

Submission
No 38

**INQUIRY INTO FEASIBILITY OF UNDERGROUNDING
THE TRANSMISSION INFRASTRUCTURE FOR
RENEWABLE ENERGY PROJECTS**

Organisation: Softwoods Working Group

Date Received: 10 November 2023



NSW Legislative Council's Standing Committee on State Development

Inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects.

Submission Prepared by the *Softwoods Working Group (SWG)*

Nov 2023

The SWG made a submission to the initial Inquiry in July 2023. Points made within that submission are still relevant to this Inquiry.

The information provided below is intended to be a brief *addendum* to that initial submission, with a view to providing this Inquiry with additional information and emphasis on the factors we consider to be consistent with the Terms of Reference. (For completeness, the initial report is attached to this report as *Appendix 1*).

This input is of particular relevance to the Terms of Reference, Item *a) the costs, **benefits and risks of underground versus overhead transmission lines, particularly with regard to **bushfire and other weather-related events**, ongoing environmental impacts, and **community mental health and welfare**.***

I would also like to request an opportunity for our group to be represented as a witness at any of the hearings that may be held prior to the delivery of the final report in March 2024.

Timber Industry Relevance.

Since the original Inquiry was held, it has been confirmed that the refined route proposal for the overhead line will have a MAJOR impact on Green Hills State Forest, which is one of the most productive and important timber plantations in Australia.

A recent study, commissioned by the Murray Region Forestry Hub (MRFH) and undertaken by the University of Canberra, has quantified the enormous socio-economic benefits of this industry to the region associated with the Hume Link project. It demonstrates that the plantation-based industries are the region's number one economic 'driver'.

Some key metrics coming from that report are outlined below. (Please note that these figures are for the entire MRFH area.)

In 2021/22, the industry generated a total of **\$3,823 million of gross value of output** for the region, including **\$1,985 million from flow-on effects**. Contribution to Gross Regional Production (GRP), or the 'value-added' to the economy excluding transfers between industries was **\$1,741 million**,

including \$962 million from flow-on effects. The direct net expenditure of the industry (the amount spent by the industry, rather than the sales value of its output), was \$1,452 million.

The industry directly employed 2,189 people dependent on the region (up to and including primary processing), with 54% of these generated by primary wood and paper processing. When flow-on effects of the industry on other industries are included, the direct and flow-on employment generated by the Murray Region Forestry Hub softwood plantation industry during the fire-recovery period, provided jobs for a total of 11,429 people across Australia.

The largest number of jobs were located in the Snowy Valleys Council LGA, with 1,120 jobs directly dependent on the softwood plantation industry.

The 2019-20 Bushfire Impacts

The Black Summer bushfires of 2019/20 were unlike any other experienced by the softwood plantation industry in the MRFH and particularly in the Snowy Valleys LGA. It had devastating impacts on the standing forest resource, as well as communities, individuals, businesses and entire industries.

Approximately 40,000 ha of softwood plantation in NSW was burnt, equivalent to around 40% of the log resource in the region.

Whilst the recovery process is well underway, the resource implications will last for the best part of the next 30 years. This means that any further reductions in that resource, no matter how small, have the potential to tip the wood-resource scales in such a way that there could be industry closures and dramatic impacts on the socio-economic well-being of local communities.

As a summary, the two key concerns, the Humelink powerline project presents are:

1. Reduction in resource availability
2. The increased risks associated with overhead powerlines running directly through or immediately adjacent to valuable plantations. These risks include:
 - a. Being a potential ignition sources for fires
 - b. Fire-fighting limitations such as, restricted access and ability to use water and equipment
 - c. Limitations on back burning and hazard reduction activities
 - d. Fire-fighter safety under and around this infrastructure

We would welcome the opportunity to discuss this submission in further detail.

Peter Crowe OAM
BSc.For, DipFor, FFA
Chair

Carlie Porteous
Executive Officer - SWG



Appendix 1: The Report to the Standing Committee submitted in July 2023

NSW Legislative Council's Standing Committee on State Development

Inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects.

Submission Prepared by the *Softwoods Working Group (SWG)*

July 2023

1. Preamble:

The **Softwoods Working Group (SWG)** which is a joint timber industry and community body that has been in existence since 1987 and serves the interests of the SW Slopes (SWS) region of NSW. The SW Slopes region contains the largest area of softwood plantations in the State of NSW (approx. **125,000ha** of both public & private land) and is the second largest softwood plantation estate in Australia.

Current members of SWG include senior representatives from:

- The major forest growers – **Forestry Corporation of NSW** and **Hume Forests** (part of the GFP Group) with **Hancock Victorian Plantations** (private grower in NE Victoria) being observer participants.
- The product manufacturers (timber processors) – **AKD** (sawn timber products), **Visy Industries** (packaging materials including cardboard and liner board), and **Hyne** (sawn timber products).
- **Local Government** (Snowy Valleys Council, Greater Hume Council, Cootamundra-Gundagai Regional Council, and Albury City)
- **Regional Development Australia** committees for Murray and Riverina
- Various relevant **NSW State Government agencies** (Department of Regional NSW, and Transport for NSW)
- The **Forest Industry Council (FIC)**, which represents the operational, training and safety issues for the industry workforce, with particular regard to harvest and haulage contractors.

The SWG is widely regarded as a unique and effective forum that examines strategic issues and prepares plans to focus on regional community development based on the local plantation industry.

