



VICTORIAN PARLIAMENTARY INQUIRY INTO CLOSURE OF THE HAZELWOOD AND YALLOURN POWER STATIONS

LIBERALS AND NATIONALS MINORITY REPORT



Prepared by The Nationals and Liberals

May 2022

Cover figure: Hydrogen Energy Supply Chain (HESC) pilot plant delivered a world-first by producing clean liquid hydrogen from Latrobe Valley's brown coal and successfully shipping it to Japan in January 2022¹.

¹ Source Australian Government, Department of Industry, Science, Energy and Resources website

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Minority Report Summary & Recommendations

Summary

The Latrobe Valley's prosperity was built on harnessing an abundant brown coal resource into low cost and reliable electricity through advances in coal-fired power generation, hard work and ingenuity from a post-World War I workforce of predominantly European immigrants and returned service personnel.

The use of Latrobe Valley's vast brown coal resource for power generation and related purposes shaped the history, economic profile, and identity of the Latrobe Valley for over a century. It along with the Maryvale paper mill and associated forest industry has driven prosperity and growth across the state of Victoria and more broadly nationally. The Liberals and Nationals members acknowledge and respect the endeavours of all workers who have contributed to the development of Latrobe Valley.

The closure of Hazelwood Power Station, and changes to reliance on brown coal, has affected the Latrobe Valley in a range of different ways that have contributed to job losses, increased unemployment and to economic and social uncertainty. The Latrobe local government area (LGA) is at the centre of these adverse outcomes.

The Worker Transfer Scheme developed for the closure of Hazelwood will be insufficient for future power station and coal mine closures, given the substantial contraction of the coal fired power industry and a diminished forestry, sawmilling, and paper industry due to the Andrews Government's abandonment of the native timber industry.

Established in November 2016, the Latrobe Valley Authority (LVA) spent approximately \$290 million over five years. The LVA has failed to achieve the socio-economic outcomes in the Latrobe Valley that minimises job losses and economic loss. It has not maximised socioeconomic opportunities which leverage off Latrobe Valley's resources, infrastructure, and skills base. The LVA was established to transition displaced Hazelwood workers and impacted contractors, deliver sustainable jobs growth and offset economic decline in the Latrobe Valley. It has not delivered on important key performance indicators (KPIs). Over the past decade the Latrobe LGA labour force has declined by approximately 4,350 jobs, while on average each of six other regional labour force have in contrast gained approximately 10,070 jobs. Latrobe LGA unemployment is just under 8 per cent as at December 2021, which is about twice the average of Ballarat, Bendigo, Geelong, Mildura, Shepparton and Wodonga.

The Liberals and Nationals hold the view that little real socioeconomic benefit will come from the \$7.5 million provided in State Budget 2022-23, as the majority of funding will be allocated to staff salaries and operational costs. Successful regional transition requires sufficient long-term government funding and support. Providing funding in advance of Yallourn's closure will provide businesses time to scale up and make investments decisions that create sustainable future employment opportunities for Yallourn workers and the job losses from the native timber and forest products industry under the failed Andrews Government 'Victorian Forestry Plan'. A recommendation for substantial funding in advance was supported in submissions by Jane Oakley (renewable energy consultant), Liz Westcott (Chief Operating Officer, Energy Australia), Tony Cantwell (Committee for Gippsland).

International experience from transitioning away from coal-fired power, indicates that the significant socioeconomic benefit of traditional power generation will not be replaced by one single industry or large-scale employer. Instead, a combination of new businesses and industries will be required to offset the economic and social changes and impacts resulting from the closure of the Hazelwood, Yallourn and Loy Yang power stations.

Growing established enterprises with a regional footprint and supporting new commercially viable technologies, and value-added products and services are vital for a prosperous future. New large-scale renewable energy projects across the Latrobe Valley and Gippsland will provide a significant number of jobs in construction. Timeframes for construction range from five to ten years, which will offset some of the job losses from the closure of the region's power stations for a fixed period. A permanent workforce will be

required to run and maintain renewable facilities but not to the magnitude of the coal generators. A diverse and multi-skilled workforce will need to emerge.

Global demand for renewable energy components and shipping constraints may delay some renewable energy projects (eg. ships capable of transporting wind turbines are booked until 2026²). Government support, timely regulatory approval, along with complementary policy and funding can help attract and ensure timely completion of renewable energy projects.

Victoria needs appropriate rehabilitation strategies for coal mines and assets to reduce future risks of mine fires, subsidence, and other adverse environmental impacts. Victoria also needs similar rehabilitation requirements and rehabilitation bonds for large-scale renewable energy assets given potential adverse environmental impacts of materials and components used in these renewable technologies.

Synopsis of Minority Report Recommendations

For the closure of Yallourn, the Victorian Government needs to implement a successful transition based on discussions with Energy Australia and impacted workers, businesses, and communities. Sufficient funding to cover the development of new and expanded industries to generate ongoing jobs and to oversee worker transition should be managed by Regional Development Victoria - Gippsland. The planning, funding, and wise implementation needs to start immediately to identify affected businesses, quantify impacts and implement solutions.

The Victorian Auditor General's Office (VAGO) be asked to investigate the effectiveness of the Worker Transition Service and Worker Transfer Scheme and recommend improvements for future services and schemes. This analysis should include the extent to which affected workers' needs and priorities have been and/or are able to be met.

The Victorian Government should undertake an analysis of future Latrobe Valley job creation opportunities and prepare a plan for new and enduring employment in the Latrobe Valley in consultation with stakeholders and release a detailed job plan by June 2023. This should be complemented with a strategic analysis of future transitional services and training requirements to support workers following the closure of Yallourn and prepare them for new job opportunities for release by June 2023.

The Victorian Government publish six monthly small area labour market employment data (SA3) for each of the six Gippsland LGA's which is comprised of Latrobe, Baw Baw, South Gippsland, Wellington, East Gippsland and Bass Coast) report on changes to employment attributed to major industry closures.

The Victorian Government needs to work more closely with the Latrobe City Council on the region's economic transition, given Latrobe LGA continues to bear the brunt of adverse impacts of the transition away from coal power generation.

² Ms Erin Coldham, EIC CHYPS, *Transcript of evidence*, March 2, 2022, p. 50.

Stakeholder Suggestions and Recommendations

Various stakeholder groups made important suggestions on how to develop new industries based on existing and emerging technologies that could help with the transition from coal-fired power generation to renewable energy. The Committee Report failed to give carriage to these important stakeholder suggestions and recommendations. Through this Minority Report, stakeholders are given a voice.

The Victorian Government seed investment in the development of technologies and people to broaden the use of lignite for a sustainable future e.g., carbon neutral hydrogen, production of fertilizers, low-cost carbon fibre, graphene for the electronics industries and activated carbon used in food and health industries and for filtration of water and effluent.

The Victorian Government should establish an industry development fund in advance of Yallourn's closure, to expand existing businesses and attracting new industries to the region to assist a smooth transition for the local economy and skilled job market.

That the Victorian Government support a commercialised HESC³ chain industry with the potential to create thousands of jobs and create a thriving hydrogen export industry with huge local economic, environmental and community benefits.

The Victorian Government should establish a Renewable Energy Industrial Precinct in the Latrobe Valley to provide cheaper infrastructure and energy (electricity and heat) shared across multiple large energy users; access to a skilled workforce; attract businesses and investors; and provide an opportunity to commercialise new technologies and solutions locally, by attracting start-ups to co-locate with established industry players.

That the Victorian Government approve Yallourn's rehabilitation plan well ahead of its closure and prioritise workers for employment in rehabilitation of the mine and operation of Energy Australia's new large-scale battery.

That the Victorian Government and operators ensure that existing users and alternative potential uses of Latrobe Valley water are protected as they plan filling the three Latrobe Valley Mines with water.

The Victorian Government should consider the 2.7 ML capacity of the Gippsland Water Factory and times of high rainfall events as opportunities to advance filling mines under any wet mine solution.

The Victorian Government should rescind its policy to exit from native forest timber supply by 2030 given that the disruption from the exit coincides with disruption from the closure of Yallourn and the planned ramp up in plantation supply has not occurred, nor is it likely to be effectively implemented given very high land prices that are prohibitive for commercial plantations. The Victorian Government must work with VicForests to continue to maintain practices which enhance healthy, sustainable, and productive forest systems.

³ HESC - Hydrogen Energy Supply Chain

The Liberals and Nationals Minority Report Recommendations

Minority Report Recommendation 1: That for the closure of Yallourn Power Station the Victorian Government implement appropriate measures that meet current and future needs of a successful transition based on discussions with Energy Australia, impacted workers, businesses and communities. The measures shall consist of funding to Regional Development Victoria – Gippsland, to cover the development of new and expanded industries to generate new direct and ongoing jobs with a funding stream and sufficient expertise to oversee worker transitional arrangements.

Minority Report Recommendation 2: That the Victorian Auditor General's Office (VAGO) be asked to conduct an investigation into the effectiveness of the Worker Transition Service and Worker Transfer Scheme and recommend ways to improve future services and schemes. This analysis should include the extent to which affected workers' needs and priorities have been and or are able to be met.

Minority Report Recommendation 3: That the Victorian Government will work with Energy Australia in advance of Yallourn's closure and identify affected businesses and quantify the impact of closure on those businesses.

Minority Report Recommendation 4A: That the Victorian Government undertake an analysis of future Latrobe Valley job creation opportunities and prepare a strategic plan for employment in the Latrobe Valley in consultation with Energy Australia and release a detailed jobs plan to the public by June 2023.

Minority Report Recommendation 4B: That the Victorian Government undertake an analysis of future transitional services and training requirements vital to support workers following the closure of Yallourn and prepare them for new job opportunities. Release a detailed transitional training plan to the public by June 2023.

Minority Report Recommendation 5: That the Victorian Auditors General's Office (VAGO) be asked to conduct an investigation into the effectiveness of the functions of RDV and LVA and recommend future arrangements that avoid duplication and maximise the proportion of funding on service delivery and streamline administration costs. (noting the Minority Report recommends to the disband the LVA)

Minority Report Recommendation 6A: That the Victorian Government publish employment figures six monthly for the six rural LGA's (Latrobe, Baw Baw, South Gippsland, Wellington, East Gippsland and Bass Coast) and changes to employment attributed to major industry closures, such as Hazelwood and Yallourn, and the native timber industry.

Minority Report Recommendation 6B: That the Victorian Government work more closely with the Latrobe City Council in relation to any future Government measures to aid the region's economic transitioning given that Latrobe LGA has been most affected by past closures and is now the most disadvantaged LVA in the region.

Minority Report Recommendation 7: Removed due to position to disband the Latrobe Valley Authority

Minority Report Recommendation 8: That the LVA focus on delivering effective transition plan with outcomes and not spend any of the 2022-23 Budget allocation of \$7.5 million on self-promotion with its final 12 months of funding.

Minority Report Recommendation 9A: That the Victorian Government discard the Victorian Forestry Plan and continue with sustainable harvesting of native forests. The Victorian Government must work with VicForests to continue to maintain practices which enhance healthy, sustainable, and productive forest systems.

Minority Report Recommendation 9B: The Victorian Government prioritise research funding to Federation University to enable localised procurement of innovation, research and development and associated training. This will deliver new jobs and help offset some of the job loss under closure of coal-fired power stations.

Minority Report Recommendation 10: That the Victorian Government develop a residual risks policy for the mines at Hazelwood and Yallourn. The policy should address risks associated with ground instability, fire and toxic or dangerous materials

Minority Report Recommendation 11: That Governments increase funding to ACI given their potential to create new industries with ongoing jobs.

Minority Report Recommendation 12: That the Victorian Government support the establishment of a Carbon Research and Innovation Centre as proposed by Australian Carbon Innovation and Federation University with the proviso that it have strong industry participation and focus on the entire chain from fundamental research → applied research → development → pilot trials → commercialisation.

Minority Report Recommendation 13: That the Victorian Government introduce bonds (similar to retiring coal fired power plant bonds) for large-scale solar energy, wind farms and large-scale battery facilities to ensure sufficient funds are available for site rehabilitation.

1. About the Inquiry

1.1 Terms of reference

On 17 March 2021 the Legislative Council agreed to the following motion moved by the Member for Eastern Victoria Region, Melina Bath MP:

That this House, requires the Economy and Infrastructure Committee to inquire into, consider and report, by no later than 13 December 2021

1. on the:
 - a. impact of the closure of the Hazelwood Power Station on the economy and jobs of the Latrobe Valley, and the success or otherwise of economic recovery efforts to date;
 - b. expected economic impacts of the proposed closure of Yallourn Power Station in 2028 and options the State Government can pursue to offset the loss of more than 1,000 direct jobs from the plant, as well as associated contractors;
 - c. success or otherwise of the Latrobe Valley Authority (LVA) to help the region transition, in light of the decline of funding made available to the LVA over successive State Budgets
2. and if the Committee proposes to transmit a report for the Inquiry to the House on a day when the House is not sitting, the Chair may give the report to the Clerk and:
 - a. the Clerk must:
 1. as soon as practicable after the report is received give a copy of the report to each Member of the House;
 2. as soon as practicable after the report is received cause the report to be published on the Tabled Documents Database and the Committee's website;
 - b. cause the report to be tabled in the House on the next sitting day of the House; and
 - c. the report will be taken to be published by authority of the House

A motion was subsequently passed to extend the reporting date to 31 May 2022.

The Government is required to respond within six months of the report being tabled. Once the response is received, it will be available for download from the Parliament of Victoria Committees website.

It needs to be noted all Labor MP's, the Animal Justice Party MP and Dr Catherine Cumming MP opposed the motion to establish the Inquiry into the Closure of Hazelwood and Yallourn Power Stations.

House divided on motion:

Ayes, 19

Atkinson, Mr
Bach, Dr
Barton, Mr
Bath, Ms
Bourman, Mr
Davis, Mr
Finn, Mr

Grimley, Mr
Hayes, Mr
Limbrick, Mr
Lovell, Ms
Maxwell, Ms
McArthur, Mrs

O'Donohue, Mr
Ondarchie, Mr
Patten, Ms
Quilty, Mr
Ratnam, Dr
Rich-Phillips, Mr

Noes, 18

Cumming, Dr
Elasmar, Mr
Garrett, Ms
Gepp, Mr
Kieu, Dr
Leane, Mr

Meddick, Mr
Melhem, Mr
Pulford, Ms
Shing, Ms
Stitt, Ms
Symes, Ms

Tarlamis, Mr
Taylor, Ms
Terpstra, Ms
Tierney, Ms
Vaghela, Ms
Watt, Ms

Motion agreed to.

[1.2 Committee Membership](#)

Members who attended hearings and deliberations during the Inquiry:

- Mr Enver Erdogan—Chair, Australian Labor Party
- Mr Rodney Barton, Transport Matters Party
- Ms Melina Bath, The Nationals
- Mr Andy Meddick, Animal Justice Party
- Ms Harriet Shing, Australian Labor Party
- Mr Lee Tarlamis, Australian Labor Party

1.4 Forward to the Minority Report

Eastern Victoria contains all of Victoria's coal-fired power generation, a skilled workforce and an abundant lignite resource with potential to support new ecologically sustainable industries, including carbon fibre and clean hydrogen fuel.

This Minority Report provides a voice to the many submissions and testimonies ignored in the Committee Report. These submissions and evidence highlight that the government's \$290 million support package failed to insulate the lives and livelihoods of workers and families who lost their job, following the closure of Morwell and Hazelwood coal mines and power stations.

The Latrobe Valley Authority (LVA) was established to administer the Victorian Government's transition package. Many residents were critical of the transition and support administered by the LVA, as evidence in the transcripts and evidence.

