

# National Forestry Conference

1 June 2016

What's out there? An assessment of our timber resource and forest inventory, including the findings of *Mobilising Ireland's Forest Resource*

Eugene Hendrick  
Forest Sector Development/COFORD Division

# Presentation outline

- Roundwood production forecasting processes
- All Ireland Roundwood Production Forecast 2016–2035
- *Mobilising Ireland's Forest Resource* – challenges and achievements

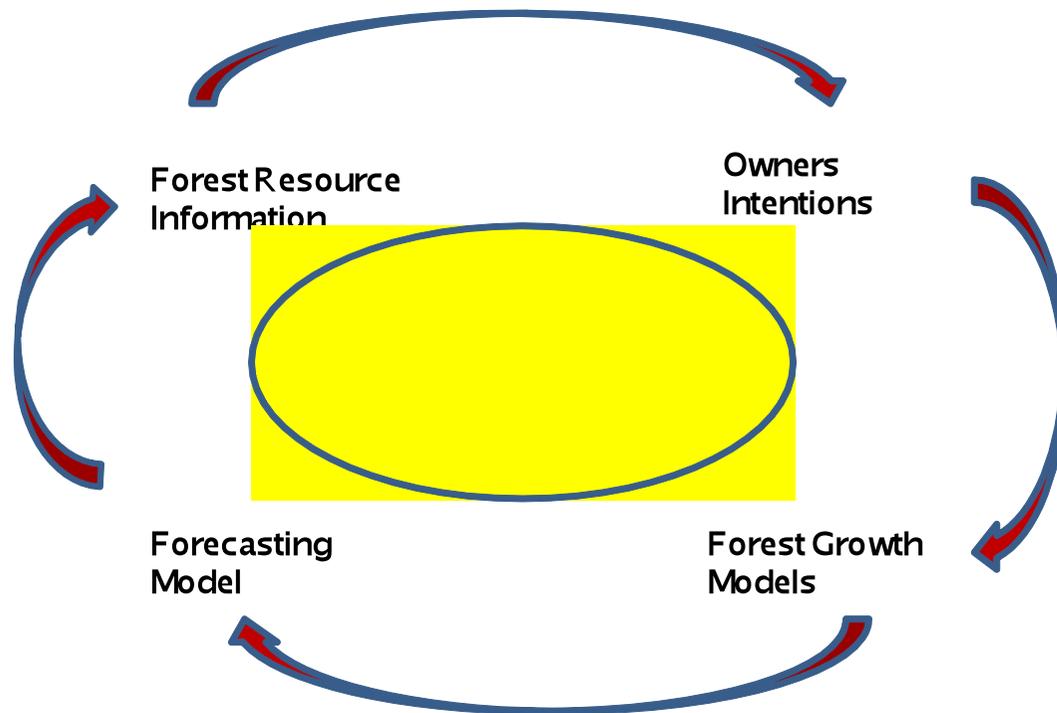
## Roundwood production forecasting process

- Collaborative effort – state/private, includes Northern Ireland
- First All Ireland roundwood production forecast 2011–2028
- New forecast 2016–2035, advance version issued in March
- Update on 5–year cycle

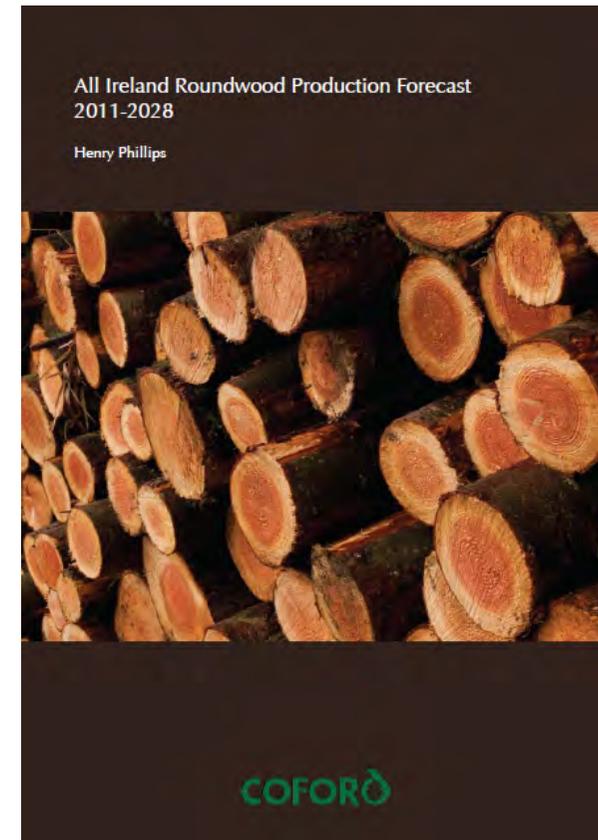
# Forecasting

Predicting the future as accurately as possible, given all of the information available

