



**CIVIL CONTRACTORS
FEDERATION**
AUSTRALIA Ltd.

Submissions to the Electricity and Energy Sector Plan 2024



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Electricity and Energy Sector Plan Taskforce

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Submissions to the Electricity and Energy Sector Plan

The Civil Contractors Federation National (CCF) Civil Contractors Federation is the only Registered Organization for the civil infrastructure industry nationally, representing 1,800 businesses nationally welcomes the opportunity to provide a submission on the Electricity and Energy Sector Plan released by the Department of Climate Change, Energy, the Environment, and Water with consultations in April 2024.

Civil Contractors Federation Australia (CCF) appreciates the opportunity to provide feedback to the Electricity and Energy Sector Plan is instrumental in guiding the energy sector's transformation in alignment with Australia's commitment to reducing greenhouse gas emissions and achieving net zero by 2050.

The Electricity and Energy Sector Plan is one of 6 decarbonisation sectoral plans being developed under the Net Zero 2050 Plan to help reduce emissions across the economy with a focus on the circular economy as a cross-cutting issue for all 6 sectors.

The Electricity and Energy Sector Plan is proposed to outline the path to decarbonise the electricity and energy sector out to 2050, supporting emissions reduction across the economy while ensuring reliable, secure and affordable energy supply.

Our submission addresses critical areas that we believe require particular focus to ensure the plan not only meets its intended goals but also maximizes benefits for all stakeholders involved. We also touch on the connections of Electricity, Energy and the Built Environment which has its own sector development plan to be considered.

Long-Term Planning and Industry Collaboration

To avoid the pitfalls of a boom-and-bust cycle in infrastructure development, consistent and transparent long-term planning is essential.

We know the destination in 2050 is net carbon zero for Australia. We also know the road to this destination requires civil infrastructure to be the bedrock and we can't reach this destination without a concrete road map.

The CCF calls upon the Government to implement a detailed long-term plan that aligns civil investment with sectoral transformation goals and provides clear guidelines and timelines for industry stakeholders.

The International Energy Agency estimates that approximately USD \$2.8 trillion was invested in the energy space in 2023, with USD \$1.7 trillion going to clean energy, including renewable power, nuclear, grids, storage, low-emission fuels, efficiency improvements, and end-use renewables and electrification.

Out of the six sectoral plans CCF has a fundamental role in supporting electricity and energy, and built environment with interest also in the other 6 sectoral plans for each major sector of the economy:

- electricity and energy; industry; resources; the built environment; agriculture and land transport.

A National Renewables Infrastructure Plan would allow the Government and Industry to attract international capital to invest in the skills and capabilities required to deliver the infrastructure necessary to achieve our 2050 targets.

Our ability to support greater capacity in roads, water and sewerage which are housing enabling infrastructure is also critical to see the current collapse in housing resolved and will also reflect this briefly in our submission.

Mobilizing Investment

It is imperative that significant government investment is channelled into infrastructure critical for the energy transformation. This should focus on renewable energy sources and include robust support for net-zero industrial precincts, which are vital for lowering infrastructure costs and directing new industry investments.

It takes up to a decade to get approvals for a wind farm in regional NSW, yet less than a year to complete the civil works for 10-15 wind turbines powered into the grid to provide

low emission energy to households. With three out of four coal plants scheduled to shut down in this region in the next ten years, energy uncertainty, increased costs and brownouts are likely for households and small businesses unless resolved.

The CCF reiterates the need for reform and action in government procurement processes, risk allocation, and the industry-wide skills shortage, particularly as it relates to a future influx of 'Green Investment'.

Government will be required to ensure a balanced and reasonable tender system at all levels of Government, to ensure local contractors are not disadvantaged.

The CCF encourages the Government to invest in meeting our 2050 targets, rather than regulating a path to net zero.

Enabling Electrification and Alternative Fuels

As the plan highlights, electrification and the development of alternative low carbon fuels are necessary pathways to decarbonization and meeting our targets; however, collaboration with the civil construction industry is essential.

Noting positive steps from the Commonwealth to establish a New Vehicle Efficiency Standard, the requirements and equipment in the construction industry are completely different than for motorists or tradespersons noting the remoteness of many projects, and the towing capacity of electric vehicles.