The Liberals and Nationals members hold major concerns with the Committee Report. Our concerns include:

- The Committee demonstrated a lack of independence required to critically examine the Andrews Government's policy by rejecting virtually all amendments to the Committee Report proposed by Ms Bath (see extracts of proceedings).
- The Committee Report is selective in its use of the material presented to the Inquiry and completely ignores a large proportion of expert evidence, particularly those critical of the Andrews Government and LVA's management of transitional arrangements.
- The findings in the Committee Report are at odds with reality, particularly relating to the performance of the LVA and the adverse impact industry closure on jobs and unemployment in Latrobe LGA.
- The Recommendations of the Committee Report do not adequately take into account critical knowledge, information, data, practical experience and positive suggestions made in submissions.
- The Committee Report fails to recognise the need for a comprehensive strategy for an orderly transition from coal fired power to renewable energy and alternate industries and businesses required to avoid substantial job loss in the Latrobe Valley.
- The Committee discounted community feedback via the Inquiry survey.
- Victoria needs a strategy that maximises the use of Latrobe Valley resources, infrastructure and skilled workforce.
- Submissions and testimonies of many regionally based stakeholder groups have not been adequately taken into account
- The Committee Report ignores the inadequate manufacturing of components in the Latrobe Valley and makes no recommendations to address this adverse situation.

The Liberals and Nationals members put forward this Minority Report with a focus on real outcomes:

- The Liberals and Nationals unpack the impact of the transition, job losses and increased unemployment in the Latrobe Valley.
- The Minority Report makes positive suggestions, delivering improved outcomes via an orderly transition to renewables that takes into account socioeconomic, environmental considerations.
- The Minority Report recommends that future policy needs to be based on more detailed analysis of the socioeconomic and environmental impacts of redundant renewable energy infrastructure.
- We discuss some of the wide range of imperatives that should be considered in an orderly and ecologically sustainable transition to renewable energy.

- The Minority Report makes positive suggestions to explore a pathway to renewable energy that utilises Latrobe Valley’s resources (including abundant Lignite), skilled workforce and favourably located infrastructure.
- Renewable energy technologies worthy of closer examination include blue hydrogen, green hydrogen, hydro-electricity and pumped hydro deep storage.
- Carbon capture and storage or geo-sequestration along with forest/farm/soil bio-sequestration offer ways in which Latrobe Valleys Lignite resource can be used as a feedstock for renewable energy such as blue-green hydrogen, carbon fibre and fertiliser.

I thank my fellow Committee members and our secretariat staff Patrick O’Brien, Justine Donohue, Jessica Wescott, Sam Leahy, Kieran Crowe for their contribution and hard work on the Inquiry.

The Liberals and Nationals members acknowledge the efforts of the many talented people in our agencies and we advocate for organisational improvement so that those people can be more effective.

The Liberals and Nationals members recommend that the Victorian Government treat the Committee report with caution.

Melina Bath



Melina Bath MP

Member for Eastern Victoria Region

Beverley McArthur



Beverley McArthur MP

Member for Western Victoria Region

Craig Ondarchie



Craig Ondarchie MP

Member for Northern Metropolitan Region

2. Background on Latrobe Local Government Area

Latrobe City is the fourth largest regional City in Victoria behind Geelong, Ballarat and Bendigo. Population growth has been marginal at 0.4 per cent pa over four years to 2020. Gross Regional Product was \$5.8 billion in 2020.⁴ Major industries in the Latrobe LGA are electricity generation, paper manufacture, education, and services. Coal fired power generation dominates.

Key employers are Yallourn Power Station (lignite 1,450MW), Loy Yang A Power Station (lignite 2,200MW), Loy Yang B Power Station (lignite 1,050MW), Jeeralang Power Station (gas peaker 432MW), Traralgon Valley Power (gas peaker 300MW), Maryvale Pulp and Paper Mill (includes 55MW biomass power station), Latrobe Regional Hospital, Maryvale Private Hospital, Federation University, and several primary and secondary schools and engineering and maintenance support industries.

The Latrobe LGA has no significant renewable energy industries established to provide employment when the five coal and gas fired power stations close, apart from Maryvale's 55MW biomass power station. There are only three small hydro power stations within the Latrobe Valley region, which employs few people – Thomson Dam 7.5MW, Blue Rock 3.6MW, and Glenmaggie 3.8MW

3. Impact of closure of Hazelwood Power Station and Mine

3.1 Closure of Hazelwood Power Station and Mine

Hazelwood Power Station was built in 1964-71 and peaked at 1760 MW, generating up to 25 per cent of Victoria's base load electricity. The low-cost electricity enabled the development of Victoria's heavy manufacturing that was the cornerstone of the State's prosperity. Owners ENGIE Group committed to divest and retire coal fired assets. The scheduled decommissioning of Hazelwood was delayed from 2009 to 2017 with the opening of the West Field to provide additional coal. Hazelwood employed approximately 800 employees and contractors.⁴

3.2 Hazelwood Rehabilitation Project

Between 2017 to 2021 the Hazelwood Rehabilitation Project provided employment for about 400 people or half the employment when Hazelwood was operating. Local (Latrobe Valley) employment was about 75 per cent or 300 jobs providing upskilling for local people in decommissioning, demolition, remediation, and rehabilitation. Skills learned in demolition and rehabilitation will be transferable to other decommissioning stations. Delta Group the principal demolition contractor has secured preparatory works for the closure of Liddell Power Station in NSW.⁴

Filling the open cut with one billion cubic metres of soil or other material has been dismissed as impractical by experts and extraordinarily expensive. Leaving an empty void would require ongoing maintenance including pumping of ground water and monitoring stability. The vision for the rehabilitation project is to deliver a safe, stable and sustainable landform and the preferred method is to create a full lake because⁴:

- It provides long term weight balance minimising mine floor and batter movement
- It eliminates fire risk
- It creates the widest range of long-term business and community uses
- The lake can act as flood mitigation and a water storage facility

⁴ Needham, I (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 30.

To ensure other water user's interests are not compromised, the focus currently is on filling the mine in 10 to 20 years using water from⁴:

- Groundwater currently pumped out of the mine from the aquifers beneath the mine floor (to continue until a full lake is achieved)
- Purchase of surface water when climate and weather conditions permit
- Direction of limited flood flows via an emergency diversion structure

3.3 Socioeconomic impact of the closure of Hazelwood Power Station and Mine

Despite the Victorian Government's claim of 4,000 jobs created by the LVA there is no documented proof that substantiates this assertion or confirmation of how many jobs are ongoing in full-time or part-time permanent positions.

It is disappointing that the new CEO of the LVA, Mr Buckingham repeated the unsubstantiated claim during the hearings that the 4,000 jobs are ongoing.

MS BATH – The next question is: “you claim 4000 jobs – it is on the website. Are the 500 SEA Electric anticipated jobs included in that figure?”

MR BUCKINGHAM – “No”

MS BATH – “And how many of the 4000 jobs that you have cited are ongoing employment?”

MR BUCKINGHAM – “In the context of COVID and variability all I can attest is that we have helped create 4000 jobs in the region and my understanding is that they are ongoing.”⁵

Despite numerous requests to the State Government agencies, for detailed clarification on how many jobs are ongoing in full-time or part-time permanent position this information has not been provided. In a response to questions on notice Mr Buckingham provided the information below.

As at November 2021, the LVA has contributed to more than 4000 employment outcomes from investments in infrastructure and local programs. These include:

(i) 1156 jobs have been created by support provided to 374 businesses through the Economic Growth Zone Reimbursement Scheme.

(ii) 1498 unemployed people who live in the Latrobe Valley have been hired as a result of funding provided through the Back to Work Scheme.

(iii) Over 730 workers impacted by the closure of Hazelwood and Carter Holt Harvey sawmill have been supported to find employment by the Worker Transition Service.

(iv) 500 jobs across the region resulting from major infrastructure projects funded through the Latrobe Valley Sports and Community Initiative.

(v) Since November 2016 (the month Hazelwood closure was made public) there are currently (Jan 2022) 4,700 more persons employed in Latrobe-Gippsland (SA4)⁶.

The statement that there are 4,700 more persons employed in Latrobe-Gippsland is highly misleading as it conceals the job loss in Latrobe City by presenting jobs data for all six of Gippsland's LGA's including Bass Coast, South Gippsland, Baw Baw, Wellington and East Gippsland.

The Baw Baw and Bass Coast LGA's are rapidly growing municipalities with high jobs growth without LVA support. Latrobe LGA remains the primary area of disadvantage since Hazelwood closed with 1,090 jobs lost and has by far the highest small area labour market unemployment rate of 7.8 per cent.

⁵ LVA CEO, Mr Chris Buckingham Inquiry into the Closure of the Hazelwood and Yallourn Power Stations 2022.

⁶ Mr Buckingham, EIC CHYPS, Questions on Notice, March 2022.

East Gippsland, Wellington and South Gippsland LGA's have suffered job losses that may be attributed to a contraction of the forest and forest products industries due to a decline in log supply (**Table 1**).

Table 1: Job numbers and unemployment for 6 rural Gippsland LGA's

Local Government Area (LGA)	Job numbers		Change (No)	Unemployment Dec-2021 (%)
	2017	2021		
Baw Baw	25,393	26,375	982	3.9
Bass Coast	15,285	16,052	767	5.7
South Gippsland	14,346	14,194	-152	3.4
Wellington	21,418	21,075	-343	5.1
East Gippsland	20,674	20,452	-223	6.4
Latrobe LGA	36,959	35,870	-1,090	7.8
Total/Mean	134,075	134,017	-58	5.4

There is a distinct lack of clarity in the answer provided by Mr Buckingham failed to address the question of how many ongoing jobs and how many were fulltime and how many were part time.

Some of the specifics that we hoped Mr Buckingham would have addressed in an informative answer are:

- (i) How many persons are still employed from the 1156 claimed?
- (ii) The term 'hired' does not signify an ongoing position nor part-time or full-time employment. 'Hire' may mean employed on a casual or one-off/temporary basis.
- (iii) The 730 workers being 'supported' does not equate to ongoing employment.
- (iv) How many of these 500 'infrastructure project' jobs are retained and continuous?
- (v) Latrobe-Gippsland (SA4) Labour Force Data (ABS, 2022, 3-month moving average) is measured over six local government areas.

Noting in fact, that the Latrobe City municipality including the towns of Morwell, Traralgon, Churchill, and Yallourn North sustained the greatest loss of jobs, it is misleading of the LVA to quote Latrobe-Gippsland labour force figures.

Minority Report Recommendation 6A: That the Victorian Government publish employment figures six monthly for the six rural LGA's (Latrobe, Baw Baw, South Gippsland, Wellington, East Gippsland and Bass Coast) and changes to employment attributed to major industry closures, such as Hazelwood and Yallourn, and the native timber industry.

Minority Report Recommendation 6B: That the Victorian Government work more closely with the Latrobe City Council in relation to any future Government measures to aid the region's economic transitioning given that Latrobe LGA has been most affected by past closures and is now the most disadvantaged LVA in the region.

The Latrobe City Council made the following observations:

The closure of the Hazelwood Power Station and associated Mine in March 2017 resulted in ca.750 direct and 300 indirect job losses in the region, a decrease of \$1,220 million in output, reduction of \$255 million in demand for intermediate goods and services, and consumption effects reduced by \$103 million. Overall, the closure of the Hazelwood Power Station and Mine resulted in a decrease in total regional output of

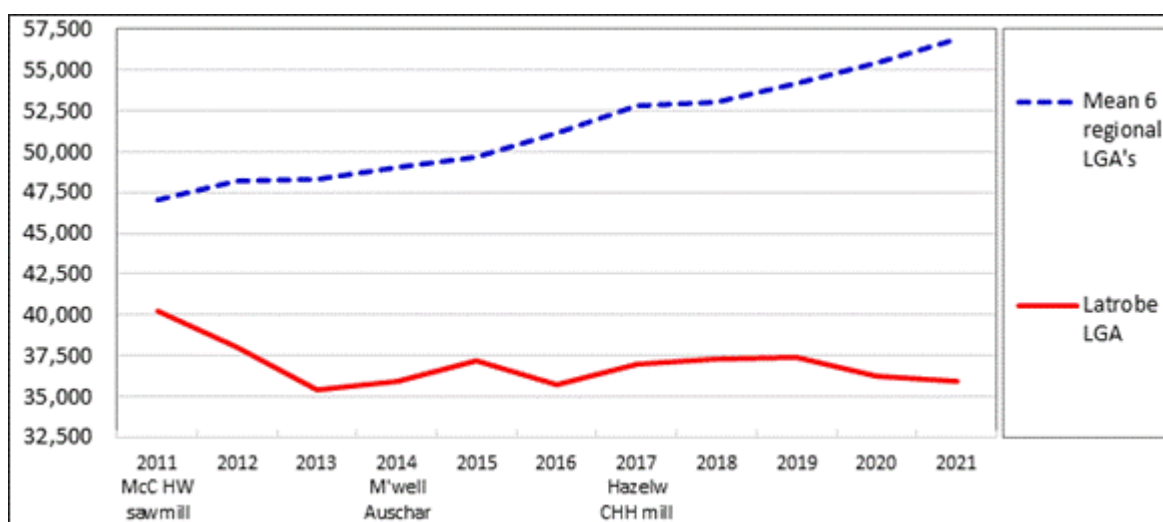
more than \$1,580 million and a decrease Latrobe City's gross regional product of \$340 million. These impacts are still deeply felt across our community and our economy⁷.

Australian Carbon Innovation submission stated:

The loss of 800 to 1000 direct jobs and twice that in indirect employment caused a sharp negative impact in the Latrobe region. The investment of \$266 million by the state government does not appear to have not represented good value for money as it has not resulted in any significant growth in the region's economy.⁸

Over the last decade the Latrobe LGA labour force small area labour market has declined by 4,350 jobs while on average each of the other six regions (Ballarat, Bendigo, Geelong, Mildura, Shepparton and Wodonga) have gained 10,070 jobs each (**Figure 1**). The decrease of the labour market for Latrobe LGA, is in stark contrast to other regional LGA's, suggesting the Governments transition plan and Latrobe Valley Authority (LVA) program have not generated significant ongoing employment to offset job losses from the closure of coal based assets and electricity dependent industries in the Latrobe LGA over the last decade.

Figure 1: Latrobe LGA labour force compared to six regional LGA's (No)⁹



3.4 The impact of the closure of Hazelwood on support businesses

The biggest failing was the lack of planning across all levels of government for an early closure of Hazelwood Power Station, which was clearly foreseeable and inevitable, given the changes that occurred in the operating environment.

These changes included: Mine Fire Inquiry outcomes; ENGIE's global repositioning as an energy company (Carbon Trading); The age and condition of Hazelwood Assets; Increased operating and maintenance costs; Environmental pressure (Australia's dirtiest Power Station); Inconsistent Emission Policy Objectives (Carbon Pollution Reduction Scheme); increased Government Regulation and Costs (Increased Coal Royalties); Closure of Energy Brix – Customer and Auxiliary Fuel Supplier; and Deteriorating Market as a result of the impact from subsidised Renewables.¹⁰

⁷ Latrobe City (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations, Submission No 5.

⁸ Australian Carbon Innovations (ACI) (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 17.

⁹ Aust Government (2022). Labour Market Portal, Labour Market Insights website, Small Area Labour Markets. Annual data - means of 4 quarters. Labour force estimates that reflect the regional disparities of the Centrelink data, while being consistent with ABS Labour Force Survey estimates averaged over four quarters, to dampen the variability inherent in the small area estimates. Updated from Cameron 2022 Submission 58 Attach 2.

¹⁰ Roland Davies (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations, Submission No 43

The inquiry received unfavourable or mixed responses to the Worker Transition Scheme. While some new employment opportunities have occurred and the Worker Transition Scheme was effective, the nature of the work, net economic outcomes and job security is far lower than during the boom times when Moe, Morwell and Traralgon were thriving community hubs, generating numerous supporting employment opportunities. The Worker Transition Scheme was pretty effective, however, it was detrimental for the regions youth, as the retirements were filled by the impacted workers rather than apprenticeships and traineeships.¹¹

4. Economic Impacts of proposed closure of Yallourn in 2028

4.1 Energy Australia commentary on the closure of their Yallourn Power Station

Energy Australia approached the Victorian government with a plan to retire the 1480 MW Yallourn Power Station (20 per cent of Victoria's demand) and transition to cleaner energy. On 10 March 2021 Energy Australia announced a plan to¹²:

- Bring forward the retirement of the Yallourn power station to mid-2028.
- Provide a \$10 million package to support the Yallourn workforce.
- Build Australia's first four-hour utility-scale battery ('Wooreen') in the Latrobe Valley beside the Jeeralang gas-fired power station of 350 MW capacity by 2026, which is scheduled to be in operation before the end of 2026.