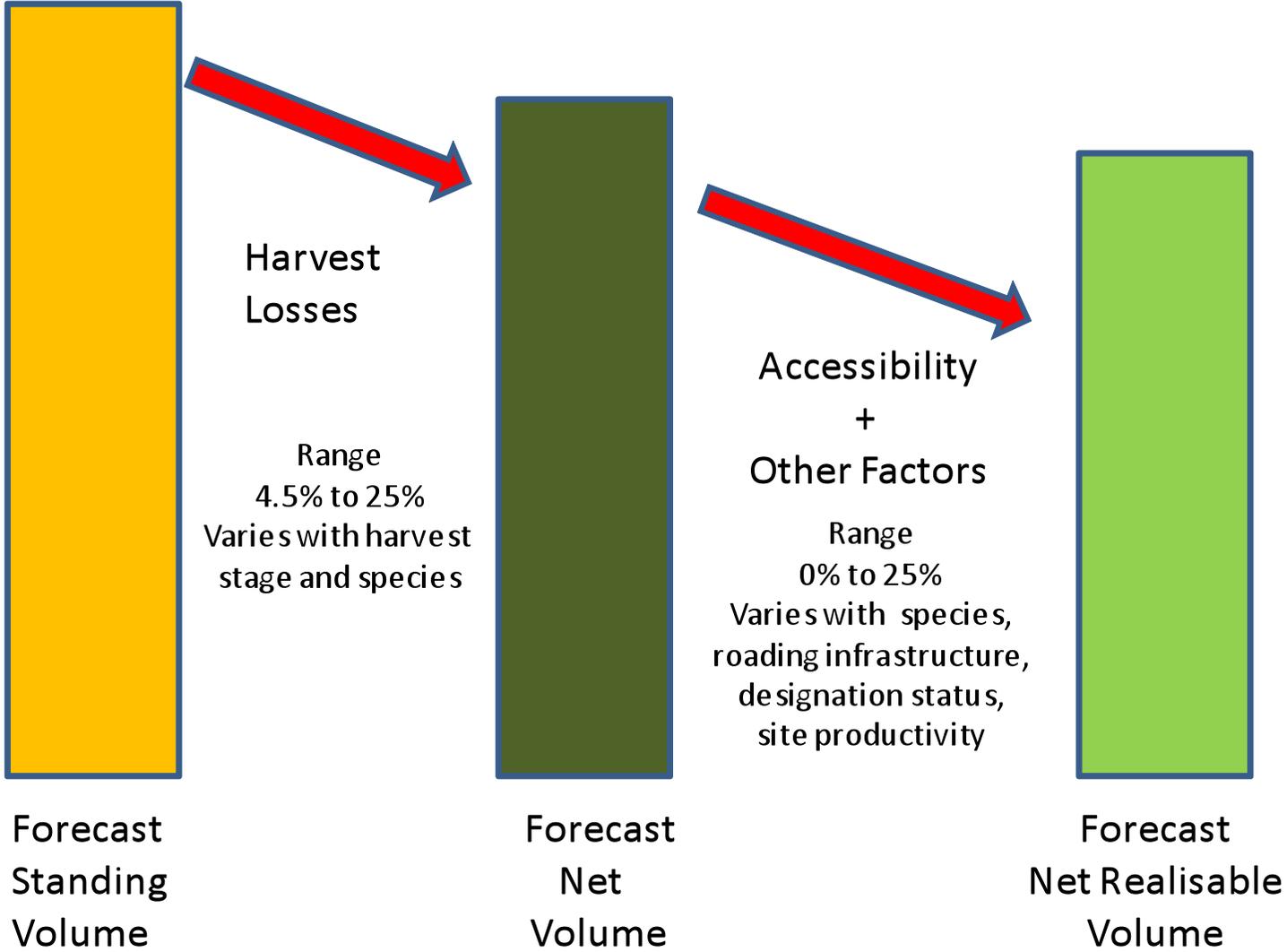
1. Long forecast period
2. Multiple owners
3. Ecosystem Services
4. Regulatory
5. Global market



