

The Forest Resource



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Teagasc Forestry Specialist
March 10, 2020



**23,000 private owners
394,000 ha, 83% farmers**



Ireland's forests and Forestry Programme supporting...



Forestry sector worth €2.3 billion



12,000 jobs (mainly rural)



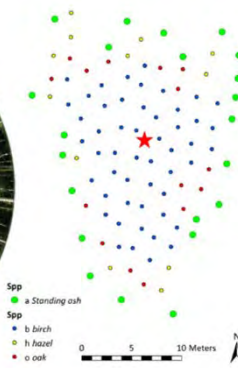
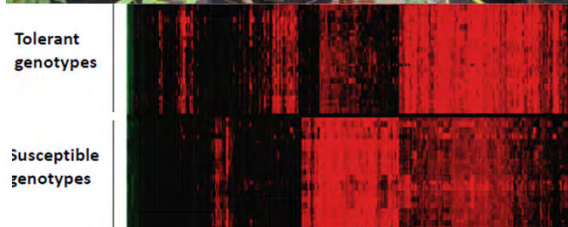
Ecosystem services



**778,000 ha
11% of land area**

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture
Food and the Marine

Teagasc Forestry Research



Teagasc Forestry Research

Forest thinning/potential of other species



Wood utilisation



Continuous cover systems