Energy Australia outlined requirements for a successful transition:

- Tailored transitional support services including those not directly employed by Energy Australia noting that workers want to remain in the Latrobe Valley.
- The LVA has an essential role to play and believe that the \$266 million provided by The Victorian Labour Government and mine rehabilitation works helped limit increased unemployment as a result of the closure of Hazelwood.
- Funding should be directed to growing existing businesses and attracting new industries to the region ahead of Yallourn's closure.
- Prioritise Yallourn workers for the rehabilitation of the Yallourn mine and operation of the new utility-scale battery.

4.2 Other Views on the closure of Yallourn Power Station

The closure of the Yallourn Power Station may have a greater socioeconomic impact than the closure of Hazelwood even though the direct job loss will be lower than for Hazelwood. The closure of Yallourn may see large-scale reductions in engineering and maintenance sectors, likely to lead to a 'fly in, fly out' business model; probably serviced from Melbourne, resulting in loss of high paid jobs⁸.

Investment in regional infrastructure will be wasted if the productive economy is ignored. The neglect of the lignite resource represents a major missed opportunity for the region, notwithstanding the current Hydrogen

Minority Report Recommendation 1: That for the closure of Yallourn Power Station the Victorian Government implement appropriate measures that meet current and future needs of a successful transition based on discussions with Energy Australia, impacted workers, businesses and communities. The measures shall consist of funding to Regional Development Victoria – Gippsland, to cover the development of new and expanded industries to generate new direct and ongoing jobs with a funding stream and sufficient expertise to oversee worker transitional arrangements.

¹¹ Roland Davies (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations, Submission No 43

¹² Energy Australia (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations Submission No 25.

Energy Supply Chain (HESC) and CarbonNet programs¹³. The government should consider seed funding promising technologies that demonstrate a commercial potential and the capacity to provide significant skilled and high paid jobs. These are likely to be in the advanced manufacturing and chemical conversion sectors where an inexpensive, plentiful and clean lignite resource is a major advantage. The US National Energy research organisation (NETL) recognise the potential of coal in the manufacture of advanced carbon materials from lower quality coal than Latrobe Valley coal¹⁴.

5. Success or otherwise of the LVA to help the region

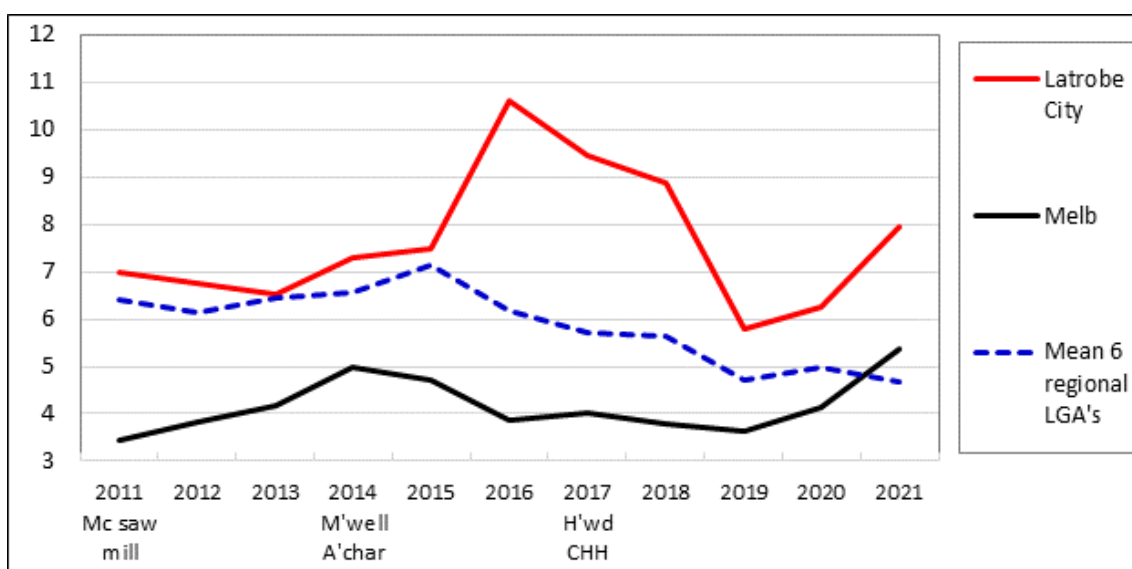
5.1 Victorian Government and LVA action following closure of Hazelwood was insufficient

With the closure also of McCormack Morwell hardwood sawmill (Mc saw mill) in 2011, Morwell Power and Briquette including Morwell Mine (M'well) in 2014, Auschar Morwell (A'char) in 2014, Hazelwood Power and Mine (H'wd) in 2017 and Carter Holt Harvey softwood sawmill (CHH) in 2017, probably about 10,000 job opportunities have been lost in the region (direct employment + production induced + consumption induced)¹⁵.

With the closure of so many manufacturing, mining, and power facilities within in six years of the \$266 million provided by the government and administered by the LVA was always going to be small 'Band-Aid' on a huge wound to the socioeconomic profile of the region.

Over recent years the unemployment rate in Latrobe LGA has been almost twice that of six similar regional LGA's – Ballarat, Bendigo, Geelong, Mildura, Shepparton and Wodonga and over the last decade. It is also almost twice that of Melbourne (**Figure 2**). Latrobe LGA's unemployment was 7.8 per cent at December 2021 and the equal fourth highest of 80 Victorian LGA's.

Figure 2: Latrobe LGA unemployment rate compared to 6 regional LGA's and Melbourne (%)¹⁶



¹³ These projects are a legacy of the Brumby and Rudd governments and have received little support by the current government with notable exception of Minister Pallas and Minister Pakula.

¹⁴ Anthony Wasiukiewicz (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission 12

¹⁵ Cameron, J N (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations, Submission No 58 attachment 2.

¹⁶ Aust Government (2022). Labour Market Portal, Labour Market Insights website, Small Area Labour Markets. Annual data - means of 4 quarters.

The increase in unemployment coupled with the decrease in the size of the labour market for Latrobe LGA is in stark contrast to other regional LGA's, indicating the Government's transition plan and establishment of the LVA has not generated significant ongoing employment. The LVA appears to have not had appropriate quantifiable and measurable KPI's:

Ms BATH: My first question is to you, Mr Buckingham — what are the three key performance indicators of what success looks like for the LVA?

Mr BUCKINGHAM: They sit around the **level of employment within the region**, the **engagement of people within the workforce**, our capacity to **actually meet the pipeline investments coming into the region successfully and ensuring that the prosperity that is generated by state government and private investment is actually shared in an equitable way**—or at least that the people of Gippsland have opportunity to share in that prosperity.

With unemployment in Latrobe LGA at 7.8 per cent and a decreasing workforce, Mr Buckingham's comments are contrary to the facts.

5.2 Andrews Government response to the closure of Hazelwood

Following closure of Hazelwood in 2017 about \$266 million of government funding was provided to the Latrobe Valley Authority (LVA) over three years for the power industry transition. The LVA boast creating 2,500 new jobs and helping generate over \$99 million of private investment in the Latrobe Valley. After presumably \$50million in admin/unaccounted costs, most of the LVA grants were invested in transitional support for impacted workers and businesses capital investment in liveability projects (**Table 2**). Most jobs were in construction with few ongoing jobs that would result from investment in manufacturing.

Table 2: LVA investment in Gippsland

Item	(\$M)
Back to work scheme (1245 payments)	11.2
Economic growth zone reimbursements (140 businesses)	6.9
Latrobe Valley Economic Facilitation fund (capital investment)	94.4
Economic Facilitation Fund grants	5.6
Community and Facility Fund	20.0
Sports Infrastructure upgrades (7 large projects)	73.1
Local reserve upgrades	5.0
Total	216.2

5.3 Community feedback on the government response

Renewable energy consultant, Jane Oakley, expressed her views on the Government's measurement of its transition performance in a private submission:

"The Victorian Government typically counts the number of new jobs associated with its investment however, this is misleading because Government is not accounting for lost jobs therefore not calculating the region's net job position.

It would be beneficial if the Victorian Government shared with regional leaders' key data associated with the economic performance of the region – historical, current, and forecast. It would be advantageous for the Victorian Government in consultation with regional leaders (including community and business/industry) agree on a set of economic metrics to measure over time the health and wellbeing of our economy and communities. A model is currently under development

being led by Committee for Gippsland in partnership with Federation University and Regional Development Australia.”¹⁷

Lisa Gooding, Energy Australia provided the following comments on attracting investment:

“I think it is having all of those groups work together, all levels of government with industry and the community, talking about, ‘How do we attract that investment here? What’s needed to bring businesses here or to grow the ones that exist here so that we can create those future opportunities?’”¹⁸

5.4 Performance of the Latrobe Valley Authority (LVA)

Based on community feedback at Australian Carbon Innovation (ACI) seminars, some believe the Latrobe Valley Authority (LVA) delivered coordinated policy and program outcomes for the region. Others believe the LVA is focussed on delivering an ideological position, rides roughshod over local government and has an overwhelming negative attitude to the utilisation of lignite (brown coal). A common perception is that the LVA is captive to an agenda that does not view lignite as a mineral resource that can be developed and utilised in a low emissions, hi-tech economy.

“The future for the region is not going to be artisan cottage industry, nor aged care and community service sectors”¹⁹.

The Latrobe Valley Authority spent \$290M²⁰ over about five years to June 2022, but failed to minimise the impact of closure of coal mines and power stations and maximise socioeconomic opportunities leveraged off Latrobe Valley’s resources, infrastructure and skills base. The LVA should be judged on the critical outcomes it was set up to deliver, which are sustainable jobs growth (not one-offs on construction only) and reduced unemployment in the Latrobe Valley. It failed on both of these KPI’s.

We note former and current CEO’s of the LVA have close connections with the Australian Labor Party.

The LVA recorded low satisfaction scores based on a survey of 141 Latrobe Valley residents conducted by the Committee. Satisfaction scores were as follows:

- Immediate support the LVA provided to Hazelwood employees, contractors and their families following the announcement of its closure – **only 27 per cent somewhat or very satisfied.**
- Support the LVA provided to local businesses to help them grow and provide more employment opportunities in the region - **only 21 per cent somewhat or very satisfied.**
- Work of the LVA to identify and support growth industries in the region to help transition the economy in the light of the closure of Yallourn in 2028 - **only 21 per cent somewhat or very satisfied.**

The decrease in jobs and increase in unemployment for Latrobe LGA and the poor satisfaction scores are indicative of a government agency that lacks direction and expertise required to deliver a successful economic transition. The Latrobe Valley deserves an effective approach.

¹⁷ Ms Jane Oakley, EIC CHYPS Submission 50, 2 November 2021.

¹⁸ EIC CHYPS Transcript March, 2022, Lisa Gooding, Yallourn Transition Leader, Energy Australia.

¹⁹ Australian Carbon Innovations (ACI) (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 17.

²⁰ \$266M over the first three years plus about \$26M over 2020-21 and 2021-22.

Minority Report Recommendation 5: That the Victorian Auditors General's Office (VAGO) be asked to conduct an investigation into the effectiveness of the functions of RDV and LVA and recommend future arrangements that avoid duplication and maximise the proportion of funding on service delivery and streamline administration costs. (noting the Minority Report recommends to the disband the LVA)

Minority Report Recommendation 8: That the LVA focus on delivering effective transition plan with outcomes and not spend any of the 2022-23 Budget allocation of \$7.5 million on self-promotion with its final 12 months of funding.

5.5 Commentary on the LVA performance by Latrobe City Council

Latrobe City Council in its submission stated that:

"The focus on liveability projects, while welcome to deliver positive outcomes for the community, have placed increased operational costs on Council which did not seem to be considered when the State Government were developing a program of initiatives. They also have not created ongoing jobs and employment for the region to replace the jobs lost. A codesign approach with Council and the community to transition and economic diversification may have identified these gaps and issues.

Latrobe City Council has had concerns about the limited consultation with Council and the local community in the aftermath of the closure of the Hazelwood Power Station and associated mine, and the lack of a measured, structured and inclusive transition planning with the focus on the region's employment and economic growth. Council as representatives of the local community were not at the table when decisions about programs and funding were being made. An illustration of the Latrobe Valley Authority's (LVA) failure fully consult with Council is the consultant's report on Latrobe City's Infrastructure Requirements that was commissioned by LVA in 2018. This report has not been made available to Council and as a result Council is having to engage consultants for a similar report in 2021. Additionally, there are many opportunities that have not been capitalised on to date to build a stronger economy such as low emissions technologies from coal using CCS, carbon utilisation, urea plants and removal of coal protection overlays. LVA support to progress these opportunities would be welcome."²¹

The Latrobe City Council submission highlights a lack of clarity in relation to effectiveness of the LVA's Worker Transition Service and mobilise existing and new industries to create new jobs.

However, without sufficient published data, there has been significant community doubt as to the effectiveness of some of these programs."²²

5.6 Commentary on the LVA performance by the Union movement

CFMMEU Victorian District Secretary Mr Geoff Dyke (dec) provided insight at a Committee Hearing:

*"The other thing was the worker transition scheme that we trialled for Hazelwood. That was partially successful. We got 90 young employee's jobs at the newer power stations and retired 90 workers. Our data suggests that we could have transferred up to 200 workers, or over 200 workers, and the scheme promised to transfer 150."*²³

²¹ Latrobe City Council, *Submission 005*, 9 July 2022.

²² Latrobe City Council, *Inquiry into the Closure of the Hazelwood and Yallourn Power Stations*, Submission 5.

²³ Mr Geoff Dyke, Victorian District Secretary, CFMMEU 24th November 2021

The Minority Report members acknowledged the invaluable contribution the late Mr Geoff Dyke gave to his community over many years.

5.7 Commentary on the LVA performance by Community groups

Latrobe Valley based renewable energy consultant, Jane Oakley in her submission to the Committee contended:

*The introduction of the Latrobe Valley Authority (post the closure of Hazelwood Power Station) presented another layer of bureaucracy and added further complexity for the region when working or engaging with State Government.*²⁴

5.8 Commentary on the LVA performance by Gippsland businesses

Peter Montgomery, Managing Director, Hydraulic and Pneumatic, commented on the counterproductive outcomes to his business and its profitability of an LVA offered grant.

“As a small business, deemed to be impacted sufficiently enough as direct result of Hazelwood closure we were able to qualify for assistance grant through LVA.

In compliance within the narrow guidelines of application criteria we were successful in securing funding.

Our experience in looking to realise benefit was very disappointing, unsuccessful. This arising from the narrow channel of compliance directed. The extensive and protracted time frame arising due to process. Totally inadequate level of funding available. Inexperience and lack of knowledge relative to our specific industry by mentors offered. Rorting of funding by service providers we were directed towards. Inflexibility of LVA to changing direction of funding toward requirement later identified in process. Critically this resulted loss of opportunity to achieve benefit within our required time frame.

Very considerable waste of our key personnel input and time. Loss of other considerable investment made in endeavour to arrive at beneficial outcome here. From our experience here, along with other feedback from applicants for like grants.

*We do not see LVA in its current form of operational guidelines and budgetary constraints as beneficial in being able to provide in time or adequate assistance to assist us in transition and new business development.”*²⁵

Peter Montgomery also commented at the hearing:

“My observation, is that before any existing industry or manufacturer is shut down a new industry and manufacturer actually needs to be in place or in advanced development for any transition of skills and resources to actually occur.

Small and medium business is the backbone of the Australian economy, in my view. It is both innovative and resilient and it underpins the nation’s prosperity.

