



Electricity and Energy Sector Plan Discussion Paper

Mining and Energy Union, April 2024

The Mining and Energy Union (MEU) appreciates the opportunity to provide a submission on the Electricity and Energy Sector Plan discussion paper.

The MEU represents more than 22,000 members working across Australia's mining and energy industries, including in underground and open cut coal and metals mining, coal-fired power generation, coal ports, and iron ore mining and transportation.

The transition to Net Zero will dramatically reshape Australia's economy, with key energy regions facing potentially significant socioeconomic impacts. Government policy has a critical role to play in ensuring that the transition is equitable and orderly – which means supporting the workers and regions which have powered Australia for generations to prosper in the future. The six sectoral decarbonisation plans being developed by the Government are an opportunity to set the energy transition down a more orderly path.

The Electricity and Energy Sector Plan will be central to the success of all other sectoral plans and the prospect of a genuinely just transition for energy regions. For example, long-term energy security fundamentally underpins the development of new manufacturing industries that can provide quality employment for communities impacted by impending coal-fired power station closures.

Our submission deals with selected discussion questions that are of most relevance to MEU members and the industries they work in. We acknowledge that the ACTU has also made a submission which deals with the discussion paper more broadly.

5. What actions are required to establish low carbon fuel industries in Australia, including enabling supply and demand, and what are the most prospective production pathways?

The development of a low-emissions hydrogen industry not only presents an opportunity to reduce domestic emissions, but also to support key export partners in achieving their own energy transition and emissions objectives.

Important partner countries, like Japan and South Korea, are highly import-reliant for their energy security. Lacking Australia's natural advantages in harnessing renewable energy sources, they will look to Australian exports to support their energy transition, just as they have looked towards our coal exports to supply their power stations and steelworks for decades. They are already showing particular interest in Australia as a source of hydrogen exports.

With the support of major Japanese energy utilities, the Hydrogen Energy Supply Chain project successfully completed its pilot phase in early 2022. This blue hydrogen project demonstrated the production and transportation of hydrogen from Victoria to Kobe, Japan, utilising the existing

resources and skill-base of the Latrobe Valley. The Japanese Government has since committed around \$2 billion to support the progression of the project to commercial demonstration.¹ This is one of many examples of international investment in Australia's future low-emissions industries.

The Australian Government's Hydrogen Headstart program directs important attention towards the nascent renewable hydrogen industry. However, renewable hydrogen remains a high-cost option, which may hamper the timely establishment of supply chains for hydrogen export. The cost-gap between renewable hydrogen and blue hydrogen, for example, is expected to persist until at least the end of the decade.²

Blue hydrogen projects offer a cost-effective pathway for quickly setting up a domestic hydrogen industry and thereby positioning Australia to play a world-leading role in an eventual market for renewable hydrogen. Australian governments at all levels should facilitate foreign investment in low-emissions hydrogen projects, regardless of technology. Cooperation between state and federal governments will prove particularly important in smoothing the pathway for projects to proceed.

8. What actions are required to ensure workforce requirements for the energy transformation are met, while supporting equitable outcomes?

This discussion question seeks views on opportunities for regional workforces and workers in fossil fuel industries. As the union for coal mining and coal power workers, our members' futures in a rapidly changing industry are a major concern in our public policy engagement. The Net Zero Economy Authority, when established, will play a critical role in ensuring workers displaced by the energy transition are supported, directing investment towards the diversification of their local economies, and creating new job opportunities.

The workforce in Australia's coal power sector is skilled, energy-literate, and ideally suited to fulfil the workforce needs of executing the Electricity and Energy Sector Plan. Coal regions also benefit from their existing connections to the electricity grid. However, to ensure a genuinely 'just transition' for these workers and their communities, renewable energy generation projects will not be enough. Such projects demand short-term construction labour but offer few long-term ongoing jobs. Jobs in the renewable energy sector have also developed a reputation among workers as being poorly paid and insecure. Other forms of heavy industry, including manufacturing, will be necessary to sustain the economy and wellbeing of energy communities through the transition and beyond.

Job creation in affected regions is time-critical – coal power closures are accelerating, but major delays in the development of new transmission and generation infrastructure risk becoming the norm. If the timing of generator closures and new developments do not align, any local employment benefits from new projects will come too late.

¹ <https://www.hydrogenenergysupplychain.com/japan-commits-aud2-35-billion-to-establish-liquefied-hydrogen-supply-chain/>

² IEA Global Hydrogen Review 2023, p. 81 – see Figure 3.11 for levelised cost of hydrogen production in 2021, 2022, and modelled for 2030.

Actions that the Electricity and Energy Sector Plan should consider in order to attract the existing energy workforce to new clean energy projects include periods of income maintenance, pegged at workers' previous earnings at coal-fired power stations, as well as support for retraining during paid work time. Retraining and reskilling strategies will also need to be sensitive to the widely different prospects faced by workers with trades qualifications and those without. Many of the highly specialised skills in coal-fired power stations are less transferable than trades qualifications, and special effort may be required to ensure these workers are afforded the same opportunities.

Other complexities to consider:

- To operate safely until scheduled closure dates, safe staffing levels at coal-fired power stations must be maintained until the final generating unit is switched off. In some cases, this may require special efforts towards staff retention. Policy initiatives which support power station workers into roles in the clean energy sector must be careful not to disadvantage those workers who stay on until closure dates (and beyond to work on decommissioning).
- The energy transition will also displace a large workforce at 'captured' coal mines. With no infrastructure or customer-base for export, these mines will close alongside their associated power station. Workforce transition initiatives should consider the captured coal mining workforce alongside the coal-fired generation workforce – this is the approach taken in the Energy Industry Jobs Plan proposed by the *Net Zero Economy Authority Bill 2024*.
 - Relatedly, the Energy and Electricity Sector Plan at-large must be cognisant of the integral links between captured coal mines and associated generators, which extend to supply contract arrangements and key infrastructure. To achieve equitable outcomes for the workforce and local communities, the impacts that closures and operational changes in the coal power sector have on captured coal mines must be considered within any government policy or plan for the electricity sector.

10. What social licence and circular economy aspects should be considered as part of the pathway for the energy transformation?

Demonstrable social benefits for impacted communities are a critical element of social licence for renewable energy generation. The creation of quality jobs in transitioning energy regions is central to obtaining and maintaining community support for individual projects and for the entire energy transition overall. The renewable energy industry's reputation for low pay, poor work conditions, exploitation of temporary labour, and hostility towards unions, has already damaged the social licence of renewable energy. Addressing these issues should be a government priority – for example, through placing obligations to abide by strong labour standards on companies winning government contracts, or benefitting from government incentives and concessions, to develop generation and transmission infrastructure. The ACTU submission explores the importance of fair labour standards in new clean energy industries in more detail.