at least 3 orthogonally bonded layers of timber



- Successive layers of boards placed cross-wise



Engineered floor joists



[timber.co.uk]



[timberengineering.co.uk]



Cross-laminated timber (CLT)

- CLT panels used as wall floor and roof elements
- Joined using simple metallic connectors



[timber.com]

- Light weight – easy to handle, construction speed, smaller foundations



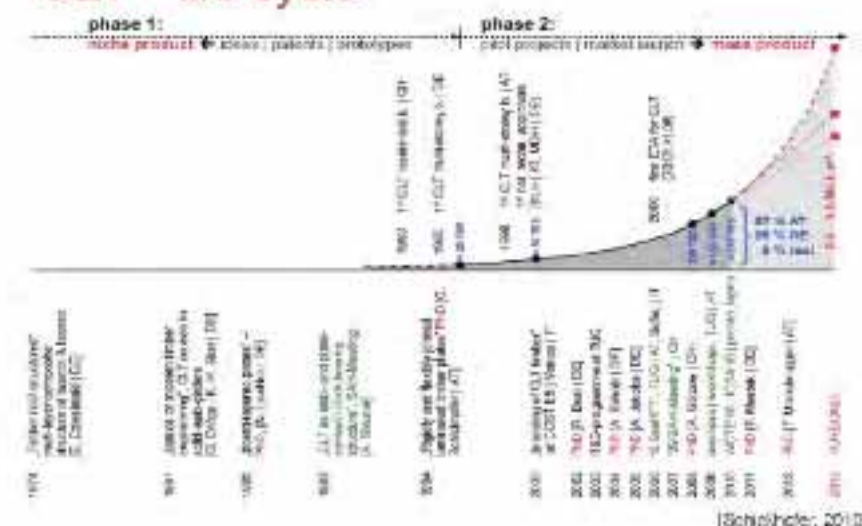
[timber.com]

CLT Production

- Individual design
- Max. panel size 4m x 18m
- Precision manufacturing
- CNC machining for
 - Window & door openings
 - Chases for services



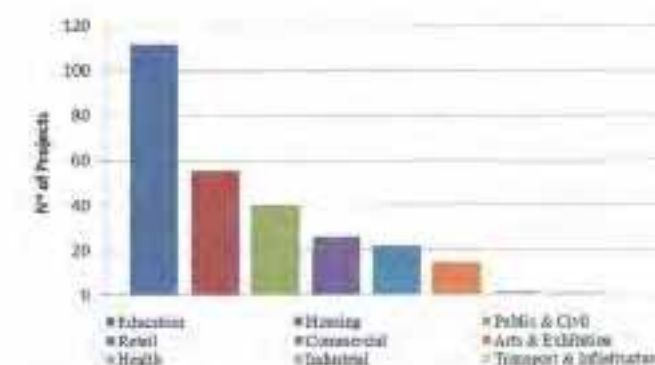
CLT – life cycle



CLT Properties

- High strength and stiffness in two directions
- Lowers the energy used in construction
- Reduces operational heat loss by improving insulation and airtightness
- Very easy to demolish and recycle at end of life.

UK CLT buildings 2003-2011



CLT Fire Performance

- Thick cross sections, when exposed to fire, char at a slow and predictable rate
- CLT construction has fewer concealed spaces within wall and floor that reduces risk of fire spread
- Adhesive type used in CLT panels has significant impact on charring rate
- 3-storey SOFIE building 2007 – 1 hr fire test – maintained structural integrity



[Fang, 2008]

CLT multi-storey buildings trend



Stadthaus apartment building, London



[Architect Journal, 2008]

STRUCTURE

- 9 storey building
 - Concrete ground floor
 - CLT upper floors
 - CLT stairwell & lift shaft
- 900 m² timber
- CLT panels manufactured in Austria
- Installation of CLT structure
 - 4 men with large mobile crane
 - 27 working days over 9 weeks
- Total construction time 49 weeks
 - Equivalent concrete building 72 weeks

Forte building construction



Construction of CLT structure:
6 men in 38 days

Concrete structure
30 men and 16-18 weeks

Stadthaus apartment building, London



[Architect Journal, 2008]

THERMAL PROPERTIES

- External: 128mm wall + 100mm insulation
- U = 0.13 W/m²/K

FIRE RESISTANCE

- Charring - 60 minutes
- Plasterboard - 30 minutes
- Total - 90 minutes

ENVIRONMENTAL PROPERTIES

- Sequestered carbon - 188 tonnes
- Concrete replacement - 124 tonnes
- Total carbon offset - 310 tonnes