- *In our experience – we had a very unpleasant experience.*
- *the conditions of the grant was that first we had to fund the investment and this would be later reimbursed on completion.*

²⁴ Jane Oakley, Renewable Energy Consultant (and former CEO of C4G), EIC CHYPS Submission 51.

²⁵ Peter Montgomery, Managing Director, Hydraulic and Pneumatic EIC, CHYPS Submission 41 2021.

- *the referral we were put for actioning the development of websites, digital marketing and product brochure development failed miserably and was never, ever delivered.*
- *The impact of that was that we were in a position which made it necessary for us to apply for redirection for funding*
- *Then we went through a lengthy process, in terms of getting a completion, for very little result, we received final reimbursement I think in late 2019.*
- *By that time any opportunity to take advantage or have any benefit was lost*
- *because of the relatively very low value of the grant and the complexity in terms of development, it actually drew more and more on our resources, which were already stressed, and required considerably more investment, both in terms of human resources and cost associated, to even action to the unsatisfactory outcome that we had.*
- *It provided nothing for us apart from further distress and complication for the period.*

The value of that grant was about \$71,000; \$16,000 of that went immediately to the medium in terms of conducting and establishing the qualification for the grant.

In fact, the investment which we have carried to date is probably around about \$250 000 on that same channel, which we have borne and carried ourselves to get some level of success and position.”²⁶

Australian Carbon Innovations (ACI) Chair Mr Gerry Morvell provided the following comments during a Committee hearing:

“Where the LVA has not assisted in that process from our perspective is it has not been prepared to support those sorts of new ideas that are based on coal. The other theme that we have put forward is that this is about a transition; so it cannot be about what you have spent this year and what you spend next year, it has to be about what the plan is over the next 10 or 20 years, and that is something I do not think we have seen with the LVA funding. It has been for much shorter-term focused projects, each of which in their own right we would not debate whether they are good or bad. In fact I assume most are good.

But what we have not seen is, ‘What’s that decadal strategy that underpins transition?’, because that is what this is all about. It is the transition from an industrial base to something new. The renewable energy activities that have been funded to date, as much as they are good, do not generate long-term employment as a general rule.”²⁷

Minority Report Recommendation 2: That the Victorian Auditor General’s Office (VAGO) be asked to conduct an investigation into the effectiveness of the Worker Transition Service and Worker Transfer Scheme and recommend ways to improve future services and schemes. This analysis should include the extent to which affected workers’ needs and priorities have been and or are able to be met.

²⁶ Peter Montgomery, Managing Director, Hydraulic & Pneumatic Pty Ltd EIC, CHYPS Hearings.

²⁷ Transcript EIC CHYPS, Gerry Morvell, Chair, Australian Carbon Innovation.

5.9 Case studies of failed investment from the LVA and the Andrews Government.

LVA's funding of Steelvision

In March 2018 Steelvision received \$400,000 in transition funding from the LVA's Economic Facilitation Fund to establish a manufacturing factory in Morwell creating 55 new local jobs. The Factory was never established and Steelvision left hundreds of thousands of dollars in debt owed to multiple Latrobe Valley businesses.

Minority Report Recommendation 3: That the Victorian Government will work with Energy Australia in advance of Yallourn's closure and identify affected businesses and quantify the impact of closure on those businesses.

The Andrews Government Treasurer, Tim Pallas admitted in September 2018 the Victorian Government was aware of Steelvision's financial situation prior to awarding the grant in April²⁸.

LVA's funding of SEA Electric

SEA Electric is another example of a failed project, promised by the Victorian Premier and funded through the LVA's Latrobe Valley Support Package. The LVA provided considerable funding (the government has refused to divulge the amount) and boasted 500 manufacturing jobs²⁹.

Prior to the 30 October 2018, announcement, ASIC records show on 5 September an ABN called SEA Electric Vans Latrobe Valley PTY LTD was registered.

The Premier said SEA Electric it would produce 2400 vehicles a year and be the lead tenant at the Gippsland Logistics Precinct³⁰.

At the announcement in Morwell, Premier Daniel Andrews said,

"This is 500 manufacturing jobs, 500 new jobs in this proud region, putting together (electric) vehicles" and "Our announcement today, the partnership with SEA Electric, is all about making sure Latrobe Valley is the national capital for electric vehicles"³¹.

In early 2021 Minister for Regional Development, Maryanne Thomas revealed only four locals were employed by SEA Electric, subsidised by the LVA to drive to Dandenong³².

At a May 2022 PAEC Hearing, the Government acknowledged payments were made to the failed venture that would not be recouped³³.

5.10 Case studies of good Commonwealth Government support for developing industries

Australian Government funding of Energy from Waste at Maryvale

Opals Maryvale has received a \$48.2 million grant through the Australian Government's Modern Manufacturing Initiative (MMI) for a \$600 million Energy from Waste (EfW) facility that will be co-located at Opal Australian Paper Mill and reduce the site's reliance on gas and electricity and assist in securing its energy requirements into the future. Government funding of 48.2 million has leveraged \$552 million from project partners Veolia, Masdar Tribe Australia and Opal.

²⁸ Latrobe Valley Express 13 September 2018 Hazelwood Grant process questioned after Supreme Court hearing.

²⁹ www.sea-electric.com/electric-vehicles-set-to-bring-hundreds-of-jobs-to-victoria-latrobe-valley

³⁰ *The Age* 30 October 2018 www.theage.com.au/politics/victoria/new-factory-to-make-morwell-electric-car-capital-as-labor-eyes-marginal-seat-20181030-p50ctn.html

³¹ ABC 31 October 2018 www.abc.net.au/news/2018-10-30/electric-cars-set-to-bring-500-jobs-to-latrobe-valley/10448344.

³² Hansard 4 February 2021 Answers to Constituency Questions p 333 <https://hansard.parliament.vic.gov.au/isysquery/d6ad44ae-113d-4b76-8034-9462e746caa5/9/doc>

³³ PAEC Hearing Thursday 19 May 2022

The project will create more than 500 jobs in Victoria and Gippsland during the construction phase, and support 450 ongoing jobs. Construction is planned to commence in 2022 with the facility starting operations in late 2025.

The EfW facility will process 325,000 tonnes of residual waste, recovering valuable energy that would otherwise be lost to landfill. It will reduce net greenhouse gas emissions in Victoria by an estimated 270,000 tonnes annually and provide a sustainable efficient waste management solution aligned to the circular economy.

The Maryvale EfW project is aligned with the principles of the circular economy and will bring state-of-the-art alternative energy technology to Gippsland. It will offer local and metropolitan councils and commercial customers a competitive waste management solution that will divert waste from landfill, reduce emissions and deliver a range of social benefits.

Australian Government funding of a Barramundi farm at Maryvale

Opal Australian Paper and its project partner, Mainstream Aquaculture, have received a \$30 million federal government grant to progress plans for a \$125 million barramundi aquaculture facility.

This Commonwealth Government funding of \$30 million will leverage \$95 million from project partners. Opal hope to begin construction, pending approvals, in early 2023.

Using its existing water allocation, access to geothermal energy, heat and manufacturing biproducts, Opal plans to create the world's largest land-based barramundi production platform.

Expanding on Opal's local footprint, logistical advantages, including proximity to markets, this well-planned project is expected to create 88 ongoing permanent jobs and 89 positions during the construction phase.

Heat from the Maryvale Mill will be used to grow barramundi (**Figure 3**). Excess heat from the mill will be used to warm water to about 30 degrees Celsius for the barramundi to grow in. Opal currently operates substantial cooling towers to cool water from turbines, so rather than running those cooling towers Opal will construct several heat exchangers to transfer the heat across to heat the in-coming freshwater for the fish. The facility will reduce Australia's reliance on imported fish.

Figure 3: Proposed Latrobe Aquaculture project at Maryvale Mill.



Minority Report Recommendation 4A: That the Victorian Government undertake an analysis of future Latrobe Valley job creation opportunities and prepare a strategic plan for employment in the Latrobe Valley in consultation with Energy Australia and release a detailed jobs plan to the public by June 2023.

Minority Report Recommendation 4B: That the Victorian Government undertake an analysis of future transitional services and training requirements vital to support workers following the closure of Yallourn and prepare them for new job opportunities. Release a detailed transitional training plan to the public by June 2023.

6. Local employment in renewable energy

Currently, little of the clean energy supply chain is manufactured in Australia and none in Gippsland (Table 3).

Table 3: Employment in manufacturing, construction, and operation of renewable energy³⁴

Energy source	Manufacturing Overseas (Job-Year/MW)	Manufacturing Australia (Job-Year/MW)	Construction (Job-Year/MW)	Operation & Maintenance (Job-Year/MW)	Manufacturing in Australia (%)
Wind	1.3	0.4	2.8	0.2	24%
Utility Solar	4.3	0.1	2.3	0.1	2%
Rooftop PV Solar	4.2	0.2	5.8	0.2	5%
Utility batteries	6.3	0.3	4.7	1.2	5%
Distributed batteries	6.3	0.3	5.6	0.3	5%
Hydro	2.8	0.7	7.4	0.1	20%
Pumped Hydro	2.8	0.7	11.1	0.2	20%
Mean					11%

7. Latrobe Valley Brown Coal Resource

The region needs new project developments that are similar in nature to a Power Generation project, and leverage off brown coal, as the source Latrobe Valley region contains 200 billion tonnes of brown coal with ca. 33 billion tonnes economically winnable.³⁵

Table 4: SWOT analysis of Latrobe Valley brown coal (Lignite)³⁶

Strengths Abundant (energy) resource Cost as an energy in \$/gigajoule is world class Processing well understood & skills exist in the region	Weaknesses Poor reputation of brown coal based on past use Difficult to raise finance for coal-based projects Need a CCS Hub to underpin any new development
Opportunities Technologies deliver net zero emissions (CCS, CCUS) Import replacement - Equivalent products are imported New opportunities from downstream processing	Threats LV Lignite becomes a stranded asset without new use Community pushback against utilization of coal Coal access requires support from existing operators

Brown coal is an energy rich resource and Victoria brown coal is Australia's second largest energy resource with a potential Gross State Product (GSP) of \$3,400 billion. Brown coal can be used to produce a range of

³⁴ Clean Energy Council (2021). Submission No 80 to LC EPC Enquiry into Renewable Energy in Victoria. Dec 2021.

³⁵ Gippsland Infrastructure (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 43.

³⁶ Derived from Gippsland Infrastructure (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 43.

contemporary products beyond electricity, with many of the products produced overseas and imported to meet Australia's domestic needs (fuels, fertilisers, carbon products).³⁷

8. Potential uses of Lignite

8.1 Latrobe Valley Lignite can be greenhouse friendly

Lignite is essentially a mixture of carbon, organic compounds, and water and by itself is not a greenhouse gas. Atmospheric emissions only occur from the combustion of lignite. Unlike many black coal deposits, the lignite in Latrobe Valley does not contain any significant greenhouse gases (primarily methane) that could be released during mining.³⁸

Lignite is an undervalued carbon resource that has the potential to be upgraded to a wide range of carbon-based products. Victoria's power industry has been based on the inefficient combustion of lignite containing two-thirds water. After drying Victorian lignite is a very clean source of carbon, with an internationally low level of mineral impurities. The potential for upgrading Victorian lignite is enhanced by CO₂ capture, use and storage infrastructure in the Latrobe Valley. The Latrobe Valley could not be home to an industrial complex of high-value, low-emissions carbon manufacturing industries³⁹.

*"A complete shut-down of lignite power stations would have a devastating social impact in the Gippsland region, and for the Latrobe Valley community in particular. There is a risk that the lignite resource could become a stranded asset, causing a significant loss of revenue for the State. In order to reduce these risks, it is important to actively investigate new uses for the lignite resource; uses that will be sustainable in a low emissions future."*⁴⁰

*"ACI (Australian Carbon Innovations) does not accept the validity of the strategy that it is acceptable to continuing the use carbon-based goods and products by reducing domestic manufacturing to meet emission reduction targets and then importing from manufacturers in other countries which do not have the same emission reduction strategies, and which results in higher levels of atmospheric emissions."*⁴⁰

*"Whilst economists and others use the terminology of "decarbonise the economy" when espousing a sustainable future, this reflects failure to understand a fundamental fact that life on our planet is carbon based and carbon itself is not the problem"*⁴¹.

8.2 There are a wide range of potential uses for Lignite

For example, dried lignite can be gasified to produce synthesis gas, or syngas, a mixture of hydrogen and carbon monoxide. Syngas can be further reacted with water to produce more hydrogen and carbon dioxide, as will be done in the HESC Project. Alternatively, it can be converted to a range of commodity chemicals and monomers for the plastics industry. Dried lignite can also be converted to specialty carbon products, fuels and agricultural products (**Figure 4**).

³⁷ Australian Carbon Innovations (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17.

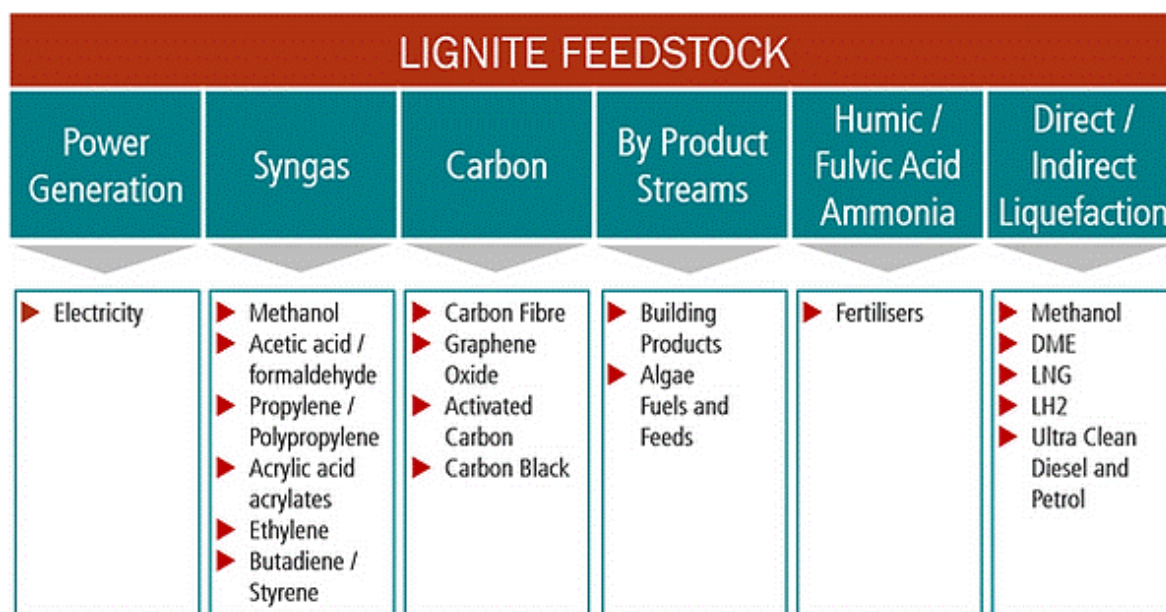
³⁸ Australian Carbon Innovation (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17 including attachment 1.

³⁹ Australian Carbon Innovation (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17 including attachment 1.

⁴⁰ Australian Carbon Innovation (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17, attachment 1.

⁴¹ Australian Carbon Innovations (ACI) (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 17.

Figure 4: Carbon-based products that can be produced from Lignite (Brown Coal) ⁴²



Lignite can be used as a heat source in the production of the glass panels used in solar collectors and reducing agent in the production of steel. Lignite can be used in solar panels and wind turbine towers with carbon fibres, used in wind turbine blades and lightweight transport components. Lignite can be converted into plastics and graphene oxide, which can be used to produce flexible solar panels, lithium-ion battery electrodes, printable batteries and supercapacitors. Lignite can also be converted to hydrogen, which can be used in fuel cells and hydrogen turbines, and further upgraded to a host of chemical products⁴².

Production of low-emissions carbon products from such raw materials requires CO₂ capture and storage (CCS). The Global CCS Institute's reports that CCS has been working safely and effectively for 45 years. There are now 18 large-scale facilities in commercial operation around the world. In Victoria, the CarbonNet Project, CSIRO and CO2CRC are at the forefront of CCS development⁴².