TranSSFor 



EARTH



Teagasc Forest Advisory Events



Advisory clinics



Forestry Management



International Day of Forests



Conferences



RDS Farm Forest award



Agricultural science students



Tullamore Show



Timber Marketing

Teagasc Forestry Training



Ballyhaise College



Harvesting Simulator



Hosting National Events



QI Accredited
L5 / L6 courses



Short Courses

Mobilising the Forest Resource

Thinning



Owner Co-Operation



Forest Inventory



Access



Harvesting

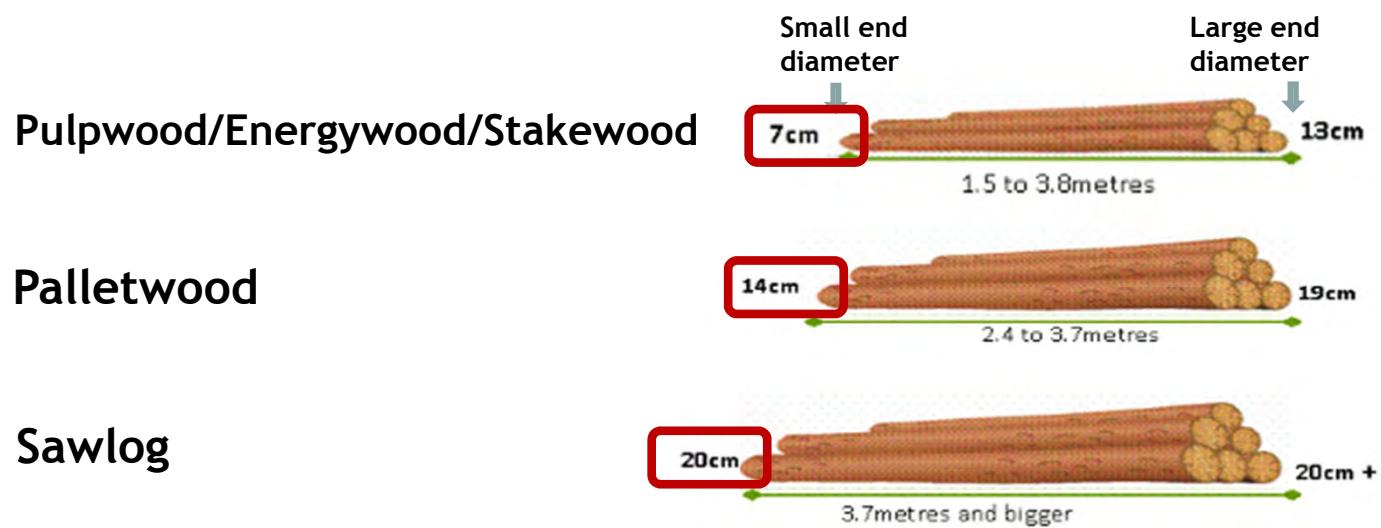




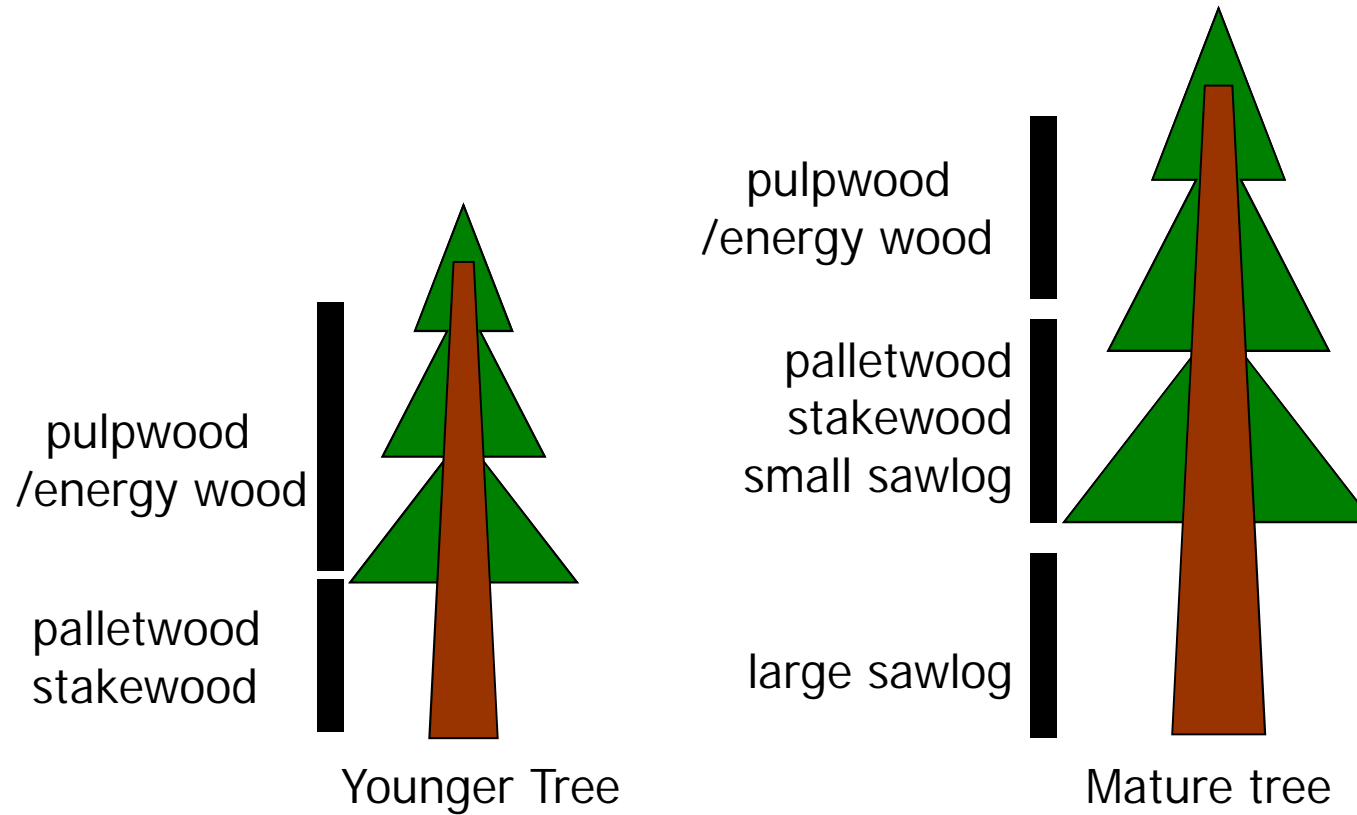




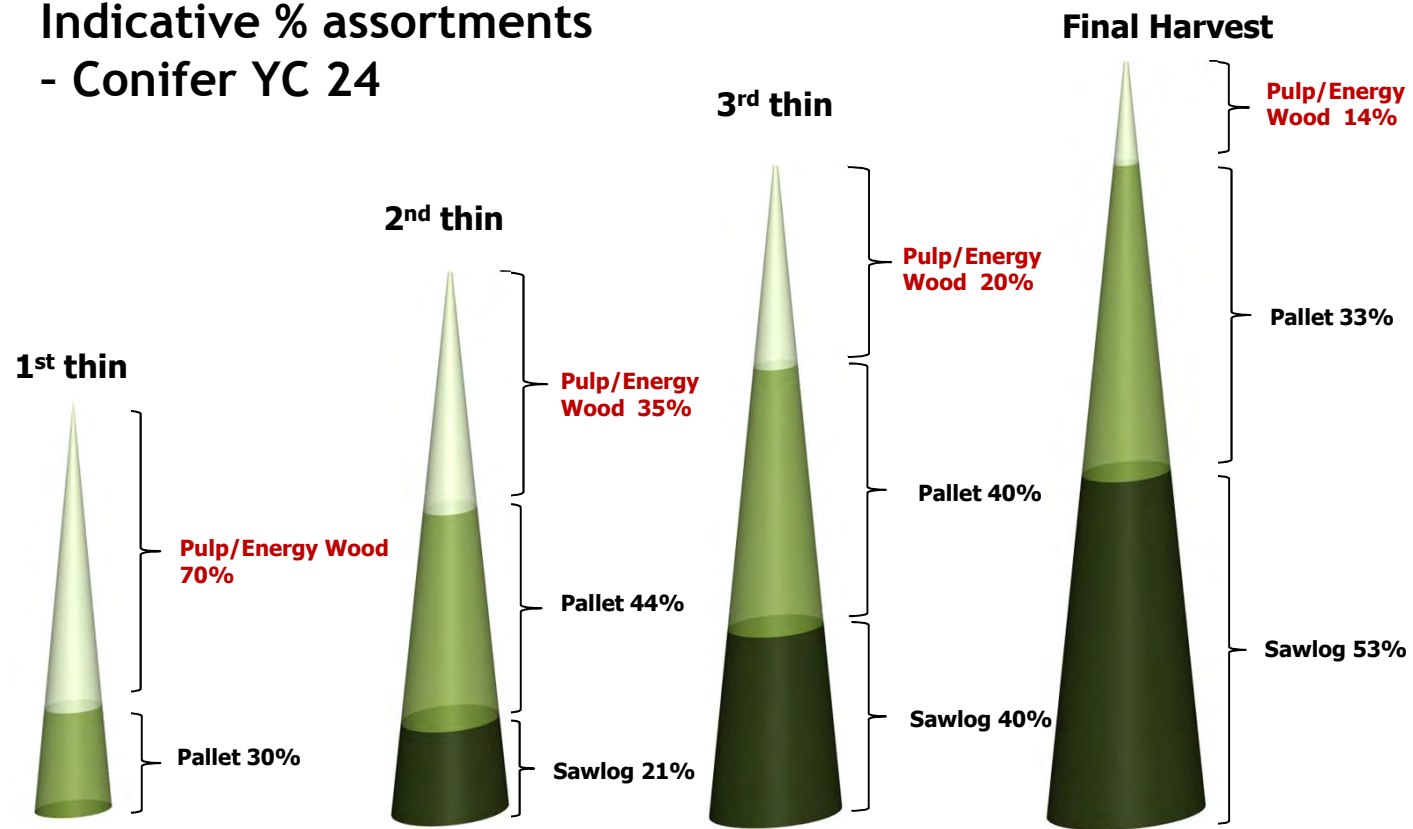
Roundwood Products