- **All Ireland roundwood production forecast 2011–2028**
- **Developed by COFORD group chaired by Mike Glennon, GBT**
- **Net realisable volume concept developed**

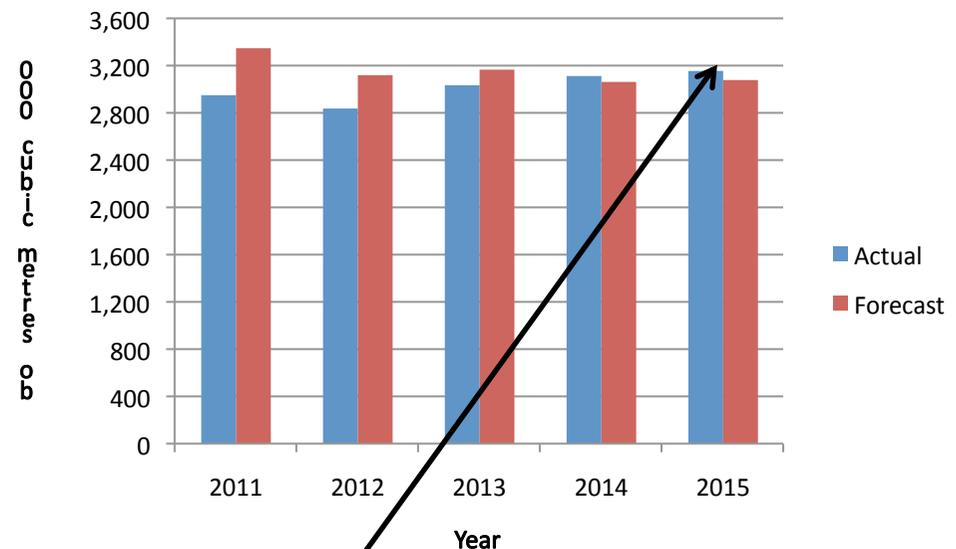


# Net Realisable Volume



# Outturn and RoI roundwood production forecast 2011-2028

- Year-on-year variation - but over 5-year period 95% of forecasted outturn harvested in RoI