8.3 Australian Carbon Innovations

Australian Carbon Innovation (ACI) was established by the Victorian Government in 2009. Over the past decade, ACI and its forerunner, Brown Coal Innovation Australia (BCIA), have established a proven track record in management of lignite research on behalf of the Victorian and Commonwealth governments. ACI is an independent, not-for-profit company with the mission to invest proactively in the development of technologies and people to broaden the use of lignite for a sustainable future. The work of the ACI over the past 12 years has evolved as options were explored and assessed as having either potential as a future industry in the Latrobe Valley or rejected as not viable either on technical or economic grounds.⁴³

Over the past decade, Australian Carbon Innovations (ACI) and its forerunner, Brown Coal Innovation Australia (BCIA), has leveraged combined government funding of \$19M into a \$59M low emissions lignite research portfolio, involving nearly 50 local and international government, industry and research organisations⁴³.

⁴² Australian Carbon Innovations (ACI) website 16/3/22. ACI was established by the Victorian Government in 2009 as an independent organisation to support innovation and research on the utilisation of Victorian lignite new and innovative products and is funded by State and Commonwealth governments. Matching funding and participation comes from industry.

⁴³ Australian Carbon Innovation (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17 including attachment 1.

The ACI research has created a pool of talented expertise, primed to take advantage of the new opportunities opening. There are cutting-edge projects currently under way which lay a foundation for future developments. ACI is seeking continued investment in lignite research and development by the Victorian and Commonwealth governments.⁴³

ACI is confident that there can be a bright future for Victorian lignite even in the context of net zero greenhouse gas emissions. There are potential technologies that produce little or no CO₂ while adding value to lignite. Where upgraded products do have a CO₂ footprint, Victoria is blessed with excellent geological CO₂ storage capacity, enough to last for hundreds of years. The ability to safely and permanently store captured CO₂, in a location close to the lignite reserves, provides a unique opportunity to develop new low-emissions industries in the Latrobe Valley to provide employment in skilled, highly paid, interesting, hi-tech jobs.⁴³

ACI funding has been limited.

Minority Report Recommendation 11: That Governments increase funding to ACI given their potential to create new industries with ongoing jobs.

8.4 Carbon capture, utilisation and storage

Carbon capture, use and storage (CCUS), is an important emissions reduction technology that involves the capture of carbon dioxide (CO₂) from fuel combustion or industrial processes, the transport of CO₂ via ship or pipeline, and use as a resource to create valuable products or services or its permanent storage deep underground in geological formations. CCUS technologies provide the foundation for carbon removal or “negative emissions” when the CO₂ comes from bio-based processes or directly from the atmosphere.

The Energy Industry has been pursuing options to mitigate emissions including pre or post combustion capture, beneficial CO₂ reuse, CO₂ mineralisation, bio sequestration and process improvements.⁴⁴

Victoria has excellent Geo-sequestration potential in sandstone formations and deep saline aquifers, which are being advanced to commercial status through the CarbonNet Project. Several trials are being undertaken to improve the natural performance of plants to terrestrially bio-sequester CO₂ leading to improved cropping performance and soil condition.^{45,35}

Minority Report Recommendation 12: That the Victorian Government support the establishment of a Carbon Research and Innovation Centre as proposed by Australian Carbon Innovation and Federation University with the proviso that it have strong industry participation and focus on the entire chain from fundamental research → applied research → development → pilot trials → commercialisation.

9. Renewable Energy

The Australian Governments whole-of-economy Long-Term Emissions Reduction Plan (the Plan⁴⁶) sets out how Australia will achieve net zero emissions by 2050 based on five key principles:

- Technology not taxes – no new costs for households or businesses.
- Expand choices, not mandates – expand consumer choice.
- Drive down the cost of a range of new energy technologies – bringing a portfolio of technologies.

⁴⁴ Gippsland Infrastructure (2021). LC EIC Inquiry into the closure of Hazelwood and Yallourn power stations, Submission No 43.

⁴⁵ Australian Carbon Innovation (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 17 including attachment 1.

⁴⁶ Australian Government (2021). Australia’s long term emissions reduction plan - A whole-of-economy Plan to achieve net zero emissions by 2050.

- Keep energy prices down with affordable and reliable power – secure Australia’s advantage in affordable and reliable energy, protect industry competitiveness and associated jobs.
- Be accountable for progress – set ambitious yet achievable whole-of-economy goals, then beat them, consistent with Australia’s approach to Paris Agreement targets.

The technologies include:

- Clean hydrogen.
- Ultra low-cost solar.
- Energy storage for firming.
- Low emissions steel.
- Low emissions aluminium
- Carbon capture and storage
- Soil carbon.

The Commonwealth Government’s transitional investments include:

- \$48.2 million grant through the Modern Manufacturing Initiative (MMI) for Opal Australia’s Energy from Waste project.⁴⁷
- \$30 million to establish an indoor barramundi aquaculture farm at Opal Maryvale, Morwell.⁴⁸
- Up to \$2.98 million for Zero Degrees Rosella 1 Pty Ltd’s Latrobe Valley Blue Hydrogen.⁴⁹

10. Solar Energy

10.1 Advantages and disadvantages of solar energy

The Clean Energy Council welcomed the Commonwealth Roadmap’s recognition of the crucial role that solar will play in Australia’s and the world’s clean energy transition and commend the ambition for Australia to make a direct contribution to achieving ‘ultra-low-cost solar’. The recently announced ARENA funding round will not only focus on the efficiency of solar cells but also on the total system build and operation deepening Australia’s participation in solar supply chains.

The Liberals and Nationals members welcome the Commonwealth Government and Clean Energy Councils recognition of the need for increased domestic manufacturing of solar panel components.

10.2 Stewardship and Recycling of Photovoltaic panels

As Victoria moves to increased renewables in the form of photovoltaic (PV) solar panels, an appropriate system for stewardship and recycling of the PV panels must be set in place.

Recovery Corporation (a Clean Energy Council CEC member company) has partnered with a European technology developer and is importing processing machines for recycling of photovoltaic (PV) panels with 99 per cent+ material recovery rates for deployment in 2022. Once the recycling, collection, and transport infrastructure for end-of-life (EOL) PV panels is in place, there will be an important role for Commonwealth, State, and local governments to encourage use of the recycling facilities. Victoria should consider the lessons that can be learned from the EU experience to prevent disposal of PV panels to landfills. Planning approval processes for large-scale solar farms could be leveraged to accelerate solar panel stewardship. The Commonwealth Government could also consider its role in the setting of eligibility requirements for access

⁴⁷ Hon Darren Chester, media release: Backing Latrobe Valley Manufacturing, April 29, 2022.

⁴⁸ Hon Darren Chester, Media release: Valley lands a big barra May 11, 2022.

⁴⁹ Hon Angus Taylor, Media Release Backing clean hydrogen and carbon capture in Gippsland. May 9, 2022.

to the rebate schemes it administers, and whether they could be leveraged to accelerate solar panel stewardship⁵⁰.

The value of recovered materials from recycling PV panels does not exceed the cost of recycling and while it is still possible to dispose of panels cheaply in landfill, the cost of managing legacy / orphan panels will continue to be problematic⁵⁰.

For effective environmental planning of renewable energy in Victoria the Liberals and Nationals Minority Report Recommendation 3⁵¹ recommends introducing remediation bonds for large-scale solar energy facilities. We extend that here to embrace wind farms and large scale battery facilities.

Minority Report Recommendation 13: That the Victorian Government introduce bonds (similar to retiring coal fired power plant bonds) for large-scale solar energy, wind farms and large-scale battery facilities to ensure sufficient funds are available for site rehabilitation.

11. Wind power

11.1 Land based wind turbines

Rural communities question the development of more land based wind farms because of the adverse health and environmental impacts, including the sound, clearing forests for the towers and loss of wildlife.⁵²

Local community groups have raised concerns with land-based windfarms. Strzelecki Community Alliance (SCA) is an incorporated Entity of over 1000 community members who live or hold property in the Yinnar, Boolarra, Hernes Oak, Mirboo North area of Gippsland. SCA opposes a proposed 33 wind turbine Delburn development, citing several valid concerns, including, concerns of an inability to adequately mitigate bushfire risk on Hancock Victoria Plantation land situated underneath the wind turbines.

A submission to the Delburn Wind Farm Planning Report highlights a significant bush fire risk.

The CFA submitted the planning permit conditions proposed by FRC such as access tracks are only likely to be effective on Fire Danger Rating days of Low to Moderate and High. It said the Project is likely to be impacted at some stage by uncontrollable landscape bushfires; fires that cannot be managed by site-based mitigation or of broader emergency management. It said “damage and destruction of assets by bushfire is likely if the proposal proceeds”⁵³.

Another submission to the Inquiry by David Packham indicated that there is a significant risk of the wind turbines being the source of ignition for bushfires, citing examples of turbines catching fire.

The Minister for Planning has provided approval for the development and the SCA community has requested a halt to proceedings.

11.2 Offshore Wind farms

While offshore wind remains considerably more expensive than onshore wind, there have been major cost reductions achieved, most notably within the UK as a result of the UK Government’s renewable energy support scheme which has set a target of deploying 40 GW of offshore wind by 2030 with the expectation

⁵⁰ Clean Energy Council (CEC) (2022). Submission to the Department of Agriculture, Water and the Environment consultation paper: Stewardship for Consumer and other Electrical and Electronic Products. 28/2/22.

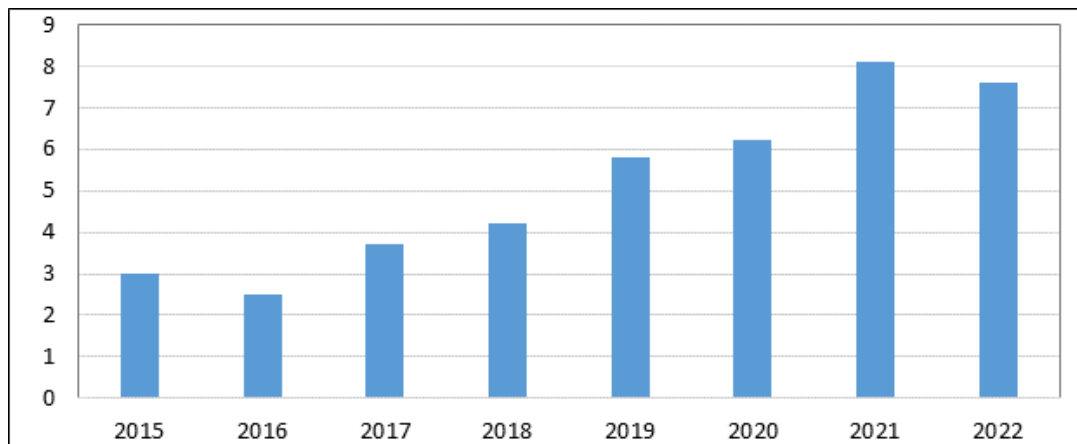
⁵¹ EPC Renewables in Victoria, Liberals and Nationals Minority Report, 2022.

⁵² Plimer, I (2018). Connor Court Publishing. 2nd printing.

⁵³ https://www.planning.vic.gov.au/_data/assets/pdf_file/0030/564852/Delburn-Wind-Farm-Panel-Report-.pdf page 117.

offshore wind to be cost competitive with onshore wind by 2030. Offshore wind has taken off globally over the past 7 years, with probably 41GW now installed worldwide (2022 may be up to 10GW) (**Figure 5**)⁵⁶.

Figure 5: Global annual offshore wind capacity additions (GW)⁵⁶



To facilitate the regulation and oversight of new offshore wind technologies and infrastructure, the Commonwealth Government implemented the Offshore Electricity Infrastructure Act 2021, having attained Royal ascent on December 2, 2021, it will come into effect by June 2022⁵⁴.

The legislative framework enables the development of new energy projects while safeguarding the environment, securing the health and safety of workers and protecting other maritime stakeholders. This legislation will accelerate a number of key projects already under development, including:

- Star of the South in Victoria
- Sun Cable's project in northern Australia
- The Marinus Link transmission line will connect the mainland to Tasmania's Battery of the Nation Project⁵⁵

Any comment from the Andrews Government about offshore wind renewable energy comes after Commonwealth Government legislated and five years after Star of the South commenced consultation with the community, industry, and Government.

12. Electricity Storage

There are many cost-effective thermal energy storage solutions commercially available that can be used at grid scale and behind the meter to shift peak load. Mechanical and gravitational storage is also undergoing significant innovation, particularly at the grid scale. Traditional gravitational storage using pumped hydro can provide flexible 'peaking services' to meet rapid changes in energy demand as well as prolonged periods of energy supply shortfall due to reductions in wind and solar output. This capability is integral to managing the transition to generation dominated by variable wind and solar generation. With fast-start and fast-ramping characteristics, hydropower can also respond rapidly to dynamic changes in our energy system for as long as is necessary to keep the lights on⁵⁶.

Large-scale energy storage (battery or pumped hydro-electricity) will play an important role in creating a flexible and reliable energy system and supporting the rapid deployment of variable renewable energy

⁵⁴ Offshore Electricity Infrastructure Act 2021, Commonwealth Parliament.

⁵⁵ <https://www.industry.gov.au/news/new-laws-to-support-offshore-electricity-infrastructure>

sources, particularly wind and solar generation likely to be important contributors to the future of the energy system.

Traditional hydro and pumped hydro projects are complex projects with long project development lead times and there is investor uncertainty around necessary government approvals. There is a need for policy settings that value the benefits of hydropower's system services including fast frequency response and inertial response, flexible capacity, operating reserve and/or ramping capability. While there has been some increase in the number of financial commitments to battery storage, the level of investment remains relatively low and will continue to be until market reforms are implemented and/or the cost of new storage capacity falls. The Roadmap should continue to support the accelerated deployment of cost-effective electricity storage solutions⁵⁶.

12.1 Pumped Hydro Storage (deep storage for firming power)

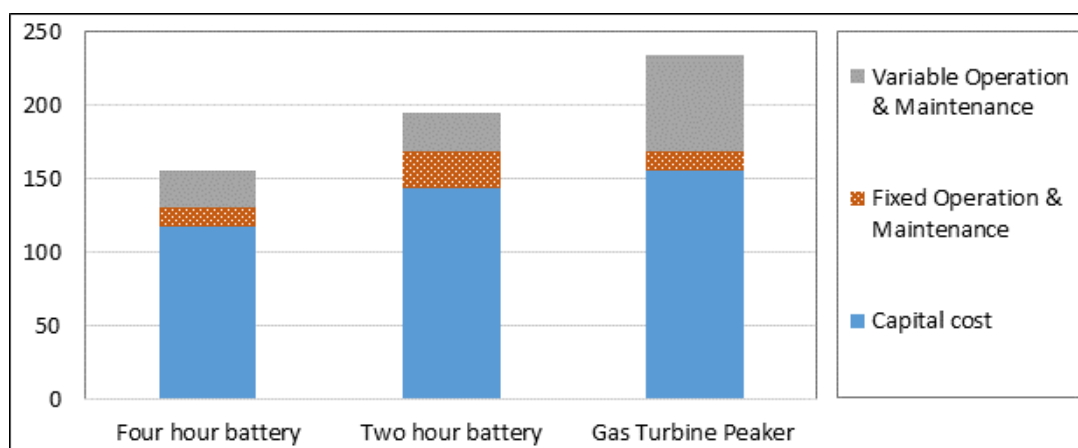
There is a need for greater Victorian Government support for new investment in deep storage by pumped hydro given the poorer operational performance of battery storage (shallow storage) and potential adverse socioeconomic and environmental risks associated with battery manufacture, recycling and disposal. Development of new pumped hydro projects in Gippsland would provide an excellent opportunity to transition Hazelwood and Yallourn power industry employees into new jobs.

Australian National University, Professor Blakers in a submission to the Inquiry on Renewable Energy paints a sufficiently bright future for deep storage by pumped hydro. A detailed comparison of the operating cost-effectiveness and socioeconomic and environmental risks of pumped hydro vs battery storage is required. The Victorian government appears to be supporting storage using imported batteries containing Lithium.