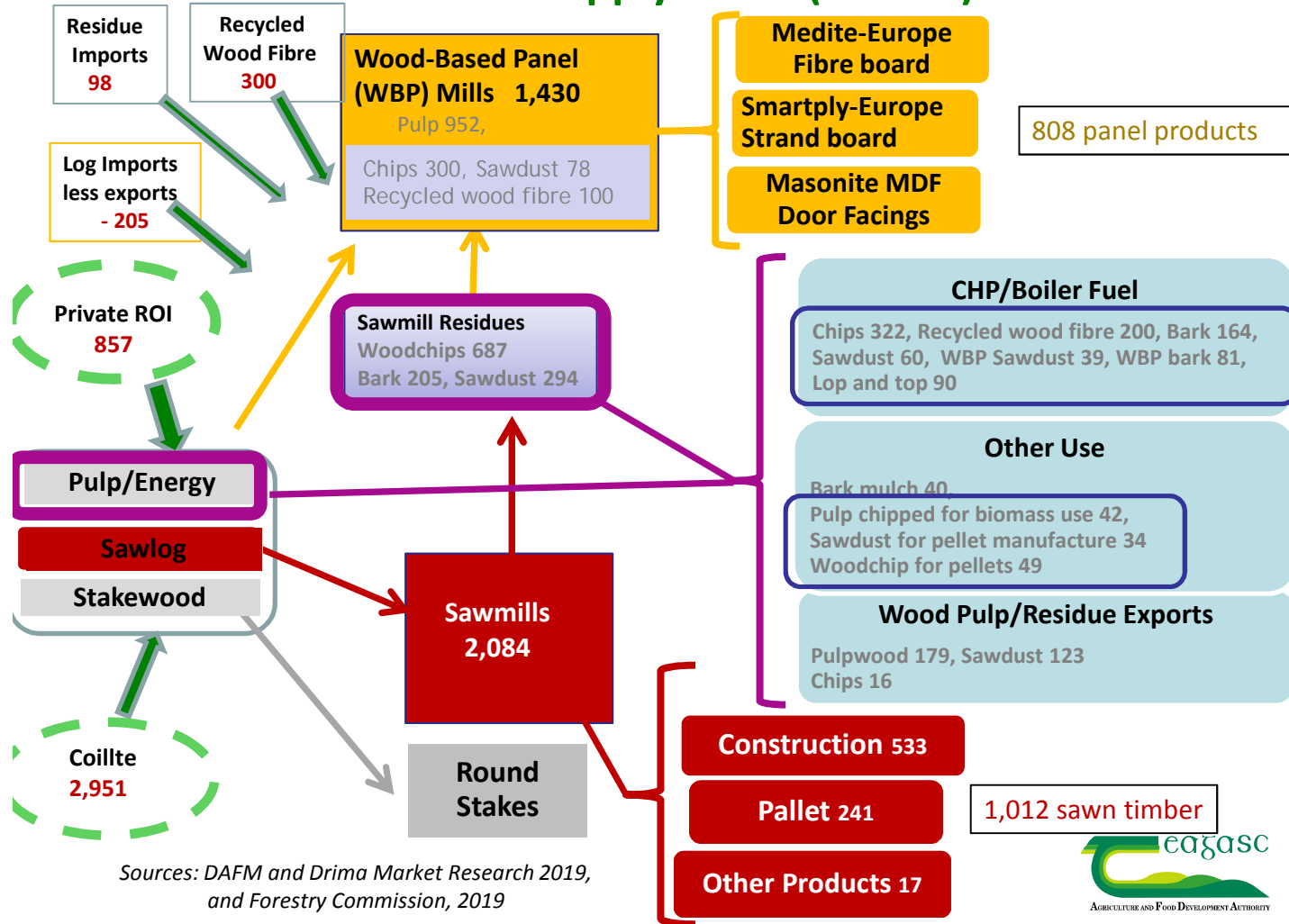
Indicative Timber Assortments



Indicative % assortments - Conifer YC 24

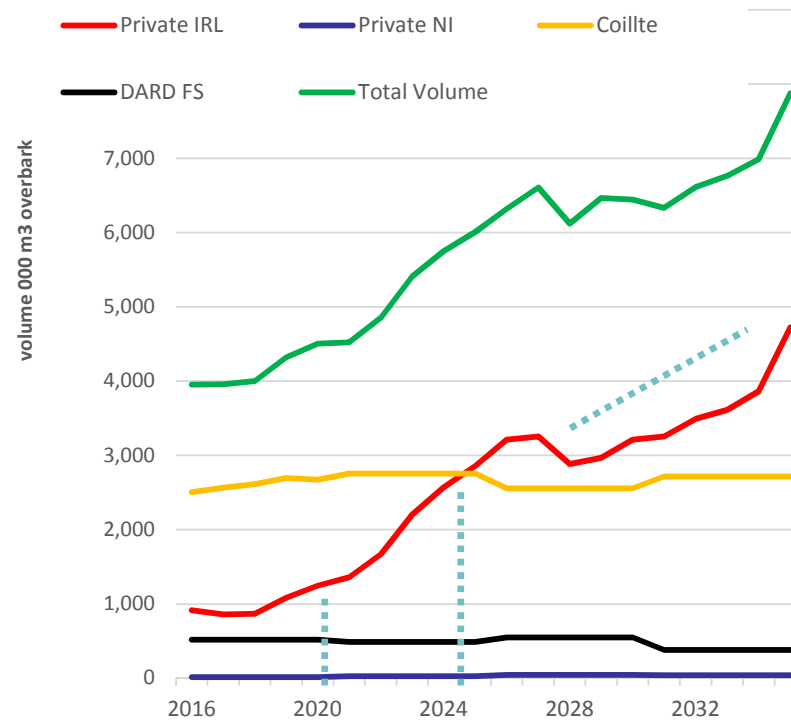


2018 Timber Supply Chain (000 m³)



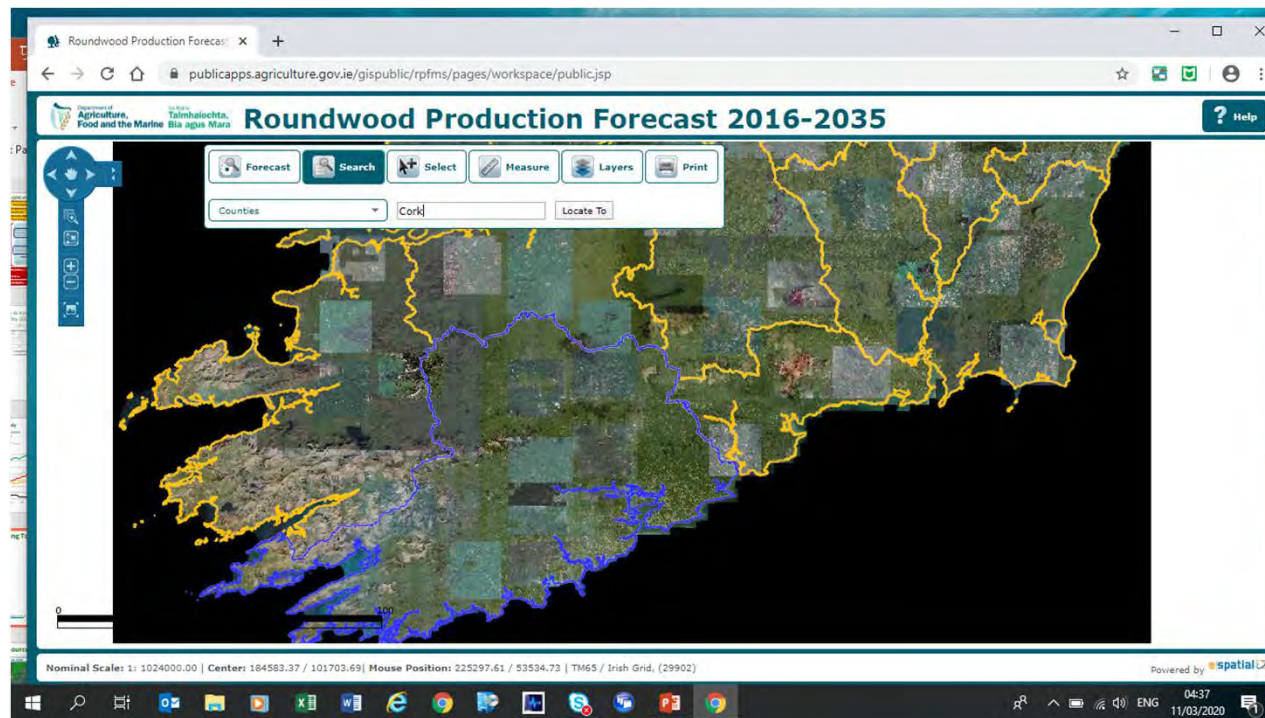
Timber Supply

Forecast of total net realisable volume production to 2035 (000m³)