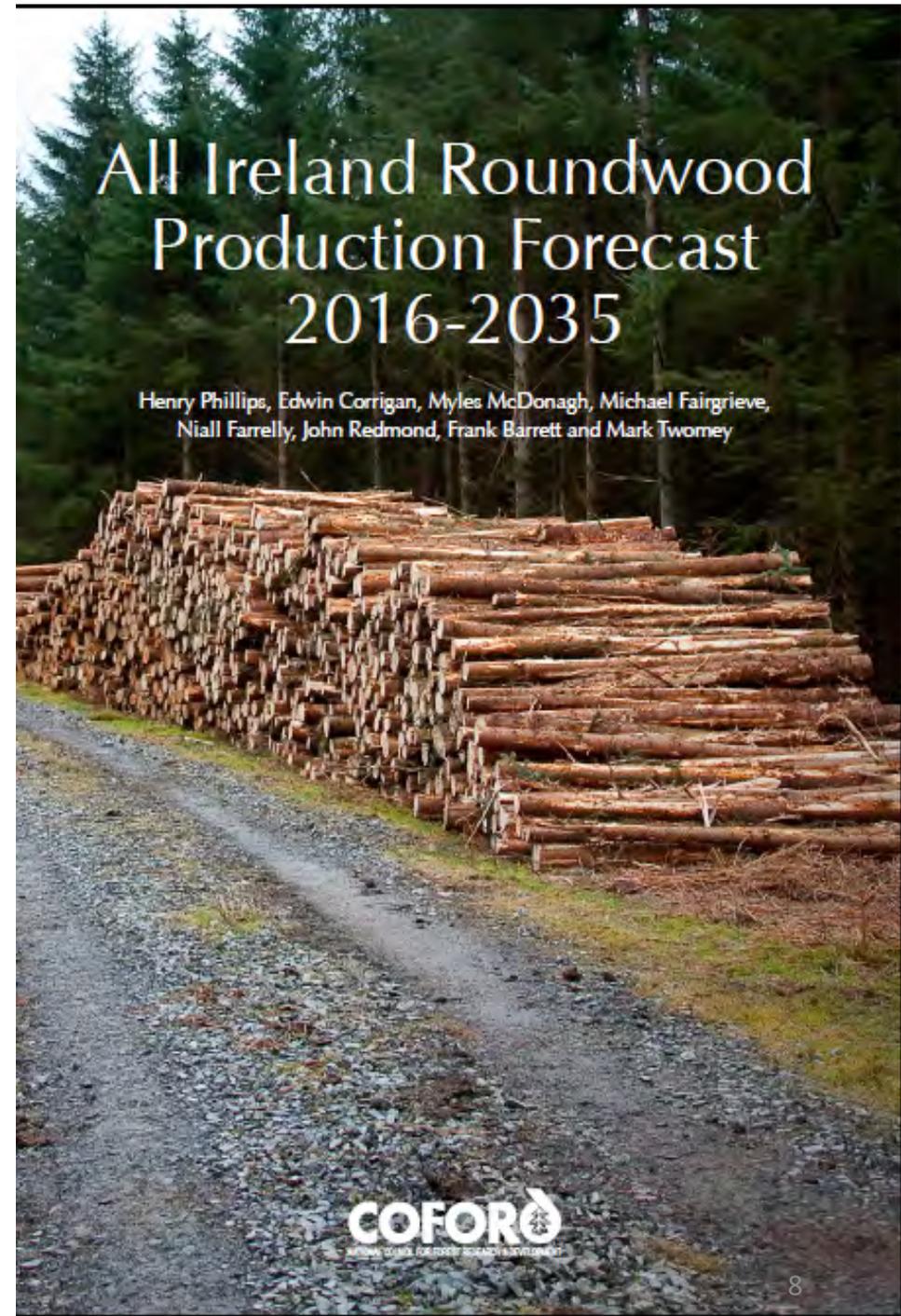


- 2015 harvest (subject to final checking): 3.2 million cubic metres, highest to date - private harvest ~ 0.7 million cubic metres (23% of total)

## All Ireland Roundwood Production Forecast 2016–2035

The purpose of this second all Ireland forecast is to:

- a) Provide an agreed methodology and approach for estimating future roundwood availability;
- b) Provide the forest and wood energy sector with an accurate forecast of roundwood and wood fibre availability;
- c) Facilitate the mobilisation of state and private forest resources;
- d) Inform policy and policy/ decision makers regarding future roundwood production; and
- e) Underpin future investment in the timber processing and wood energy.