12.2 Battery Storage (shallow storage for 2 to 4 hours)

Private investors are gaining confidence to commit utility-scale battery projects. Batteries are now being used to improve the performance of existing fossil assets, for example by reducing starts/stops of gas peakers as well as being effectively integrated with solar and wind projects. The Commonwealth Roadmap stretch target of \$100/MWh for firmed electricity from lithium-ion batteries is a stretch target that requires a 50 per cent cost reduction for a two-hour battery and a 35 per cent reduction for a four-hour battery but based on CEC data is competitive with Gas Turbine Peaker⁵⁶ (Figure 6).

Figure 6: Levelised cost of lithium-ion batteries and a gas turbine peaker (A\$/MWh)⁵⁶



⁵⁶ Derived from Clean Energy Council (CEC) (2022). Submission to Department of Industry, Science, Energy and Resources, Australian Government's Technology Investment Roadmap. 14/2/22. (Open-cycle gas turbine peaker).

13. Hydrogen Energy

13.1 Hydrogen Energy Supply Chain (HESC) Project

The consortiums⁵⁷ world-first HESC Project has safely produced liquefied hydrogen from Latrobe Valley brown coal and successfully transported it to Japan.⁵⁸

The HESC Pilot has investment of \$500 million (Victorian and Australian Governments \$50 million each) and **created approximately 400 indirect and direct jobs in Victoria, the majority in Latrobe Valley.**

It is also stimulating world-first hydrogen research, building new knowledge, and developing adaptable infrastructure. There is opportunity to move a commercial operation.

The CarbonNet CO₂ storage Project is developing in parallel with HESC. If both projects are commercialised, CO₂ captured during hydrogen production would be transported and stored by CarbonNet in the depleted oil and gas reserves in Bass Strait.

The CarbonNet Project has successfully achieved several major milestones and is on track to enable a low emissions future for the state of Victoria and provide economic growth to the region.

HESC has a commercial hydrogen production estimate of 225,000 tonnes pa. This is estimated to reduce global CO₂ emissions by some 1.8 million tonnes per year – the equivalent to emissions of 350,000 petrol driven cars– enabling the region to play a part in achieving Australia’s net zero emissions by 2050 commitment.

Captured carbon dioxide (CO₂) from the Hydrogen (H₂) production can be used for other products such as manufacture of fertiliser, building products, F&B, and fish proteins.

13.2 Opportunities for wise investment - Green Hydrogen

Citing the European Union’s seven-year investment timeframe, the Gippsland Circular Economy Precinct (GCEP) submission emphasised the need for long funding investment from the State Government over short term commitments.

We note the European Union’s continued investment in and work, built on a seven-year investment timeframe, with a pathway of innovation, intervention, trial and research, leading into longer term strategy, policy and investment cycles that leads to structural and systemic change in regions, industries and communities.

We encourage the State Government in its various functions and silos to reflect on the impact of political positioning and short-term commitments and its capacity to drive long term change for the benefit of our climate and community.

This collaborative Gippsland consortia makes a strong argument for government seed funding in the renewable energy economy, and specifically green hydrogen.

GCEP is acting now, bringing together a consortium of local and global businesses to drive manufacturing, production and use of green and sustainable hydrogen into an integrated domestic hydrogen economy.

Seed investment from government, strategically invested with industry, such as the GCEP Consortium, will deliver jobs and investment immediately.

⁵⁷ The consortium includes Kawasaki Heavy Industries, Ltd (KHI), Electric Power Development Co., Ltd. (J-POWER), Iwatani Corporation (Iwatani), Marubeni Corporation (Marubeni), AGL Energy (AGL), Sumitomo Corporation (Sumitomo), Royal Dutch Shell (Shell), ENEOS Corporation, and Kawasaki Kisen Kaisha, Ltd. (K-Line).

⁵⁸ Kawasaki Heavy Industries (2021). LC EIC Inquiry into the Closure of the Hazelwood and Yallourn Power Stations Submission 29.

GCEP and our consortium partners are driving and facilitating industry investment in jobs and manufacturing capability in renewable energy.⁵⁹

14. The Victorian Forestry Plan

The Victorian Labor Government's announced in 2019 that it would phase out the native timber industry with a full shut down by 2030. The Liberals and Nationals believe there is a strong case for continued access to the 6 per cent or 415,000 hectares of our 7.5 million hectares for the sustainable production of native timber .

A Parliamentary Report highlighted the fact that the Victorian Forestry Plan is flawed and will not deliver the environmental outcomes it purports, nor will new plantations ensure sufficient wood volume to accommodate the loss of Victoria's sustainable native timber industry⁶⁰.

- *The Forestry Plan will have an adverse impact on scale economies in agriculture because it is based on converting 70,000 to 140,000 hectares of farmland to plantations.*
- *Past native timber access policy, exacerbated by bushfires, has resulted in the loss of \$6.6 billion Gross Regional Product and 5,560 jobs over the last 20 years from native forest timber.*
- *The 'Forestry Plan' is likely to contribute to a further loss \$5.6 billion in Gross Regional Product and the loss of another 3,660 jobs over the next twenty years in disenfranchised rural communities, already severely impacted by reducing native log supply and recent fire, floods and a pandemic.*

A detailed submission described the insurmountable challenges of implementation of the Forestry Plan:

"The Victorian Forestry Plan fails to acknowledge the current decline in plantation supply and the considerable and possibly insurmountable challenges to establishing new plantations. The 'Forestry Plan' also ignores the 20 to 30 year lead time required. The challenges include very limited availability of suitable land, high land cost, poor plantation log quality, unsuitability of plantation sawlogs for existing mills and the large scale required for returns on investment in new mill technology. Replacing native forest timber with new plantations on farmland threatens to push up farmland prices, crowd out farmers and will lead to diminishing scale economies in agricultural production and food processing. Farmland in Gippsland is scarce."⁶¹

A veteran of thirty years' experience in the timber industry, Mr Ian Reid informed the Committee of the flawed nature of the Victorian Government's decision to close the native timber industry.

"As a resident of the Latrobe Valley for over 35 years and being involved in the timber industry for 30 years I have seen many of the natural advantages of the area compromised and are concerned that if this trend continues the cost to both the valley and Victorian economy will be high. I work in the timber industry as a harvesting contractor working predominately in the Gippsland pine and hardwood plantations owned by HVP.

By growing the timber resource base an opportunity will be created to use this renewable resource as a raw material for the further development and opportunities for employment within the Latrobe Valley replacing and growing jobs and economic activity lost through the closure of the Hazelwood and Yallourn power stations.

It's a shame the short-sighted decision to stop native logging by 2030 will mean the loss of a significant renewable resource that could have been available for future opportunities with the

⁵⁹ Gippsland Circular Economy Precinct, EIC CHYPS, Submission 44, 2021

⁶⁰ Victorian Parliamentary Inquiry into Ecosystem Decline, The Nationals and Liberals Minority Report, Chapter 6

⁶¹ CHYPS Submission 58, John Cameron, 16 December 2021.

continued innovation and technology advances for the use of timber (eg Cross laminated timber, reusable paper bags as a replacement of plastic bags, etc).

The plan to stop timber from native forests is flawed due to:

1) there is not enough time to replace this resource with the planned promise plantation development. Even with trees planted today there will be a gap of 10-20 years before they could begin to replace the native resource

2) The native areas being locked up are regrowth timber anyway, with the lack of management of this resource it will end up being a severe fire risk and is likely to be destroyed by bush fire within 20 years of lock up.

3) Gippsland is well suited due to soil, weather, and rainfall to grow quality trees”.⁶²

Mr Geoff Dyke shared his sentiments on the Victorian Government’s appalling decision to shut the native timber industry.

“I think it is a disgrace to shut down the timber industry. I will be blunt. We have 7.1 million hectares of native forest, we have got some of the best timber in the world, and we are importing timber and we are putting timber workers out of work. I just think it is disgraceful.”⁶³

Minority Report Recommendation 9A: That the Victorian Government discard the Victorian Forestry Plan and continue with sustainable harvesting of native forests. The Victorian Government must work with VicForests to continue to maintain practices which enhance healthy, sustainable, and productive forest systems.

15. The way forward

The Liberals and Nationals members support a transition to renewable energy. Government investment in Latrobe Valley must harness natural resources, infrastructure advantages and a skilled and ready workforce.

Closing coal fired power stations before sufficient transmission infrastructure to link renewable energy projects, adequate local component manufacturing and appropriate recycling facilities are established, has risks.

An opportunity exists to assist local manufacturers to make components for renewable energy and replace imports. Currently only 11 per cent of components for renewable energy are manufactured in Australia (e.g. solar panels, wind turbines).

Victoria also needs to ensure electricity as the cornerstone of manufacturing remains reliable and priced competitive.

15.1 Some renewable options that warrant closer examination

Hydro electricity and hydrogen have potential for renewable energy with greater Australian-made content, without the challenge of developing recycling for solar panels or wind turbine blades. Hydro (currently 20 per cent Australian manufactured) and hydrogen have potential to use Gippsland resources and create more local jobs than solar power (only 2 per cent to 5 per cent of components manufactured in Australian) and warrant closer examination.

Pumped hydro deep storage (currently 20 per cent Australian manufactured) has potential for firming power that is much more effective than shallow storage by batteries (only 5 per cent of components manufactured in Australian) and potentially offers socioeconomic, environmental and geopolitical advantages.

⁶² Mr Ian Reid, Submission 26, EIC CHYPS 2021.

⁶³ Mr Geoff Dyke, CFMMEU, EIC CHYPS, Transcript 2021.

Carbon capture and storage or (geo-sequestration along with forest/farm/soil bio-sequestration offer ways in which Latrobe Valley's huge Lignite resource can be used as a feedstock for renewable energy such as blue-green hydrogen, carbon fibre and fertiliser.

Support for a recommendation of technologies and people to broaden the use of lignite for a sustainable future came from several submissions, for example:

*"The region needs new project developments that are similar in nature to a Power Generation project, and the continued leveraging of brown coal as the energy source. An obvious pathway would be a Hydrogen Production Facility utilising brown coal as the feedstock. A domestic Hydrogen facility would support the development of downstream processing facilities to produce valuable commodities for the State such as Ammonia and/or Urea Fertiliser."*⁶⁴

15.2 Energy Australia's plan

On 10 March 2021 Energy Australia⁶⁵ announced its plan to:

- Bring forward the retirement of Yallourn Power station to mid-2028.
- Provide a \$10million package to support the Yallourn workforce.
- Build Australia's first four-hour utility scale battery ('Wooreen') of 350MW capacity by 2026 which is scheduled to be operating before the end of 2026.

15.3 Some suggestions from the community on shaping the way forward

Gippsland Regional Executive Forum, Chair John Mitchell proposed the need for local peak body champions to be at the centre of discussions with government.

"The Gippsland Regional Executive Forum (GREF) is one of three self-funded (3) Regional Executive Forums (REF's) established in Victoria, under the auspice of The Champions of The Bush. The REF's aim to provide effective business networks, undertake professional development, and advocacy in respect to regional investment facilitation, and policy/regulatory frameworks.

The GREF has 21 members, and each member comes from a different industry sector. Current membership includes Dyers Distribution, Alan Wilson Insurance Brokers, Telstra Country Wide, McMillans, GBS Recruitment, AGL, GippsTech, Aerium Consultants, Chunxing Corporation Pty Ltd, Latrobe Regional Hospital, Littleton Hackford Solicitors, Latrobe Funeral Services, Latrobe Valley Bus Lines, Hydro Australia Ltd, and Omnia Nutriology.

Advice to the Committee from John Mitchell Chair, Gippsland Regional Executive Forum identified:

- *Local procurement policy is key to engaging local workforce.*
- *Industry Capability Network is getting better at identifying local and that focus now needs to be on central and the whole of Gippsland.*

GREF would also propose the need for a peak body comprising industry champions, as opposed to too much government/public entity approach, and thinking. To assist with project planning there is also need for an investment assessment too to enhance decision making and leverage investment."

Mr Barry Dungey, offered the following comments:

⁶⁴ Gippsland Infrastructure – Roland Davies, Director.

⁶⁵ Energy Australia (2021). Inquiry into the closure of Hazelwood and Yallourn Power Stations Submission 25, 21 Oct 2021.

- *Encourage government businesses to establish in Latrobe Valley. They will have a natural preference to stay in Melbourne, but any new business departments should be set in Latrobe Valley. (E.g., Australian Securities Commission currently in LV is an excellent example.*
- *The road and rail networks to LV require significant upgrade, without this LV will continue to lose projects to Geelong, Bendigo and Ballarat. The target needs to be 1 hr from Traralgon to Melbourne CBD, anything more than this will see a preference given to development in towns closer to the CBD.*
- *Support for the Churchill University - this is an excellent resource that should be further enhanced. They already run some of Australia's leading medical training courses and could offer a solution to improved doctor and nurse training that rural Australia is crying out for. They could also be leveraged to offer more PhD studies and development of new technology such as AI. Education is one critical key of a developing society.⁶⁶*

15.4 Smart Specialisation Strategy

Food and Fibre Gippsland (F&FG) has partnered with the Latrobe Valley Authority to deliver the food and fibre stream of the Gippsland Smart Specialisation Strategy (GS3). The GS3 is a dynamic, place-based regional development initiative that builds on our region's key strengths by fostering innovation for long-term, sustainable economic and social advantage.

These increases in advantage are achieved by proactively and collaboratively exploring innovative industry opportunities for the Gippsland region with stakeholders from across Industry, Government, Education, Research, and Community sectors. This approach of collaborative co-design ensures that opportunities are assessed from multiple viewpoints, are backed by data, and have the support required to ensure their success. The food and fibre stream of the GS3 is currently exploring six innovation opportunities:

- Advanced Vegetable Processing
- Carbon Economies
- Circular Economies
- Collective Craft Malting
- Sustainable Emerging Commodities - Insects & Seaweed

15.5 The role of Federation University in the Smart Specialisation Strategy

Federation University has not been provided the opportunity to lead the majority of the Gippsland based engagement and research across the Smart Specialisation program within the above sectors including timber transition.

Federation University supports the framework of deep engagement across community, government, industry, and education including undertaking the important discovery and engagement work to develop future priorities. The Liberals and Nationals are disappointed that most of the research funding over the last three to four years has been directed to education institutions outside of Gippsland.

The Committee Report failed to include the following comments from Federation University submission.

Latrobe Valley's transition and growth into new economies through Federation University is critical to its regional communities, including the Latrobe Valley and Gippsland, injecting more than \$1 billion into our local economies each year. With nearly 200 staff employed at the Gippsland campus, in research, teaching and professional roles we are also one of Latrobe Valley's largest employers.

Importantly, 70 per cent of students who undertake higher education in the regions, then go on to live and work in regions⁶⁷.

⁶⁶ EIC CHYPS Submission 34, 2022

⁶⁷ Federation University EIC CHYPS Submission 50, November 2021

Based in Churchill, Federation University is playing, and can continue to play, a key role in supporting Latrobe Valley's transition and growth into new economies through:

Research and Partnerships in New Energy Futures:

Federation University is a key partner in the Gippsland NERA Hydrogen Cluster (led by the Committee for Gippsland), and the work underway to establish Latrobe Valley as a Hydrogen Hub. The Hydrogen Energy Supply Chain pilot project, CarbonNet and Gippsland's Renewable Energy Zone are all key projects for the region that will require ongoing State and Federal Government support.

Through Federation University's Carbon Research Technology Centre at the Gippsland Campus, the university is a key partner in the Hydrogen Energy Supply Chain, analysing hydrogen production quality and performance of the gasification and refining plant.

Federation was recently awarded a Federal Government grant of \$2.5m to establish the Centre for New Energy Transition Research which will have headquarters in both Gippsland and Ballarat (under the Regional Research Collaboration Scheme administered by the Federal Department of Education).