The CCF proposes that the Commonwealth should develop a strategy to assist the building and construction/civil sector in adapting to a net-zero economy.

The CCF supports the uptake of hybrid vehicles and electric vehicles and the integration of hydrogen, and low-carbon liquid fuels into our national energy strategy.

This approach should be comprehensive, addressing the needs of both urban and regional areas.

Building Australia's Clean Energy Workforce

The transformation of the energy sector requires a skilled workforce. We urge the Government to prioritize specialized skills training and educational programs that can fill the current skills gap and support the forthcoming clean energy industries.

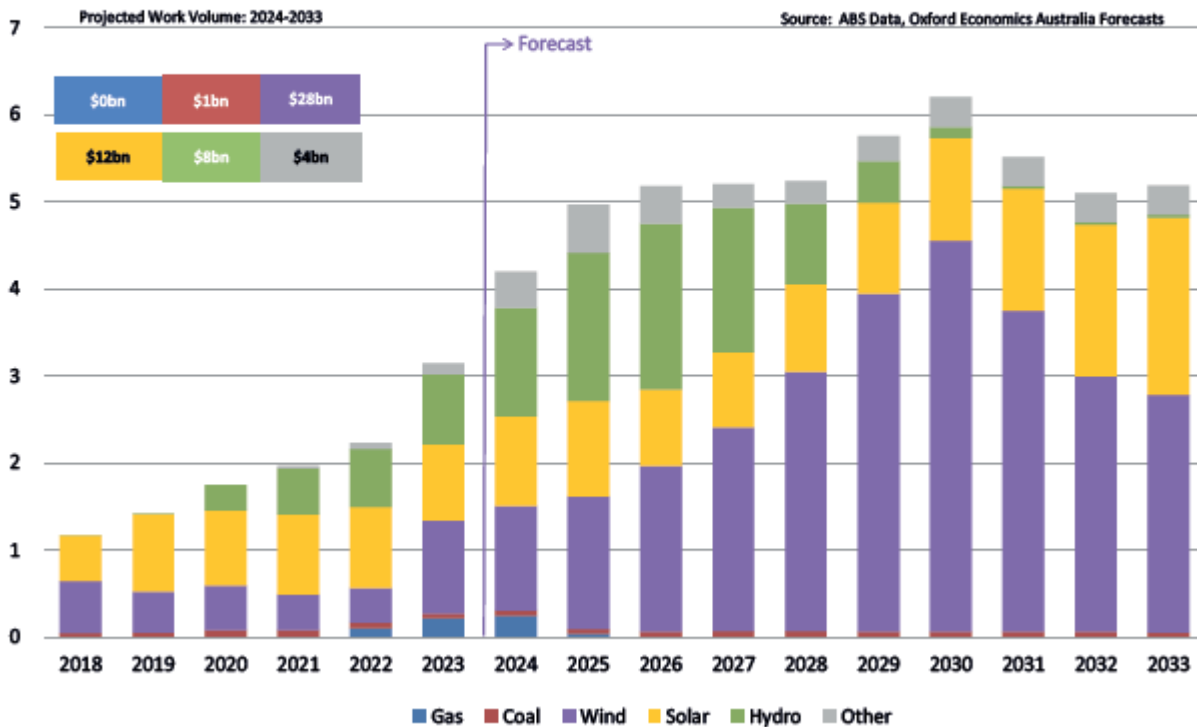
Infrastructure Australia's 2023 Market Capacity Report has highlighted the opportunity for governments at all levels to work more collaboratively with the construction sector to urgently address issues threatening Australia's future infrastructure, housing, and energy agenda.

As per the Infrastructure Australia 2023 Market Capacity Report, there is currently a projected shortfall of 229,000 full-time infrastructure workers. The report notes that with the existing workforce at 177,000 employees, this is a 129% shortfall of workers needed to meet demand.

Long-term planning is required to address these shortages, to enable the industry to deliver the infrastructure required to meet the 2050 target. Pinch points include long lead times into an infrastructure role, high attrition rates, the need for a focus on skilled migration, and a need to upskill the current workforce in emerging skills.