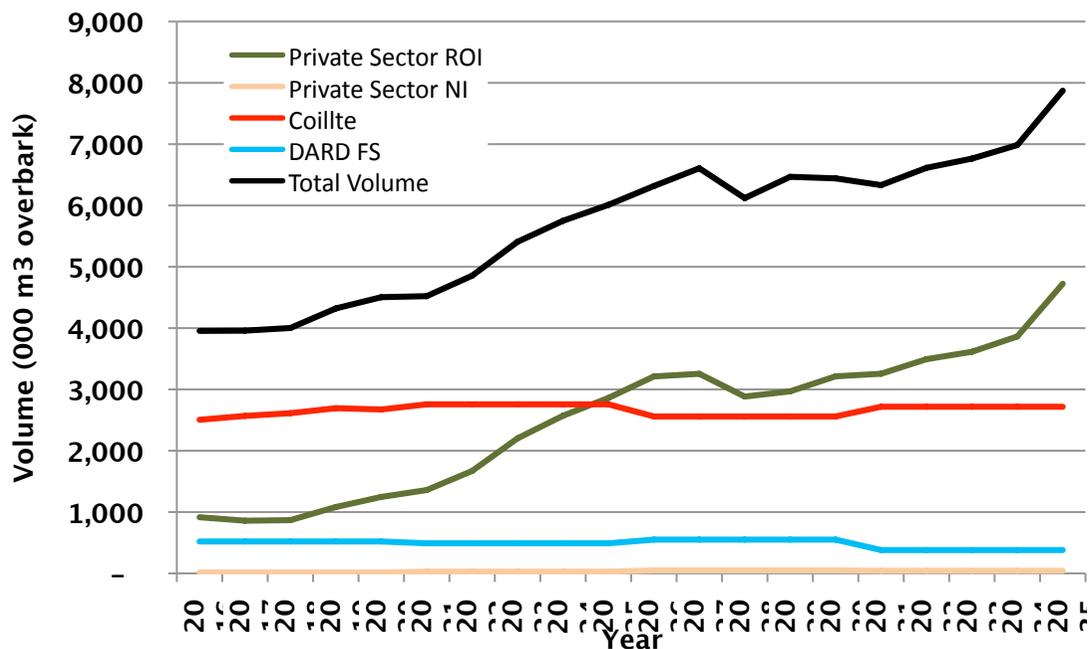


# All Ireland Roundwood Production Forecast 2016-2035

*Roundwood supply will increase significantly over the next two decades, with almost all of the increase coming from privately-owned forests in the ROI and primarily in the larger size assortments.*

*The forecast net realisable volume (NRV) will increase from 3.95 million m<sup>3</sup> in 2016 (on the island) to 7.87 million m<sup>3</sup> by 2035.*

[www.coford.ie](http://www.coford.ie)



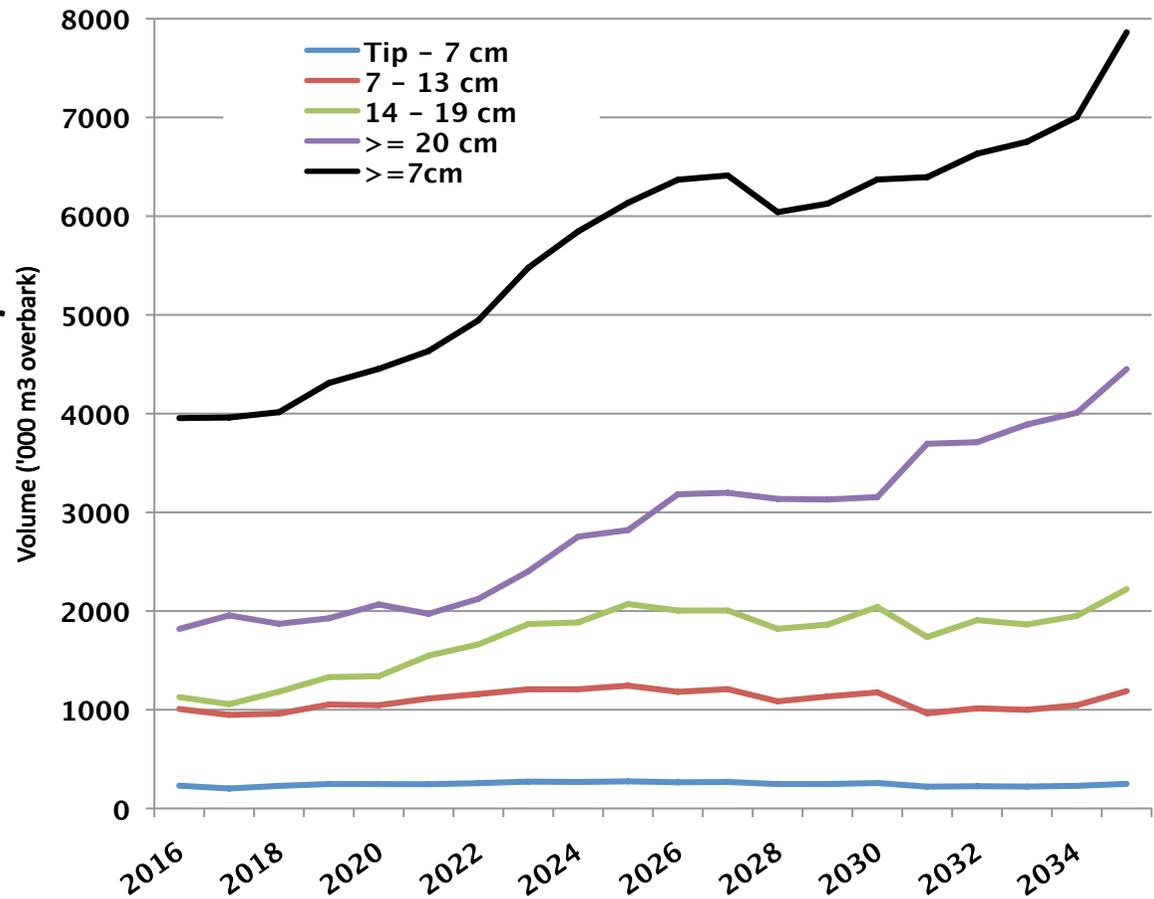
# All Ireland Roundwood Production Forecast 2016-2035

