Economic assessment of the timber value of Victoria's forests

Key points

- The forest industry contributes to jobs and economic activity in many Victorian communities.
- A comprehensive assessment of the benefits provided by Victoria's forests will provide up-to-date information on the contribution that forest assets make to the Victorian economy and community.
- Researchers will conduct an economic assessment of timber provided by Victoria's forests, among a broader assessment of ecosystem services.
- Researchers will also draw on existing, recent socioeconomic analyses of Victorian forest industries and employment related to timber.
- Monitoring and assessing harvest levels of timber from native forest is an essential part of sustainable forest management, and an important indicator to evaluate sustainability of timber harvesting.

New research: Economic assessment of Victoria's forests

DELWP is undertaking a comprehensive economic assessment of the wide range of benefits provided by Victoria's forests. The project will provide up-to-date information on the contribution that forest assets make to the Victorian economy and community.

The work will be part of a broader project that uses an environmental-economic accounting framework to assess the current annual flow of ecosystem services from forest assets. It will include assessment of the value

Research project titles

Economic assessment of Victoria's forests

Who is doing this work?

Department of Environment, Land, Water and Planning

of benefits to people, which includes the provision of timber, a clean water supply, climate change mitigation, recreation opportunities, and improved health and wellbeing.

Researchers will examine the role that forests play in providing timber and will undertake an economic evaluation of this ecosystem service. The study will assess the situation across each of Victoria's Regional Forest Agreement (RFA) regions.

The research team will draw on existing forest industry data and socio-economic analyses of Victorian forest industries, including data from VicForests.

Socio-economic contribution of the forest industry

The forest industry contributes to jobs and economic activity in Victorian communities. The industry includes wood and fibre production from native forest, hardwood plantations and softwood plantations grown within the State, as well as the processing of imported timber and manufacturing of wood products.

Victoria's State-owned enterprise, VicForests, is responsible for sustainable harvest, regrowing and commercial sale of timber from State forests on behalf of the Victorian government. Plantations are generally owned and operated by private businesses.

In 2016-17 the total value of timber harvested in Victoria was \$731 million, which includes \$108 million of native timber, \$302 million of hardwood plantation timber and \$321 of softwood plantation timber (ABARES).

The forest industry provides jobs in primary production and processing (in which native forest and plantations are grown and harvested and logs processed into products such as sawn timber, woodchips, pulp and paper), as well as the manufacturing of wood products.

There are over 16,000 jobs in the Victorian forest industry sector. This includes 1,400 jobs in forestry and logging, 600 jobs in forestry support services, 1,600 jobs in wholesaling and 13,200 jobs in product manufacturing (Australian Bureau of Statistics).



Environment, Land, Water and Planning



Forests on public land across Victoria's five RFA regions

Studies by the University of Canberra and EconSearch for Forest and Wood Products Australia have estimated the forest industry's contribution to Victorian regional economies. It was estimated that the industry's direct contribution to the Victorian economy was \$695 million in 2015-16. This includes \$290 million in the Central Highlands and Gippsland region, \$115 million the North Central region, \$190 million in the west of the State, and the remainder in Melbourne.

Sustainable forest management

State forests are highly valued by the community and are managed for multiple benefits. These include maintaining biodiversity, providing recreation and tourism opportunities, cultural connection and a sustainable, renewable resource for the timber industry.

VicForests manages timber resource modelling and uses a range of information and modelling to develop estimates of sustainable levels of harvesting from forests. These are used to set the total volumes that are available for harvesting in the near term, and to identify future sustainable harvesting levels.

Modelling State forests of eastern Victoria

VicForests employs a widely-used modelling approach to estimate sustainable fibre and wood supply levels for the State forests of eastern Victoria.

The modelling begins with an assessment of the area of harvestable forest and the volume of merchantable wood in a region. Determining the area of forest that is suitable for timber management activities entails a multi-staged approach; where all areas required for biodiversity conservation and regulatory constraints are removed from the scope of the modelling system.

The second modelling stage applies existing sawlog commitments and restrictions on harvesting in water catchments.

The last step involves running dozens of scenarios to develop a range of wood supply options, and discussions with senior managers and district foresters regarding the proposed supply levels. Following this process, researchers set the final sustainable wood supply levels.

While the modelling process is rigorous and repeatable, there are some areas that could be improved, such as the

data underpinning the resource assessment, which is now 15 to 25 years out of date.

DELWP is investing in the acquisition of LiDAR (light detection and ranging) across all Victorian public forests. LiDAR is a surveying method that illuminates a target with a pulsed laser and measures the reflected pulses with a sensor. Whilst this data will be used initially to model and map high conservation forest values, the data may also be used to develop accurate models of biomass and timber volumes. DELWP will facilitate research in this area with partner researchers.

Monitoring and assessing harvest levels of timber from native forest is an essential part of sustainable forest management, and an important indicator to evaluate sustainability of the current approach to timber harvesting.

Longer-term threat

Climate change presents a longer-term threat to the viability of the native forest resource (see Fact sheet 7: Climate change). Modelling of climate change impacts shows that by the end of the century there may be reductions in forest standing volume and stand density of 15 per cent.

More information

Future of our Forests https://www2.delwp.vic.gov.au/futureforests

This series of fact sheets https://www2.delwp.vic.gov.au/futureforests/forestvalues-assessment/forest-values-assessment-factsheets



Main components of the strategic wood supply model

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