Source: All-Ireland Roundwood Production Forecast 2016-2035 (COFORD, 2016)

Web Based Mapping Tool



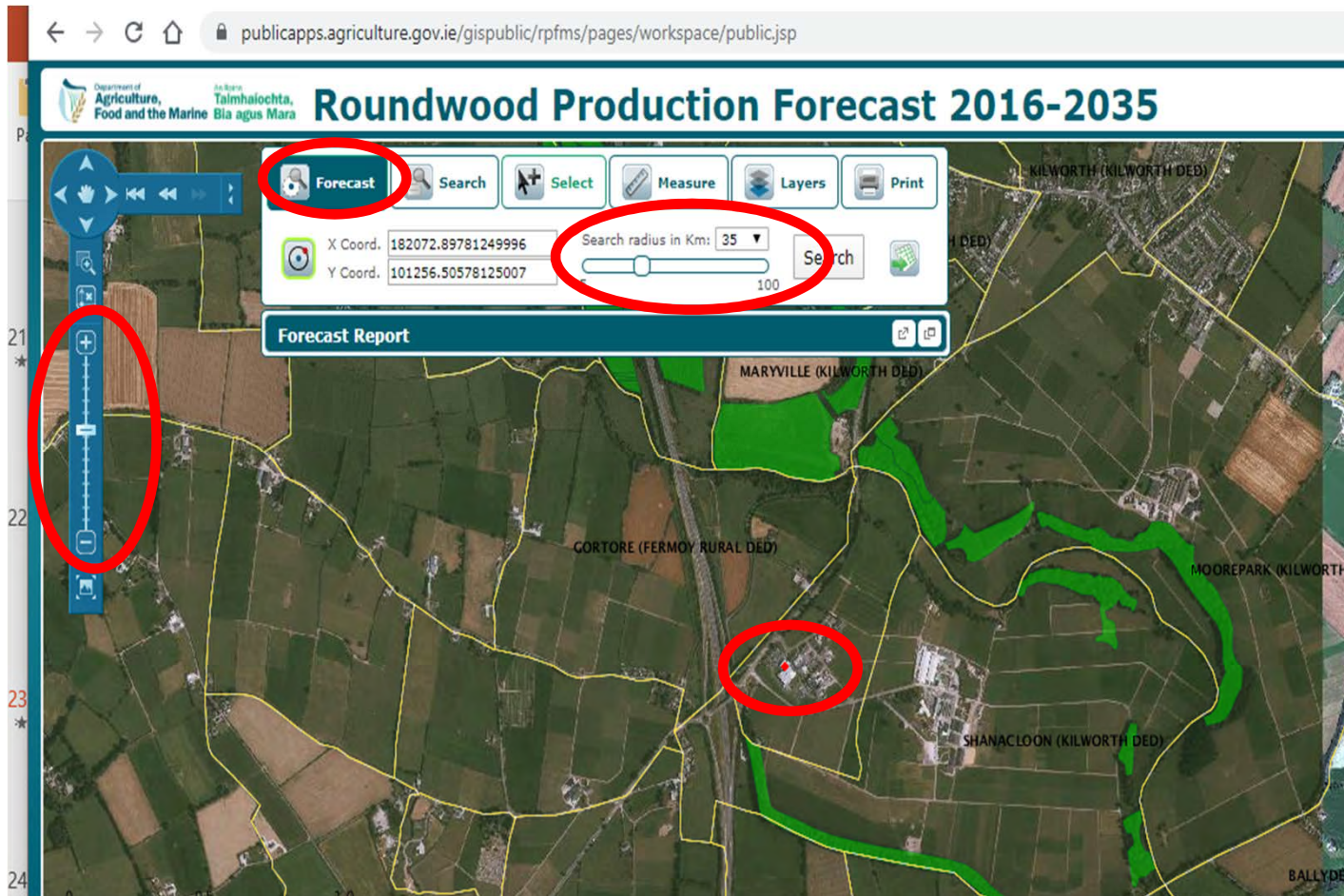
Source: COFORD, 2016

Available at:

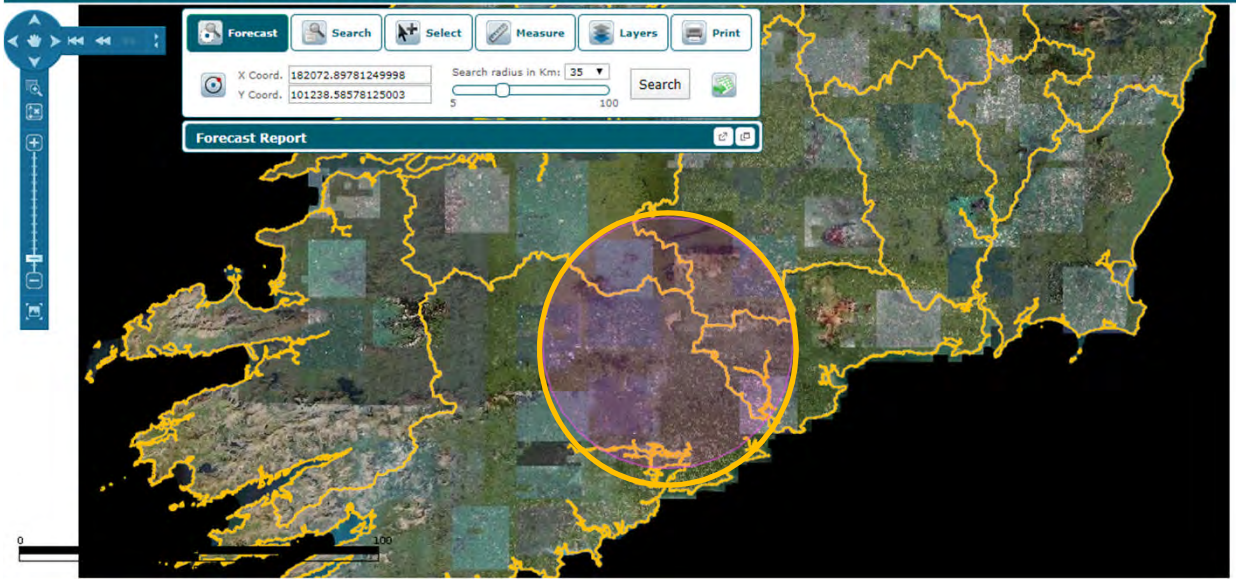
<https://www.agriculture.gov.ie/forests-service/forestmanagementtools/>



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Department of Agriculture, Food and the Marine / Talmhaíochta, Bia agus Mara
Roundwood Production Forecast 2016-2035



Forecast Report

Table: Owner, Species Group¹, Year

Volume Sum: Harvest Type, Size Category

Harvest Type	Size Category	7 cm - 13 cm	14cm - 19 cm	>= 20 cm	Tip - 7 cm	Totals
Clearfell		585,820	1,643,956	3,776,020	95,598	6,101,394
Thinning		1,227,062	818,390	306,462	499,524	2,762,438
Totals		1,813,882	2,462,346	4,082,482	505,122	8,863,832

¹ - Broadleaf species have not been included in the Coillte forecast.
² - All volumes are reported in m³.