*Top diameter categories:*

- *tip-7 cm and 7-13 cm relatively flat over the forecast*

- *14 to 19 cm increases to 2.07 million m<sup>3</sup> by 2027, relatively flat for the remainder*

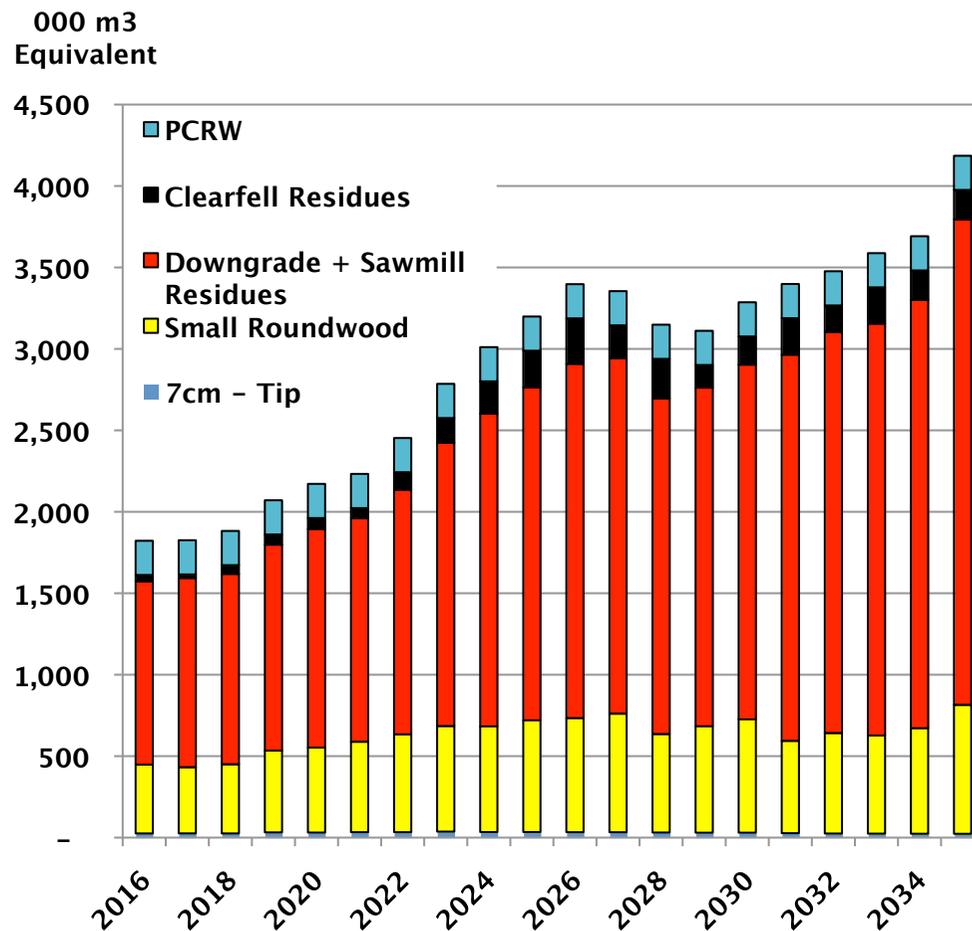
- *In contrast, 20 cm+ increases slowly for the first 6-7 years followed by a steady increase from 2 million m<sup>3</sup> to 4.46 million m<sup>3</sup> by the end of the forecast period.*



# RoI potential forest-based biomass forecast to 2035

## *Increasing volume:*

- *small roundwood from thinnings*
- *downgrade material from larger size assortments +*
- *wood residues from the processing sector +*
- *harvesting residues from the clearfell of spruce +*
- *tip-7 cm category confined to potential harvesting on thinning sites*



# ***Mobilising Ireland's Forest Resource***

***The COFORD Wood Mobilisation Working Group (CWMWG) was established to identify and make recommendations to address barriers to wood mobilisation from forests to end user.***

# **Mobilising Ireland's forest resource**

Authored by the COFORD Wood Mobilisation Group



# ***Mobilising Ireland's Forest Resource***

## ***- Terms of Reference***

- To identify and make recommendations on issues impacting on access to and mobilisation of wood resources at the national level, taking into account cost effectiveness and related issues, with due reference to the work of the Forest Policy Review Group, and other relevant reports.
- Further understand and assess ways to address projected shortfalls in wood fibre supply on the island.
- Update information on wood harvest v forecast contained in Table 1 in the COFORD All Ireland Roundwood Production Forecast 2011-2028.