[TRADA 2008]

William Perkin High School London

- UK's largest timber building
- Opened Spring 2014
- £19m four-storey complex
- 3,800m² CLT (KLH Austria)
- Above-ground floors 230mm-thick and span 7.5m with a 2.5m cantilevering walkway
- Structure assembled in 19 weeks



[www.tjonline.com]

Tallest timber apartment building in the world

Forté

Victoria Harbour
Melbourne

Height: 32.17 metres

23 apartments, over 10 storeys

Start on-site: February 2012

Begin CLT installation: May 2012

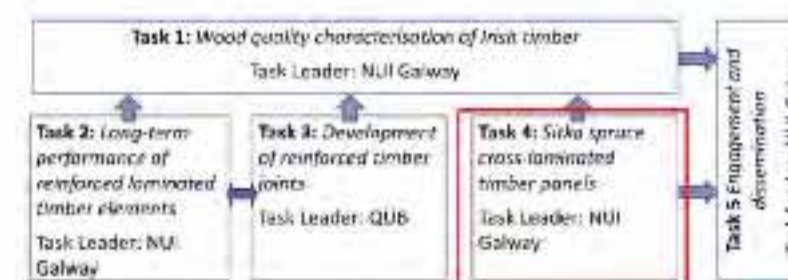
CLT structure complete: August 2012

Construction completion: October 2012



Project cost (construction):
Apartment tower: \$11 million

Innovation in Irish timber usage (ITU)



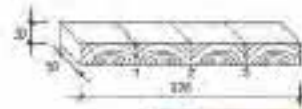
Website: www.irishtimber.org

CLT research at NUI Galway



Adhesive selection

- type & pressure
- Solid v glued



Delamination

- accelerated aging
- pressure soaking & drying



Thank you



OE Galilimh
NUI Galway



Ryan
Institute

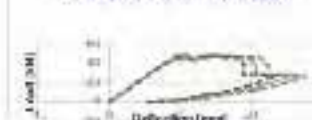
CLT research at NUI Galway



Strength & stiffness testing



S3 Deflection vs. Load



CLT constructions - videos

- Construction of a single family house with CLT
http://www.youtube.com/watch?v=SC7ND_dMnT4

- Bridport House - timelapse of the construction
<http://www.youtube.com/watch?v=jDrfVYdhpGQ>

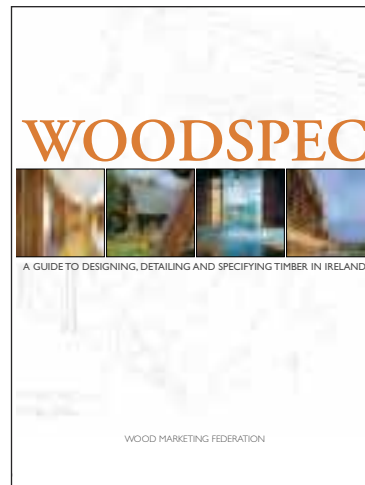
- Forte Build - time lapse video
<http://www.youtube.com/watch?v=cqXyqHyU5ws>

CLT research at NUI Galway

Next steps

- Investigate rolling shear properties of Sitka spruce
- Manufacture and test large scale panels
- Investigate the technical requirements for upscaling to commercial manufacture in Ireland

WOOD MARKETING FEDERATION



WMF published a 376-page hardback book *Woodspec – A Guide to Designing, Detailing and Specifying Timber in Ireland* in 2007.

The Wood Marketing Federation (WMF) was founded in 1989 to promote wood in all aspects including wood products, standards, design and usage. It recognised the need to promote wood especially to builders, architects, engineers, designers, specifiers, State agencies and educational bodies as there was a dearth of good information on wood usage and design in Ireland up until WMF was formed.

Mission and objectives

Our mission and objectives reflect these changes and also acknowledge the role wood will play in sustainable living and climate change. The WMF mission is:

To promote wood as a renewable, sustainable and versatile natural material

WMF members and other stakeholders support a range of projects, which meet with the Federation's objectives:

- Quality: to support the development of the highest standards.
- Education: to increase the knowledge and understanding of wood and wood products.
- Innovation: to promote and encourage new uses and applications for wood.
- Representation: to support member organisations in improving and developing their markets.

