



Market and policy issues

European Union/UK

The export-orientated sawmilling sector will continue to compete in a very challenging market environment, with EU/UK-related developments likely to have a significant impact.

Ireland

The target in the National Strategic Plan is to expand forestry cover to 18% of the land area by 2046, creating the critical mass to support an indigenous industry. The Government Climate Action Plan targets 8,000 hectares of afforestation per annum as a contribution towards climate change mitigation goals to 2030, and beyond. The promotion of farm forestry, grant schemes and incentives will continue to play an important role for farmers considering forestry as a land use option. The estimated domestic timber production required to achieve critical mass includes a sustainable supply of 6.6 million cubic metres (m³) by 2027.

The major challenge is to ensure that measures contributing towards these targets equitably address the social, environmental and economic benefits that forestry can deliver.

The need for sustainable forest management, chain of custody certification schemes, the provision of ecosystem services as well as the EU Timber Regulation, will increase in significance. By 2025, it is predicted that an annual sawlog and stakewood harvest of 4.11 million m³ will be sufficient to meet sawmill demand. The existing wood fibre supply deficit is anticipated to increase up to 2025 and beyond, with a wood energy demand deficit of over 3.0 million m³ being a key factor.

Shape and size of the sector in 2027

- By 2027, there will be over 842,000 hectares of forest in Ireland, 12.2% of the total land area.
- By 2027, over 50% of the forests will be privately owned and the contribution of the private sector to overall timber supply forecast (56% of total) will be evident as crops approach first thinning stage and maturity.
- Private sector timber production (including energy wood), reached 1 million m³ in 2018, and is forecast to increase to 3.35 million m³ (net realisable volume) by 2027.

Technical performance for the forestry sector

- There is significant capacity to increase resource efficiency through improved planting material and appropriate species choice. This can ensure an increase in timber production, enhanced timber quality, carbon storage and a range of ecosystem services derived from forestry. A diversification of current management practices, including varied thinning intensities and continuous cover forestry, will also need to be considered to adapt the forest resource to climate change and other challenges.
- The adoption of best practice, supported by research-based evidence, will increase the quality and output of innovative timber products to satisfy demand from new and existing markets, thereby increasing the profitability of the forest enterprise and carbon sequestration potential.
- Producer networks have a strong capacity to create economies of scale across the supply chain and to achieve greater efficiencies. In harvesting, networks can facilitate timber mobilisation and act as conduits for innovation and knowledge transfer initiatives.

Environmental and land use implications

Forests play an important role in the provision of ecosystem services and climate change mitigation. Trees play a vital role in sequestering carbon dioxide, storing carbon in harvested wood products, displacing carbon-intensive materials and providing a renewable source of raw material to displace fossil fuels.

- Well-planned and sustainably managed forests provide ideal wildlife habitats, increase landscape connectivity and contribute to biodiversity goals.
- Well-designed forests protect and enhance water quality. The appropriate management of riparian buffers and aquatic zones can mitigate sediment and nutrient run-off from farming practices on surrounding land.
- Forestry can contribute significantly towards the national adaptation response to the impacts of climate change through sequestration in soils and biomass. From 2007-2016, Ireland's forests removed 3.8 million tonnes (Mt) per annum of CO₂ eqv. Between 2021 and 2030, forest sequestration will contribute up to 2.0 Mt CO₂/annum to climate mitigation targets. Afforestation

targets need to be achieved and deforestation limited to ensure a positive contribution post 2030.

- Significant potential exists to expand the forest area, with up to 1.3 million hectares identified as land that is marginal to economic agriculture, whilst suitable for forestry.

Research and knowledge transfer actions

- Update land availability research and its suitability for different forest types.
- Promote appropriate afforestation using improved forest genetic material, adapted for current and future climatic conditions together with robust economic and socio-economic analyses coupled with best management.
- Research appropriate silvicultural regimes to support future forest health and resilience in relation to pests and diseases and other biotic and abiotic threats.
- Develop initiatives to enhance timber mobilisation and improve competitiveness of small-scale forest owners.

Comment

- By 2030, national timber output has the potential to reach 6.6 million m³ per annum, and to continue increasing thereafter.

- The wood energy market is well developed and technologies are being adopted to optimise the benefits of engineered wood, value-added wood constituents and forestry side-streams to the bioeconomy.
- The non-timber benefits of forestry have enhanced importance and value. These include environmental services, tourism and recreation.
- The collaborative actions of forest owner groups through knowledge transfer (KT) has led to the adoption of sustainable management practices.
- More private forests close to thinning stage are certified, demonstrating sustainable forest management to the market.
- There is increased awareness of both short-term and long-term environmental and economic consequences associated with various tree species and their management system requirements.

Contact

Dr Nuala Ní Fhlatharta, Head Teagasc Forestry Development Department: nuala.nifhlatharta@teagasc.ie

The road map for forestry is available on www.teagasc.ie.

Table 1: Increase in returns from Sitka spruce achievable through improved management.

Species	Fertility	Yield class	Management level	Return AEV* (€/ha)
Sitka spruce	Medium	20	Limited management	419
			Improved management	460
	High	24	Limited management	482

* Annual Equivalent Value (AEV) is the Net Present Value (NPV) of a forestry plantation expressed as a series of equal cash flows over the forest rotation length. If all costs and revenues (including establishment grants and subsidies) associated with forestry land use are compared with all costs and revenues (including direct payments) associated with agricultural land use, then AEV per ha and Family Farm Income (FFI) per ha are conceptually equivalent.

Table 2: Achieving the best returns from sycamore.

Species	Soil type	Yield class	Management level
Sycamore	Grey-brown podzolic	8	Plus 50%

Increase in revenue as a result of more valuable products available as a result of forest management.