Reported March 2015

# ***Mobilising Ireland's Forest Resource – supply/demand balance analysis***

- Potential shortfall in supply of ca 2 million cubic metres on the island by 2020 (based on 2011 forecast)
- Half in sawlog and half in energy wood
- Sawlog demand is likely to strongly influence on mobilisation levels to 2020, especially in the private sector – implications for rotation length
- Energy wood demand in the domestic market will depend on response to new Renewable Heat incentive – as well as other projects in the pipeline
- The mobilisation challenge: to achieve and potentially exceed forecasted levels of roundwood production in a sustainable manner

# Issues from COFORD Mobilisation Report

- Impacts of felling practices and rotation lengths on future assortment availability and resource optimisation
- Felling licences, planning permission/forest roads and harvest information
- Coillte resource
- Road haulage and technology
- Information and advice/management interventions sales methods
- Taxation
- Environmental designations
- Expanding supply
- Future forecasting
- Research and development

State/COFORD responding to the mobilisation challenge and relevant recommendations from the COFORD report - systematic and structured tracking and implementation through:

- internal Forest Service group and
- COFORD Working Group on Roundwood Mobilisation and Forecasting

# Responding to the mobilisation challenge and recommendations from the COFORD report – work in progress – some examples

## 1. Impacts of felling practices and rotation lengths on future assortment availability and resource optimisation

- *Advisory service to private owners provided by Teagasc*
- *Work also underway by the Forest Service on the assessment of the impact of forest felling age on overall financial return to forest owners*
- *Output will be a web-based rotation-length advice system – available on DAFM web site in 2016*

**FOREST SERVICE ROTATION LENGTH CALCULATOR**

Species: Sitka Spruce      Timber Prices: 10 Year Average

Age: 14

Yield Class: 20

Management Type: Regular Thinning

Rotation Type: 21 m Top Height

Discount Rate: 5%

Submit

Clear Inputs

---

**RESULTS**

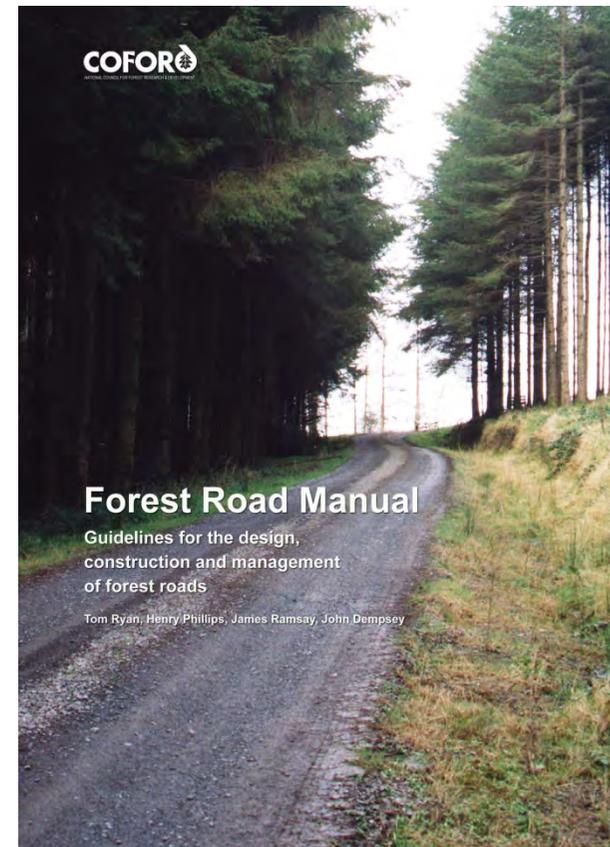
Fell Age: 37  
Clearfell Revenue: €27,850