Federation University's Geotechnical and Hydrogeological Engineering Research Group (GHERG), established in 2009, combines local and international experts in a close working relationship with the Victorian Government and Latrobe Valley mining partners. Located at the Gippsland Campus, GHERG combines a wealth of research experience in geomechanics, hydrogeology and soil science for the purposes of open pit mine stability and rehabilitation which will be critical into the future.

Established in 2021, Federation University's Future Regions Research Centre (FRRC) brings together expert research and local knowledge to tackle challenges ranging from the transition towards new energy to helping regional communities recover from bushfire and drought. This expertise is embodied by our multidisciplinary teams who are working to develop new knowledge and innovative solutions to the grand challenges facing our environments. These challenges include:

- managing land and water and its associated infrastructure and integration within the agricultural sector;*
- supporting and restoring ecosystems affected by primary industries and other activities (particularly mining);*
- understanding the role of people at a time of significant societal and environmental change; and*
- understanding the requirements to adapt to climate change and to more actively involve our first peoples in the nation's future.*

Federation University, in partnership with TAFE Gippsland, can play a leading role in helping to transition the current energy workforce into new jobs through up-skilling and re-skilling.

TAFE Gippsland, Federation University and the Committee for Gippsland are partnering to create a Hydrogen Workforce of the Future seeking immediate support to develop a business case into what infrastructure, resources, curriculum and academic staffing will be required to retrain Gippsland's workforce to jobs of the future. At the completion of the business case in mid-2022, the partnership will seek funding to support the development of a Hydrogen Education & Training Centre⁶⁸.

15.6 Community commentary on the Smart Specialisation Strategy

In respect to the LVA and its Smart Specialisation strategy the Gippsland Regional Executive Forum (GREF) made the following comments:

⁶⁸ Federation University EIC CHYPS Submission 50, November 2021)

“GREF is also aware that the LVA has sought to champion innovation and collaboration through the Smart Specialisation Project. The flip side is that LVA requires significant resources and is another layer of bureaucracy.

*The other issue is to what degree is there overlap/duplication of effort with the LVA and the Regional Office of Regional Development Victoria (RDV)? The real issue is whether better outcomes could have been achieved more efficiently through mechanisms such as RDV or a duly appointed Task Force, or existing entities like Gippsland Regional Partnerships, Committee 4 Gippsland, One Gippsland”.*⁶⁹

Further to the discussion on Smart Specialisation, Jane Oakley commented:

“Federation University has been a participant in the extensive Smart Specialisation program funded and led by the Latrobe Valley Authority across the growth sectors of Food & Fibre, the Visitor Economy and New Energy.

Federation University understands there is currently ongoing Smart Specialisation work being undertaken in small rural communities in East Gippsland and Wellington Shire Council to help those communities develop plans as they transition away from economies that relied on native timber harvesting. In their submission to the Inquiry, however Federation University stated that they have not been provided the opportunity to lead the majority of the Gippsland based engagement and research across the Smart Specialisation program within the above sectors including timber transition.

*Federation University supports the framework of deep engagement across community, government, industry, and education including undertaking the important discovery and engagement work to develop future priorities. It is disappointing that most of the research funding over the last three to four years has been directed to education institutions outside of Gippsland.”*⁷⁰

Minority Report Recommendation 9B: The Victorian Government prioritise research funding to Federation University to enable localised procurement of innovation, research and development and associated training. This will deliver new jobs and help offset some of the job loss under closure of coal-fired power stations.

The Liberals and Nationals members note that no additional information was forthcoming on the deliverable outcomes from Food and Fibre Gippsland on the Smart Specialisation Program.

Question to Ms Pero – Food and Fibre Gippsland

Ms Bath: *“I am quite focused, as you have heard, on those measurements of deliverable outcomes....”.*

Ms PERO: *“If it is acceptable, I am very happy to put a one- or two-pager together with some of that information and data and send it across to you”*⁷¹.

⁶⁹ John Mitchell Chair, Gippsland Regional Executive Forum, Submission 57.

⁷⁰ Jane Oakley, EIC CHYPS Submission 50, 2 November 2021.

⁷¹ EIC CHYPS Transcript Nicola Pero, Food and Fibre Gippsland, March 2022

15.6 Mine rehabilitation

Mine rehabilitation is expensive. ENGIE Group and Mitsui & Co Ltd are investing nearly \$1 billion on the multi-year rehabilitation of Hazelwood coal mine and surrounds and for future use of the land as an industrial site⁷².

Gippsland Regional Executive Forum (GREF) provided a view on a mine rehabilitation strategy.

“We would also advocate that the key issue of Mine Rehabilitation should be considered by the Inquiry. The mine rehabilitation projects will have significant economic, environmental, social consequences and there is a very real need to have certainty around the rehabilitation options, and the cost / benefit analysis of those options, and clarity on how the rehabilitation costs will be borne ie who is actually paying? If the costs are to be apportioned who is paying what share?”

The Mine Rehabilitation proposals involve consideration of dry and wet mine options. Water used in the rehabilitation process should be assigned an economic value, and it is clearly essential for the Government and community to understand how any water resource is being accessed, the long-term implications in respect to regional water sustainability, and the implications for longer term economic development capability and environmental stewardship.

Other water resources such as those held by Gippsland Water should also be considered and where appropriate fully leveraged. Government should ensure it is looking at the full range of natural water resources available before considering alternative resources such as manufactured water/desalination.

Existing alternative sources of water production at a local level should also be prioritised in any wet mine solution – such as the 2.7 ML capacity of the Gippsland Water Factory.”⁷³

A submission from Engie advocated filling the mines beginning with Hazelwood, followed by Yallourn and then Loy Yang. Based on current timetables, this sequential filling could be completed over the next 40-50 years. Creation of a lake at Morwell would give the Latrobe Valley a new impetus as a residential centre (relatively close to Melbourne with good transport links), enhance the Latrobe Valley’s appeal as a destination and enhance Gippsland by offering another water-based activity centre.

Another submissions raised geotechnical issues and competing demands for water.

Minority Report Recommendation 10: That the Victorian Government develop a residual risks policy for the mines at Hazelwood and Yallourn. The policy should address risks associated with ground instability, fire and toxic or dangerous materials

⁷² Needham, I (2021). Inquiry into the closure of Hazelwood and Yallourn Power Stations Submission 30, 27 Oct 2021.

⁷³ John Mitchell Chair, Gippsland Regional Executive Forum, Submission 57.

Appendix 1: The Committee compared to Liberals and Nationals findings and recommendations

Committee Recommendation	Liberals & Nationals Position/ Recommendation ⁷⁴ . Amendments in red	Liberals and Nationals Rationale
<p>1: That the Victorian Government continue to work with Energy Australia – including via the Latrobe Valley Authority – to undertake consultations with impacted workers, businesses and communities to determine the impact of the closure of the Yallourn mine and power station. Future Victorian and Commonwealth Government support for affected workers, businesses, and communities should be tailored to meet current and future needs, including as they relate to long-term transition and development.</p>	<p>1: That the Victorian Government implement appropriate measures that meet current and future needs of a successful transition based on discussions with Energy Australia and impacted workers, businesses and communities.</p> <p>The measures shall consist of funding to Regional Development Victoria - Gippsland to cover the development of new and expanded industries to generate new direct and ongoing jobs with a funding stream and sufficient expertise to oversee worker transitional arrangements.</p>	<p>1: The amended recommendation stipulates clear government accountability. Measures implemented following the closure of Hazelwood failed the Latrobe LGA. Over the past decade Latrobe LGA labour force declined by about 4,350 jobs while on average each of six other similar regions⁷⁵ gained on average about 10,070 jobs each.</p> <p>Using Regional Development Victoria rather than the LVA to manage the transition avoids duplication. Satisfaction of LVA's handling of the Hazelwood transition by workers, local businesses and support for growth industries was only 21-27 per cent.</p>
<p>2: That the Latrobe Valley Authority, in partnership with other agencies and Departments within the Victorian Government (including but not necessarily limited to Regional Development Victoria and the Department of Jobs, Precincts and Regions), consolidate an analysis of the outcomes of the Worker Transition Service, and the ways in which this work can apply to future worker transition supports. This analysis should include the extent to which affected workers' needs and priorities have been, or are able to be, met.</p>	<p>Amend / Oppose</p> <p>2: That the Victorian Auditor General's Office (VAGO) be asked to investigate into the effectiveness of the Worker Transition Service and recommend ways to improve future worker transition services including the appropriate organisation to manage the transition services. This analysis should include the extent to which affected workers' needs and priorities have been and or are able to be met.</p> <p>The Victorian Auditor General's Office (VAGO) be asked to investigate the effectiveness of the Worker Transition Service and Worker Transition Scheme and recommend improvements for future services and schemes.</p>	<p>2: The Victorian Auditor General's Office (VAGO) has a track record of investigating public sector entities to assess efficiencies, ensure transparency and accountability.</p> <p>The analysis of the outcomes of the LVA programs and schemes, including the Worker Transition Service should be conducted by an independent organisation with expertise, such as the Victorian Auditor General's Office (VAGO). Internal reviews are unlikely to deliver impartial evaluations.</p>

⁷⁴ Amendment in red

⁷⁵ Ballarat, Bendigo, Geelong, Mildura, Shepparton and Wodonga.

<p>3: That the Victorian Government continue to work with EnergyAustralia to:</p> <ul style="list-style-type: none"> Identify businesses across the supply chain in advance of Yallourn's closure Provide support to help these businesses adapt to the closure and, where possible, employ new workers. 	<p>3: That the Victorian Government will work with Energy Australia in advance of Yallourn's closure and identify affected businesses and quantify the impact of closure on those businesses.</p>	<p>3: An analysis of the number, type and magnitude of impact for businesses associated with Energy Australia's Yallourn Power Station is required to avoid failings associated with Hazelwood closure.</p>
<p>4: That the Victorian Government – including via the Latrobe Valley Authority – continue to work with industry and training providers, including Energy Australia, to:</p> <p>(i) Identify and support job creation opportunities in new and existing industries that are aligned with the skills, expertise and capabilities of enterprises equipped to provide new opportunities in the lead-up to, and following the closure of, the Yallourn mine and power station.</p> <p>(ii) Ensure that, as occurred through the Worker Transition Service and the Latrobe Valley Authority's partnerships with industry and Councils, training and support opportunities are available for workers to develop the skills needed to fill new employment opportunities, including in priority industries, and for businesses to develop and implement transition plans that enable new jobs to be created.</p>	<p>Amend/ Oppose</p> <p>RECOMMENDATION 4A: That the Victorian Government undertake a analysis of future Latrobe Valley job creation opportunities and prepare a strategic plan for employment in the Latrobe Valley in consultation with Energy Australia and release a detailed strategic jobs plan to the public by June 2023.</p> <p>RECOMMENDATION 4B: That the Victorian Government undertake a analysis of future transitional services and training requirements vital to support workers following the closure of Yallourn and prepare them for new job opportunities. Release a detailed transitional training plan to the public by June 2023.</p>	<p>4: Recommendations 4A and 4B focus on time dependant outcomes assigned to the Victorian Government, for increased accountability and urgency. The Committee recommendation fails to acknowledge that serious strategic planning is required and fails to stipulate a timeline for outputs that will deliver transparency to the public.</p>

<p>5: That the Victorian Government publish an outline of the functions of the Latrobe Valley Authority and Regional Development Victoria respectively, including how they relate to other parts of the Victorian public sector, other levels of government and industry.</p>	<p>Amend/ Oppose 5: That the LVA should be wound up and any future assistance programs should be implemented and managed through RDV – Gippsland.</p>	<p>5: The functions of the LVA could have been carried out by Regional Development Gippsland with a specified funding stream. Duplicating and overlapping functions lead to inefficiencies, including a lack of ‘process complete’ outcomes and involving protracted decision making with poor service delivery.</p>
<p>6: That the Victorian Government publish information relating to job creation involving the Latrobe Valley Authority’s work as it relates to business and industry in the Latrobe Valley and across the Gippsland region more broadly. This information where possible should include detail aligned with other methods of data collection in ABS, Commonwealth and Victorian Government modelling and reporting methodologies, including the sectors, modes and duration of employment. Information about the mode, duration and sector of direct and indirect work in the operation of the Hazelwood and Yallourn mines and power stations should also be published to enable meaningful comparisons where relevant.</p>	<p>Amend/ Oppose 6A: That the Victorian Government publish employment figures six monthly for the six rural LGA’s (Latrobe, Baw Baw, South Gippsland, Wellington, East Gippsland and Bass Coast) and changes to employment attributed to major industry closures, such as Hazelwood and Yallourn, and the native timber industry.</p>	<p>6: The information and source data should be aligned with official ABS <u>methodology and not with state government modelling and state government reporting</u> as that data can be manipulated, and may not always align with official ABS methodology which is the soundest basis.</p> <p>The Minority Report highlights that the Latrobe LGA has been impacted substantially more than the other five surrounding LGA’s and is the municipality of substantial job loss. Published employment data needs to be on an LGA basis not broad Latrobe Valley or Gippsland Region.</p>
	<p>New RECOMMENDATION 6b 6B: That the Victorian Government work more closely with the Latrobe City Council in relation to any future Government measures to aid the region’s economic transitioning given that Latrobe LGA has been most affected by past closures and is now the most disadvantaged LVA in the region.</p>	<p>6b: Significant evidence from the Latrobe City Council cited a lack of consultation and collaboration by the LVA⁷⁶. (Refer to Chapter 5 in the Minority Report)</p>

⁷⁶ Latrobe City Council, EIC, CHYPS Inquiry, Submission 5, 2021.

<p>7: That the Latrobe Valley Authority list its performance indicators on its website, including continuing to define its future role in terms of funding decisions and how it will enhance economic and social strengths.</p>	<p>Amend/ Oppose 7: That the Latrobe Valley Authority publish quarterly its <u>performance against its key performance indicators (KPI's)</u> on its website and publish annually its updated <u>business strategy</u>, describing how, when and what outcomes it will deliver to enhance future socio-economic outcomes for the Latrobe Valley.</p>	<p>7: The Minority Report Recommendation 7 is focussed on increased transparency which requires measurable and deliverable outcomes. It is one thing to 'list' performance indicators for public viewing and another to measure them against PKIs.</p>
<p>8: That the Latrobe Valley Authority identify gaps in community awareness of its work and continue to address these gaps or misunderstandings by promoting its work, including as it relates to the 2022–23 Victorian State Budget's allocation of \$7.5 million to continue and evolve its work on transition and development for the Latrobe Valley Region.</p>	<p>Oppose 8: New RECOMMENDATION That the LVA focus on delivering effective transition outcomes and not spend any of the 2022-23 allocation of \$7.5 million on self promotion.</p>	<p>8: The LVA should stop wasting its time and money on peripheral matters such as its image and focus on delivering as much economic growth and new sustainable jobs with the limited budget, given that administration and operational costs will consume most of the \$7.5M 2022-23 Budget.</p>
<p>9: That the Latrobe Valley Authority identify and publish a timeline for its work to develop and implement localised transition and development across the Latrobe Valley, and the benchmarks against which it will operate.</p>	<p>Oppose 9: See Minority Recommendation 7</p>	
	<p>9A: New RECOMMENDATION 9a: That the Victorian Government discard the Victorian Forestry Plan and continue with sustainable harvesting of native forests. The Victorian Government must work with VicForests to continue to maintain practices which enhance healthy, sustainable, and productive forest systems.</p>	<p>9A: A Parliamentary Report highlighted that the Victorian Forestry Plan will not deliver the environmental outcomes it purports, nor will new plantations to ensure sufficient wood volume to accommodate the loss of 1 million m3 from Victoria's sustainably harvested native forests. The 'Forestry Plan' is likely to contribute to a further loss \$5.6 billion in Gross Regional Product and the loss of 3,660 jobs over the next 20 years in disenfranchised rural communities.⁷⁷</p>

⁷⁷ Victorian Parliamentary Inquiry into Ecosystem Decline, The Nationals and Liberals Minority Report, Chapter 6.