Plantation forests represent one percent of Australia's forests, yet they supply more than 50 percent of our domestic timber needs. With reduced access to native forests in recent years, the plantation sector is becoming more significant in providing raw materials for industry. Plantations provide a

wide range of forest products that support a vibrant and growing timber-processing sector. The establishment and management of timber plantations and the ancillary services associated with the industry provide the economic basis for many regional communities in NSW.

2. The Humelink Route Impacts

The SWG has been a member of the Humelink Community Consultative Group since its inception in Oct 2021.

At the beginning of that process several possible routes for the new powerline were outlined and subject to discussion. The preferred route being considered utilised existing easements through Maragle and Bago State Forests heading just to the north of the Green Hills plantations before heading west to Wagga.

This route was largely through private farmland which caused considerable angst amongst local landowners and other community representatives on the CCG. In mid-2022, Transgrid determined that some '*route refinements*' were going to be investigated.

The actual '*route refinements*' involved a dramatic and completely different route being proposed that results in the loss of around 400ha of prime timber plantations and a further 300+ ha of native forest in the Bago SF.

The timber industry is well aware of the importance of, and need for, facilitating the renewable energy sector. The major grower in NSW (FCNSW) has been a co-operative and supportive partner in enabling renewable energy development on existing plantation land under the *Energy Legislation Amendment Act 2021*. However, further losses over and above that are compromising NSW's ability to provide adequate timber supplies in the future.

The following points are a summary of our concerns.

2. The total plantation area that would be lost under the proposed scenario has been estimated at nearly 400ha. These plantations are some of the best plantation areas in the region. It is highly productive, close to log processing facilities, has established all weather infrastructure and provides valuable wet-weather accessible country that is critical to the overall management of the plantation estate.
3. Over a rotation (one full crop) it represents a loss of 240,000t of wood (100kt pulp/140kt sawlog) which equates to around \$80M worth of paper used for packaging and timber products used in building construction.
4. On an annual basis, around 8,000 tonnes of resource would be lost to the softwood processing industry which is a foundational driver of the regional economy of this area. In 2019, this industry was assessed as supporting (directly and indirectly) over 50% of the employed workforce of Snowy Valleys Shire (Schirmer, et al, 2020). The bushfires of 2020 destroyed 40% of the resource on which this industry is based, and significant efforts have been made over the past three years (including financial support from the NSW and Australian Governments) to maintain all existing processors in business, albeit at lower levels of activity and output. Any further resource loss (such as would result from the 'Green Hills' Transgrid route option), could result in a 'tipping point' being reached for some processing activity, with closures resulting in social and economic loss for the regional community.

5. In addition, there is another 300ha (approx.) of native forest (highly productive Alpine Ash) that would need to be cleared through Bago SF. This would represent a situation where a renewable energy project can only be enabled by facilitating deforestation of native forest. It will also mean deviating off and away from an existing powerline easement. This makes no sense!
6. Details relating to site access and construction of transmissions lines are still to be released but given the size of this project it is likely that **additional** plantation and native forest areas would be lost to provide adequate access to the sites.
7. Overhead transmission lines present huge issues for both firefighting and fire prevention within, and adjacent to, forested areas. These issues include:
 - a. Being a potential ignition sources for fires.
 - b. Fire-fighting limitations such as, restricted access and ability to use water and equipment.
 - c. Limitations on back burning and hazard reduction activities.
 - d. Fire-fighter safety under & around this infrastructure.
 - e. Impacts on power-security for users far removed from the fire ground in the event transmission equipment is damaged or needs to be switched off.
8. This proposal is at odds with NSW Govt policy that recognises the resource limitations and impacts from recent fire losses. They have acknowledged and supported the need to be expanding the plantations and ultimately increasing the supply of timber products. It seems incongruous that it is now prepared to forego a large tract of highly productive plantations when there are potential undergrounding options that would have considerably less impact.

The powerlines are a valuable asset but so too are the production forests on which they are planned to be constructed.

3. The Under-Grounding Option.

Concerns about the loss of vital timber-production capacity together with the huge impacts on firefighting and management, would almost be eliminated if the transmission infrastructure was located underground.

We readily acknowledge that we are not technical experts with undergrounding. However, it does appear that there are many 'pub-test' issues that are being ignored and warrant further consideration. Some examples include:

- There appears to be considerable progress with the under-grounding of HVDC power lines in other countries such as Switzerland, Sweden & US.
- Powerlines are installed, between countries and under oceans!
- There was an independent report about the Western Vic TN (For Moorabool Council), that has described undergrounding as being viable for the proposed 190km route.

- Construction costs are one part of the equation. It is not clear that the cost assessments are looking at the TCO (Total Cost of Ownership) over the anticipated life of the transmission asset rather than just the initial construction costs?
- Looking at the huge towers that will be constructed and the on-going maintenance required, it is very difficult to comprehend the non-viability of an underground route.
- The ever-increasing calls for electrification will see the requirement for further transmission facilities in the next decade and beyond.

How long after Humelink is completed will it be before we need even more powerlines and where are they going to be located?

- We talk about being the innovative country and want to be seen to be a global leader in new technology for renewables. This seems to be happening for the generation side of things but not for the transmission. WHY??
- In summary, undergrounding may initially be more expensive, however, the immediate and longer-term benefits will result in an outcome that is:
 - Innovative
 - Smarter
 - Lower maintenance
 - Safer
 - Low /no risk from a fire-fighting and fire management perspective
 - Better for the environment
 - Preserves the productive capacity of the land (agricultural, horticultural and forestry/timber)
 - Is embraced, accepted, and supported by the community generally.

We would welcome the opportunity to discuss this submission in further detail.

Peter Crowe OAM

BSc.For, DipFor, FFA

Chair