Roundwood Production Forecast 2016-2035

Forecast Search Select Measure Layers Print

X Coord. 182072.89781249998 Y Coord. 101238.58578125003

Search radius in Km: 35

Search



Forecast Report

Table		Owner		Species Group ¹						
Volume Sum		Size Category		Harvest Type						
Year	Size Category	7 cm - 13 cm		14cm - 19 cm		>= 20 cm		Tip - 7 cm		Totals
	Harvest Type	Clearfell	Thinning	Clearfell	Thinning	Clearfell	Thinning	Clearfell	Thinning	
2016		25,589	61,773	61,477	30,373	172,715	2,886	2,892	22,642	380,347
2017		19,557	52,361	51,975	27,664	182,639	3,523	2,138	16,566	356,423
2018		25,758	54,408	79,513	26,525	192,057	3,385	5,057	17,189	403,892
2019		25,005	65,160	81,697	30,571	186,014	6,140	5,389	19,542	419,518
2020		26,458	68,594	74,005	35,210	190,532	4,713	5,735	21,404	426,651
2021		33,050	74,795	97,314	37,146	198,452	4,261	5,347	22,375	472,740
2022		31,455	74,726	86,962	33,990	153,762	3,872	4,186	22,715	411,668
2023		28,110	59,952	74,434	38,829	126,881	15,441	4,441	20,159	368,247
2024		26,303	74,995	82,116	56,009	180,007	20,495	4,965	25,392	470,282
2025		33,545	70,634	96,426	45,729	164,478	12,594	4,920	22,621	450,947
2026		37,755	74,935	104,646	39,661	196,860	8,401	6,238	24,044	492,540

Wood Fibre Availability Forecast

RoI (m³ equivalent)

Year	Total Fibre (000 m ³)	Energy Content Millions (GJ)
2020	2,171	14.98
2025	3,100	22.07
2035	4,186	28.88

Wood fibre includes

- Roundwood 7-13 cm
- Tip of tree to 7cm
- Downgraded larger roundwood + residues
- Residues from harvest
- Suitable recycled wood products

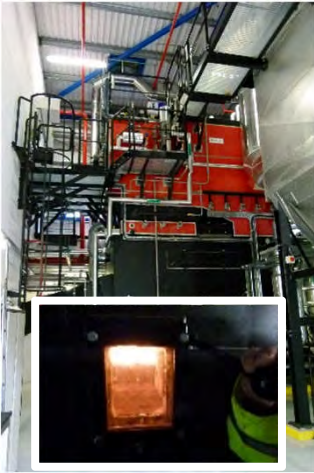
Source: COFORD, 2016

Sustainably- Produced biomass

- Additional **local markets** for small/lower grade logs
- Stimulus for **enhanced and sustainable** forest management
- Assisting in **promoting quality, vigour and diversity** within forests

- **Cost savings** for local business/enterprise
- **Competitive advantage** through sustainability
- Assist in **transition** to low carbon economy
- Enhanced economic and growth agenda

Case Study – Astellas Ireland Company Limited – Kerry Plant



Case Study – Poultry Farm

- 2 X 200 kW Fröling T4e Woodchip Boilers
- Biomass consumption: 596,000 kWh/yr
- SSRH Support: €25,920/yr
- Estimated fuel saving: €7,748/yr
- Estimated CO₂ saving: 149,000kg

- Capital cost €180,000
- Payback in **7.5 years** including interest
- Sources:



Case Study, McAuley Wood Fuels

Log Drying



Chipping

350hp chipper, chipping directly from storage stacks.





Wood Chip Suppliers

Wood Chip

Woodchip is chipped woody biomass in the form of pieces with a defined particle

[VIEW SUPPLIERS](#)

Wood Chip Suppliers for WFQA

Map data ©2020 GeoBasis-DE/BKG (©2009), Google Terms 20 km

Challenges / Opportunities

- Energy use of wood has a significant role to play
- Promotion of sustainable management within forests
- Sustainable and increasing supply of raw material
 - achieving net realisable volumes
- Stimulate appropriate harvest activity
- Balanced approach to the development of Ireland's wood resource

New Biomass Projects

Research / homework essential

Insights into:

- Sustainable current and future biomass supply and demand – specific to your needs
- Local supplies from catchment
- Insights from existing successful projects
 - Basis for informed decisions
- Quality assurance



THANK YOU