	9b: NEW RECOMMENDATION 9b: The Victorian Government prioritise research funding to Gippsland institutions, such as Federation University to enable localised procurement of innovation, research and development and associated training. This will deliver new jobs and help offset some of the job loss under closure of coal-fired power stations.	9b: Federation University supports the framework of deep engagement across community, government, industry, and education including undertaking the important discovery and engagement work to develop future priorities. It is disappointing that most of the research funding over the last three to four years has been directed to education institutions outside of Gippsland ⁷⁸ .
10: That the Victorian Government develop a residual risks policy for the mines at Hazelwood and Yallourn. The policy should address risks associated with ground instability and fire.	10: Support & Amended That the Victorian Government develop a residual risks policy for the mines at Hazelwood and Yallourn. The policy should address risks associated with ground instability, fire and toxic or dangerous materials.	

⁷⁸ Jane Oakley, EIC CHYPS Submission 50, 2 November 2021.

Appendix 2: Community Stakeholder Recommendations ignored by Committee Report

RECOMMENDATION A: Victorian Government to seed investment in the development of technologies and people to broaden the use of lignite for a sustainable future e.g. carbon neutral hydrogen (with carbon capture, use & storage), production of fertilizers, low-cost carbon fibre, graphene for the electronics industries and activated carbon used in food and health industries and for filtration to clean water and sewage.

Support for a recommendation of this nature came from many submissions including:

“The region needs new project developments that are similar in nature to a Power Generation project, and the continued leveraging of brown coal as the energy source. An obvious pathway would be a Hydrogen Production Facility utilising brown coal as the feedstock. A domestic Hydrogen facility would support the development of downstream processing facilities to produce valuable commodities for the State such as Ammonia and/or Urea Fertiliser.”⁷⁹

“Government industry and the community to adopt a proactive approach to building a new industrial base which could see new industries in the Latrobe Valley focused on production of fertilizers, low-cost carbon fibre, graphene for the electronics industries and activated carbon used in food and health industries and for filtration to clean water and sewage. The time to commence this investment was 4 years ago when the decision to shut down Hazelwood was made. The best time is now”.⁸⁰

“With a world class carbon resource base and a strong history of an innovation by Australian industry, the Latrobe Valley has an opportunity to transition to a global centre for development of carbon technology to underpin a sustainable and low emission future.”⁸¹

“Adopt a commercial HESC project for its potential to create thousands of jobs and help transition the region from coal fired power stations to new clean industries and create a thriving hydrogen export industry with huge local economic, environmental and community benefits”.⁸²

“Hydrogen can make a significant contribution to the required transition to clean energy by replacing existing fuels and reducing CO2 emissions across a broad range of applications. The long term success of this project, will rely on the development of Carbon Capture and Storage technology which is progressing through the CarbonNet project supported by the state and federal government.”⁸³

RECOMMENDATION B: Victorian Government establish an industry development fund now, ahead of Yallourn’s closure, to be directed to growing existing businesses and attracting new industries to the region to assist a smooth transition for the local economy.

Rationale: Providing such funding ahead of Yallourn’s closure would give businesses time to scale up or make investments decisions that create future employment opportunities not only for Yallourn’s workforce but the loss of jobs in the forest industry and supporting industries.

Comment: Recommendation along these lines supported in submissions by Jane Oakley, Liz Westcott from Energy Australia, Tony Cantwell:

“Funding directed to growing existing businesses and attracting new industries to the region ahead of Yallourn’s closure could assist in a smooth transition for the local economy. Providing such funding ahead of Yallourn’s closure would give businesses time to scale up or make investment decisions that

⁷⁹ Submission 43, Gippsland Infrastructure – Roland Davies

⁸⁰ Submission 17, Australian Carbon Innovation

⁸¹ Submission 17, Australian Carbon Innovation

⁸² Submission 29, Ms Yuko Fukuma, Kawasaki Heavy Industries on behalf of Hydrogen Energy Supply Chain Project

⁸³ Submission 55, AGL Energy, 30 November 2021

create future employment opportunities not only for Yallourn's workforce but for the broader community".⁸⁴

"To date, we have not seen any significant new large-scale business investment that will present significant job opportunities to offset those lost with the closure of Hazelwood Power station and associated supply chain businesses".⁸⁵

"Gippsland needs large-scale investment (to replace outgoing industry). The region needs commitment and action from Commonwealth and Victorian Governments to target and attract new investment to advance business development by providing:

- Market certainty (confidence) for existing businesses to invest.*
- Work with regional leaders to develop packages to attract new large-scale business.*
- Deploy dedicated 'Invest Victoria and Austrade' resources to Gippsland's mission to attract new large-scale business investment (working alongside industry and regional leaders)".⁸⁶*

"A state government/RDV focus on gaining potential investment through existing organisations and agencies would be of significant assistance, including Regional Development Australia and local government economic development teams, with support from Committee for Gippsland. However, a multitude of agencies and government departments at the client-face can make it confusing for industry and business looking to further invest in the region. Resourcing for the task should be strategically allocated through minimal bureaucracy and not spread across multiple agencies and organisations duplicating services."⁸⁷

On the closure of traditional employers and the need for new industries, Group General Manager, Operations, AGL, Mr Steve Rieniets said:

"I mean, here it is a bit like musical chairs, right? There are going to be less chairs in the game, right? So we need to get more chairs into that circle, right, and those chairs will not be power stations. It needs to be other industries putting their chairs into that circle so everyone gets a chair, right? I think that is the name of the game here".⁸⁸

RECOMMENDATION C: That the Victorian Government approve Yallourn's rehabilitation plan well ahead of Yallourn's closure and prioritise Yallourn workers for employment in rehabilitation of the Yallourn mine and operation of EnergyAustralia's new utility-scale battery.

Rationale: Approval of a final rehabilitation plan well ahead of Yallourn's closure will help ensure workers can transition immediately to work on Yallourn's rehabilitation without any gap in employment.

"Prioritise Yallourn workers for employment in rehabilitation of the Yallourn mine and operation of EnergyAustralia's new utility scale battery. Approval of a final rehabilitation plan well ahead of Yallourn's closure will help ensure workers can transition immediately to work on Yallourn's rehabilitation without any gap in employment".⁸⁹

⁸⁴ Submission 25, Liz Westacott, Energy Australia, 21 October 2021

⁸⁵ Submission 51, Jane Oakley, 21 August 2021

⁸⁶ Submission 51, Jane Oakley, 21 August 2021

⁸⁷ Submission 56, Committee for Gippsland, 13 December 2021

⁸⁸ Mr Steve Rieniets AGL, EIC CHYPS, Transcript, 3 March 2022

⁸⁹ Submission 25, Liz Westacott, Energy Australia, 21 October 2021

“Securing this approval will be a priority for EnergyAustralia over coming years and we eagerly anticipate the finalisation of the regulatory framework for rehabilitation that will make this possible”.⁹⁰

RECOMMENDATION D: That the Victorian Government support a commercial HESC Project.

Rationale: A commercial HESC⁹¹ Project has the potential to create thousands of jobs and help transition the region from coal fired power stations to new clean industries and create a thriving hydrogen export industry with huge local economic, environmental and community benefits

NOTE: The Victorian and Australian Governments have each contributed \$50m for the delivery of the pilot as a practical investigation of a viable new industry for the Latrobe Valley and Australia.⁹²

“A commercial HESC Project has potential to create thousands of jobs, enabling the transition for workers in coal-fired power stations and mines to a range of new, transformative industries”⁹³

“The region is also blessed with quality industrial infrastructure and natural resources that provide a strong foundation for hydrogen development”⁹⁴.

“The Federal Government has identified Latrobe Valley as a future hydrogen hub, with the Committee for Gippsland leading considerable efforts under the NERA Hydrogen Cluster; which includes Federation University as a key partner”.⁹⁵

“The Hydrogen Energy Supply Chain pilot project, CarbonNet and Gippsland’s Renewable Energy Zone are all key projects for the region that will require ongoing State and Federal Government support”.⁹⁶

RECOMMENDATION E: That the Victorian Government and operators ensure that existing users and alternative potential uses of Latrobe Valley water are protected as they plan filling the three Latrobe Valley Mines with water.

Comment: A submission from Hazelwood Power advocated filling the mines beginning with Hazelwood, followed by Yallourn and then Loy Yang. Based on current timetables, this filling could be completed over the next 40-50 years. Creation of a lake at Morwell would give the Latrobe Valley a new impetus as a residential centre (relatively close to Melbourne with good transport links), enhance the Latrobe Valley’s appeal as a destination and enhance Gippsland by offering another water-based activity centre.

Another submission raised geotechnical issues and competing demands for water.

“A large lake-centred recreational precinct less than two hours from Melbourne, surrounded by a mixture of passive and adventure recreation, intensive agriculture and horticulture, industry and possibly accommodation or residential areas could change the face of the Latrobe Valley. It would become a magnificent resource for local communities, a destination in its own right, and a ‘destination on the way’ to existing well known attractions across the Gippsland region”. –⁹⁷

⁹⁰ Submission 25, Liz Westacott, Energy Australia, 21 October 2021

⁹¹ Hydrogen Energy Supply Chain (HESC)

⁹² Submission 29, Ms Yuko Fukuma, Kawasaki Heavy Industries on behalf of Hydrogen Energy Supply Chain Project

⁹³ Submission 29, Ms Yuko Fukuma, Kawasaki Heavy Industries on behalf of Hydrogen Energy Supply Chain Project

⁹⁴ Submission 29, Ms Yuko Fukuma, Kawasaki Heavy Industries on behalf of Hydrogen Energy Supply Chain Project

⁹⁵ Submission 50, Federation University, November 2021.

⁹⁶ Submission 50, Federation University, November 2021.

⁹⁷ Submission 30, Engie Hazelwood, 27 October 2021.

"In its end state, Hazelwood will benefit from a full lake; a proud focal point for all activities, visible from many aspects within the site. As the powerhouse for new communities, the lake will be the first of its kind to be fully utilised".⁹⁸

"The Mine Rehabilitation proposals involve consideration of dry and wet mine options. Water used in the rehabilitation process should be assigned an economic value, and it is clearly essential for the Government and community to understand how any water resource is being accessed, the long-term implications in respect to regional water sustainability, and the implications for longer term economic development capability and environmental stewardship".⁹⁹

"GREF strongly submit that decisions on how we share and manage water resources needs to be carefully assessed having regard to intergenerational/regional interests and the critical need for decisions to be based on the best scientific and environmental considerations".¹⁰⁰

RECOMMENDATION F: Victorian Government establish a Renewable Energy Industrial Precinct within the Latrobe Valley to provide access to:

- Cheaper infrastructure and energy (electricity and heat) that will be shared across multiple large energy users lowering energy bills and production costs;
- Access to a skilled workforce that can be trained in the development and operation of efficient, zero-emissions industrial processes; attract businesses and investors, support local industries, secure existing jobs and create new jobs; and
- Provide an opportunity to commercialise new technologies and solutions onshore, by attracting start-ups to co-locate with established industry players.

"The Victorian Government through its Renewable Development Plan (RDP) has acknowledged that Gippsland has potential as a renewable energy zone (REZ) and outlined plans for the Gippsland Renewable Energy Zone (GREZ)".¹⁰¹

"With the development of new energy projects comes potential for new network connections and demand for significant new infrastructure to be constructed".¹⁰²

RECOMMENDATION G: That the Victorian Government address energy reliability for Victorians by replacing energy shortfalls in a strategic and time critical phase as a result of potential reliability risks from closure of Yallourn and earlier closures of other coal fired power stations.¹⁰³

RECOMMENDATION H: That the Victorian Government focus more energy and forestry research funding to education institutions within the region with the expertise who can deliver local recommendations and future priorities with a physical presence in the region¹⁰⁴

Comment: Federation University has not been provided the opportunity to lead the majority of the Gippsland based engagement and research across the Smart Specialisation program within the above sectors including timber transition.

"Federation University in Gippsland has the local expertise and capability to lead this work".¹⁰⁵

⁹⁸ Submission 30, Engie Hazelwood, 27 October 2021.

⁹⁹ Submission 57, John Mitchell, Gippsland Regional Executive Forum, 15 December 2021.

¹⁰⁰ Submission 57, John Mitchell, Gippsland Regional Executive Forum, 15 December 2021.

¹⁰¹ Submission 56, Committee for Gippsland, 13 December 2021.

¹⁰² Submission 056 Committee for Gippsland

¹⁰³ Multiple submissions

¹⁰⁴ Submission 50, Federation University, 2 November 2021

¹⁰⁵ Submission 50, Federation University, 2 November 2021.

RECOMMENDATION I: That the Victorian Government adopt a local procurement policy.¹⁰⁶

Rational: When it comes to supporting communities facing uncertain futures as a result of closing industries Government actions speak louder than words.

RECOMMENDATION J: Victorian Government prioritised alternate sources of water such as the 2.7 ML capacity of the Gippsland Water Factory and use times of high rainfall events as an opportunity to advance filling voids under any wet mine solution.

*“Other water resources such as those held by Gippsland Water should also be considered and where appropriate fully leveraged. Government should ensure it is looking at the full range of natural water resources available before considering alternative resources such as manufactured water/desalination. Existing alternative sources of water production at a local level should also be prioritised in any wet mine solution – such as the 2.7 ML capacity of the Gippsland Water Factory”.*¹⁰⁷

RECOMMENDATION K: That the Victorian Government rescind its policy to exit from native forest timber supply by 2030 given that the disruption from the exit coincides with disruption from the closure of Yallourn and the planned ramp up in plantation supply as not occurred, nor is it likely to be effectively implemented given the very high land prices that are prohibitive for commercial plantations.¹⁰⁸

Rational: Native forest timber is our most ecologically sustainable building material. Australian forestry is a world class and sustainable renewable industry that should be expanded so that Australia can be self-sufficient in timber resource rather than importing timber from sources that may not have been grown to the same standards (environmental, safety and sustainability). Socioeconomic impact of ceasing native forest log supply will cause considerable socioeconomic loss and coinciding with the closer of coal-fired power generation will create considerable socioeconomic issues for the Latrobe Valley and Gippsland. Establishing sufficient area to replace the ca. 1 million cubic metres currently sourced from native forests is infeasible.

“The plan to stop timber from native forests is flawed due to:

- 1. There is not enough time to replace this resource with the planned promise plantation development. Even with trees planted today there will be a gap of 10-20 years before they could begin to replace the native resource*
- 2. The native areas being locked up are regrowth timber anyway, with the lack of management of this resource it will end up being a severe fire risk and is likely to be destroyed by bush fire within 20 years of lock up.*
- 3. Gippsland is well suited due to soil, weather, and rainfall to grow quality trees”.*¹⁰⁹

“The Victorian Forestry Plan fails to acknowledge the current decline in plantation supply and the considerable and possibly insurmountable challenges to establishing new plantations. The ‘Forestry Plan’ also ignores the 20 to 30 year lead time required. The challenges include very limited availability of suitable land, high land cost, poor plantation log quality, unsuitability of plantation sawlogs for existing mills and the large scale required for returns on investment in new mill technology. Replacing native forest timber with new plantations on farmland threatens to push up farmland prices, crowd out farmers and will lead to diminishing scale economies in agricultural production and food processing. Farmland in Gippsland is scarce.

*Over the last 21 years misallocation by policy and exacerbated by wildfire loss has resulted in the loss of \$6.6 billion Gross Regional Product and 5,560 jobs over the last 21 years. The ‘Forestry Plan’ is likely to contribute to a further loss of \$5.6 billion in Gross Regional Product and the loss of another 3,660 jobs over the next twenty years”.*¹¹⁰

¹⁰⁶ John Mitchell Chair, Gippsland Regional Executive Forum, Submission 57.

¹⁰⁷ Submission 57, John Mitchell, Gippsland Regional Executive Forum, 15 December 2021

¹⁰⁸ Submission 58, John Cameron, 16 December 2021 & Submission 26, Mr Ian Reid, 21 October 2021.

¹⁰⁹ Submission 26, Mr Ian Reid, 21 October 2021.

¹¹⁰ Submission 58, John Cameron, 16 December 2021.