Year	Top Height (m)	Net Revenue (€/ha)	Net Discounted Revenue (€/ha)	Average Tree (m <sup>3</sup> )	Net Volume (m <sup>3</sup> /ha)
35	19.5	€24,500	€8,794	0.61	366
36	20.3	€26,250	€8,974	0.65	387
<b>37</b>	<b>21.0</b>	<b>€27,850</b>	<b>€9,067</b>	<b>0.71</b>	<b>409</b>
38	21.7	€28,000	€8,682	0.74	431
39	22.6	€28,500	€8,416	0.78	452

Print Results: Yes

## 2. Felling licences, planning permission/forest roads and harvest information

- *Forest Service forest roading grants for first thinning*
- *Provision of almost €28 million of funding under Forestry Programme 2014-2020*
- *Increase of 14% over the previous Forestry Programme*



### 3. Provision of production forecast information

- *New spatial tool for RoI to enable user-defined forecasts for selected areas (subject to a minimum area)*
- *Output can be specified by*
  - *year,*
  - *species group,*
  - *top diameter assortment and*
  - *harvest type.*
- *Available at DAFM web site in Q4 2016*

## 4. Provision of wood price information

- New Wood Price Quarterly based on private sector sales available at ITGA and COFORD web sites

- Important initiative involving a collaborative effort between ITGA, UCD, private forestry companies and consultants, building on ITGA system

- ITGA/UCD would welcome further price data to reflect all market activity

- Data provided is treated as strictly confidential

- Supported by FSD/COFORD

Average Tree Size Category (m3)	Jan - Mar 2015 (€/m3)	Apr - Jun 2015 (€/m3)	Jul - Sep 2015 (€/m3)	Oct - Dec 2015 (€/m3)
Up to 0.074	7.68 *	-	11.87 *	13.70
0.075 to 0.124	11.11 *	14.25	12.80	20.00
0.125 to 0.174	12.91	19.33 *	19.98	22.20
0.175 to 0.224	21.31	20.53	19.31	21.30
0.225 to 0.274	31.40	35.14	35.68	23.96
0.275 to 0.324	35.03	29.11	38.56	33.31
0.325 to 0.374	54.38	36.59	28.78	29.01
0.375 to 0.424	35.20	40.59	51.95	35.51
0.425 to 0.474	55.14	39.12	33.26 *	46.09
0.475 to 0.499	-	-	-	-
0.500 to 0.599	54.09	36.91	43.27	23.52 *
0.600 to 0.699	59.68	61.76	47.83	58.57
0.700 to 0.799	57.33	63.13	64.87	49.74
0.800 to 0.899	68.21	66.20	60.24	48.63
0.900 to 0.999	54.50 *	65.00 *	65.00 *	65.34 *
1.000 and over	60.47	61.63	63.39	50.28

## 5. Voluntary Forest Certification

- DAFM undertaking a pilot project on knowledge transfer Groups focusing on group certification.
- In partnership with the North East Forestry Group and the Forest Owners Co-operative Society.
- Aim is to develop a template for FSC certification which can be rolled-out to other forestry groups, forestry companies and individual forest owners who are interested in becoming certified.
- The template will be road tested by the two forestry groups with the aim of achieving certification.
- Start date August 2016 and will take 12 months to complete.

## 6. Innovative Forest Technology

- The Forest Service is preparing a scheme to support the roll out of Central tyre inflation (CTI) systems to haulage companies involved in transporting roundwood
- CTI allows drivers to electronically select the most suitable tyre pressure for the particular vehicle operation and/or driving surface
- CTIs can contribute to reducing damage to forest and public roads, reduce wear and tear to the lorry and can also contribute to health and safety by reducing vehicle vibration



## 7. Forest Machine Operator Training

- Forest Service has approved funding to Teagasc to develop a suitable training course at Ballyhaise College for operating forest machinery.
- Funding has also been approved to purchase a harvester/forwarder simulator to support this training initiative.

**Thank you for your attention!**

**[eugene.hendrick@agriculture.gov.ie](mailto:eugene.hendrick@agriculture.gov.ie)**

**Thanks to**

**Frank Barrett  
Brian Clifford  
Karl Coggins  
Eoin O'Driscoll  
Henry Phillips  
Tony Quinn  
John Redmond  
Donal Whelan**



Department of  
**Agriculture,  
Food and the Marine**

An Roinn  
**Talmhaíochta,  
Bia agus Mara**