Projects

Most projects have a strong educational content because we recognise that there is a lack of information relating to wood usage and design specific to Ireland. Our programme is aimed at a number of audiences including wood users, designers and specifiers along with our future audience such as students currently studying engineering, architecture and design in third level colleges. Projects to date include:

- Wood Awards Ireland – competition launched in association with RIAI for building and design projects using wood as the inherent medium.
- Publication of a 376-page hardback book *Woodspec – A Guide to Designing, Detailing and Specifying Timber in Ireland*.
- 3rd level student wood awards which now has entrants from Irish universities and third level colleges – North and South.
- Wood promotional and educational literature including posters, website, *Talking Timber* series, *Pride in the Product* and newsletters.
- Wood promotion campaign to 3rd level colleges.
- Studies and seminars on wood usage, design in construction, fencing, leisure use, renewable energy, sustainable forestry and wood certification, aimed at architects, engineers, designers, wood specifiers, planners and other specialist groups.
- Shows and events including Plan Expo-Ecobuild in the RDS showcasing wood use and design and Timber Expo in England.
- Collaboration with other organisation such as the Tree Council of Ireland to promote wood to Primary and Secondary Schools
- Events such as Garden of Plenty – Sustainable Living Silver Gilt Medal winner at Bloom (2013) and Meitheal-Wood Collaborative at Electric Picnic (2009-2013).
- Lobbying Government, State agencies, EU and other organisations.



WMF publishes a range of wood promotional and educational literature including posters, website, *Talking Timber* series and *Pride in the Product* (above).

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THE SOCIETY OF IRISH FORESTERS



Society of Irish Foresters



Title page of facsimile edition of *The Trees of Great Britain and Ireland* published by the Society in 2012.

The Society of Irish Foresters is an all island body which represents the forestry profession in Ireland. It was founded in September 1942 'to advance and spread the knowledge of forestry in all its aspects'.

Objectives

The Society fulfils this objective by organising field days, study tours, workshops, public lectures, conferences and publications. It has more than 670 members who are predominantly professional foresters but includes, through its Associate and Student membership, a wide cross-section of people who are involved in, or share an interest in, Ireland's forest industry. Our objectives are:

- To promote a greater knowledge and understanding of forestry in all its aspects, and to advance the economic, social and public benefit values arising from forests;
- To support professionalism in forestry practice;
- To establish, secure and monitor standards in forestry education and professional practice;
- To provide an appropriate range of services to members.

The Society is currently contributing to a number of government policy documents including the ongoing Forest Policy Review, the Forestry Bill 2013 and the Consultation Paper on the Forestry Programme 2014-2020.

Since 1943, the Society of Irish Foresters has published *Irish Forestry*, a peer-reviewed journal of current research work; a bi-annual newsletter *The Irish Forester*; and a range of Policy Position Papers. In 2012, to celebrate its 70th anniversary, the Society published a limited edition reprint of Elwes and Henry's masterpiece *The Trees of Great Britain and Ireland*. Our most recent publication is *Glimpses of Irish Forestry*, a concise yet comprehensive overview of Ireland's forests and forest products industry.

The Society of Irish Foresters is deeply committed to promoting and maintaining professional standards in Irish forestry and the regulation of the forestry profession in Ireland. More than a decade ago, we introduced a Programme of Continuous Professional Development for members as a means of confirming that professional foresters are up to date in current forestry practice. Members of the Society are also bound by the Society's Code of Ethics and Professional Conduct. The Society of Irish Foresters also assesses forestry education courses in Ireland to ensure the highest professional standards.

These are exciting times to be involved in Irish forestry. Times of change bring us challenges and opportunities. When the Society of Irish Foresters was founded in 1942 the major challenge was to establish and develop a forest industry in Ireland.

Our challenge today is to protect and consolidate the valuable resource that has been created and to develop markets for the wood from these forests. Today's conference is a step in that direction.

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Glimpses of Irish Forestry published by the Society in 2014.

Wood Awards IRELAND 2014

WOOD AWARDS IRELAND 2014 is a major new competition to reward Irish architects, engineers, designers and wood workers who create work in Ireland and overseas, incorporating wood as an inherent medium in their projects. The emphasis is on creativity and innovation using wood from sustainably managed forests.

Submissions accepted for following categories:

- Large-scale public buildings
- Small-scale buildings
- Restoration and conservation projects
- Innovative structures
- Furniture
- Other innovative projects

Image: Marine Institute HQ, Galway, courtesy of OPW

Closing date

16 July 2014

Site visits and shortlist: September

Awards ceremony: 28 November

Further information and entry form
e info@wood.ie www.wood.ie/wood-awards-ireland

WAI is organised by the Wood Marketing Federation

Supported by the Royal Institute of the Architects of Ireland





www.wood.ie



Society of Irish Foresters

www.societyofirishforesters.ie



www.farmersjournal.ie



www.coford.ie



www.agriculture.gov.ie