Thousands of our contractors across Australia building roads, schools, and hospitals should have a clear understanding of when the sectoral plans require them and their businesses to play the key role in supporting the development of energy infrastructure. It is fair to say that they have a growing pipeline with the period ahead to see significant demand for their skills as demonstrated driven by the energy transition as found by the recent CCF NSW Civil Oxford Economics Australia - Industry Forecast to 2033 report released in April 2024 and noted below.

NSW Electricity Generation Work Done (\$bn Current Dollars)



As the report shows, electricity construction activity rose strongly in FY2023, with an annual growth rate of 54.0%. This reflects strong investment across the entire electricity network (generation, transmission and distribution). We expect total electricity construction activity to grow by 19.9% in FY2024 and then forecast an average annual growth rate of 5.3% over the rest of the forecast period. The sector will be supported by work in the transmission subsector and generation subsector through renewable energy projects (wind and solar) and storage projects (other and hydro).

What this points to is a significant growth in skills required going forward to support the energy transition which is indicative of what is the case nationally. The fundamental concern that needs a sharp awakening is the requirement to bolster civil skills training and in particular apprenticeships for base civil works that are required in growth demand.

Critically, the Civil Apprenticeships required to sustain the civil workforce to deliver current infrastructure pipeline, are not recognized on the new Federal Government's Australian Apprenticeship Incentive Scheme or Priority List.

The Australian Apprenticeships Priority List is used by the Australian Apprenticeships Incentive System (AAIS), to provide additional financial support to apprentices, trainees and their employers in order to boost apprentice numbers and support completions in priority occupations. Civil Apprentices are not eligible as they are not listed on the Priority List.

The Civil Contractors Federation is the peak national representative body for the Australian civil construction industry comprising over 1,800 civil construction companies across the construction supply chain.

In particular the prioritisation and upskilling of relevant employees must be aimed at encouraging apprentices and trainees to pursue work in areas of skills shortage, complete their training, and go on to have successful long-term careers.

Civil workforce capability and capacity will decline without apprenticeship pathways. Without funding support parity there is no incentive for individuals to enter critical civil trades to support critical work force sustainability,

The reality here is that you can't spend a dollar in energy transition until there is a dollar spent in civil. In particular the base civil skills and the energy generation skills that are supported by the civil industry is needed.

Equitable Outcomes for Housing and Communities

It is vital that the transition to a clean energy economy does not disproportionately impact vulnerable groups. We recommend the implementation of policies that ensure equitable access to the benefits of energy transformation, including targeted support for low-income households and businesses facing transition challenges.

In terms of built form, housing makes up just under 20 per cent of Australia's carbon footprint. Some of the challenge is the provision of net carbon zero emissions electricity and energy which has been addressed above, however the replacement of 1 and 2 star energy rated homes with brand new 7 star low energy reduces the carbon footprint and reduces future usage. It also provides efficient housing that is warm in winter, cool in summer and low cost which reduces the cost of living.

CCF has called for greater investment into housing enabling infrastructure as the latest ABS numbers show continued collapse of new supply of new low cost, low energy efficient housing. With new home builds having record declines from 235,101 home starts in the 12 months to June 2016 to drop back to 161,342 of housing starts as of today, a reprioritizing of housing enabling infrastructure, is required.

This new data shows the shocking reality that the nation simply is busting at the seams in terms of population growth with not enough housing and the infrastructure that precedes it to increase low emission new builds and to bring on the replacement or substantial upgrade of existing high carbon emitting housing.

We are running Australian cities on 50-100 year old infrastructure and we hope to see density uplift of low energy multi-residential. Infill and brownfield developments can't go ahead without an increase in the capacity of the water, sewerage and roads infrastructure.

In simplest terms not one dollar in housing can be spent until a dollar has been spent in civil and a refocus of housing enabling infrastructure boost in both greenfields and brownfields areas is critical. Investment in low energy is not mutually exclusive from the built environment planning if policy and practice is to have equitable outcomes for community.

The CCF recognise the importance of transitioning to Net Zero, but stresses that implementation must factor the record high supply costs that are currently impacting the Civil Sector.

In Conclusion

Thank you for considering our submission. We look forward to the opportunity to collaborate closely with the Taskforce to achieve a sustainable, secure, and prosperous energy future for Australia.

We commend the Taskforce's efforts in drafting a comprehensive sector plan and are eager to contribute to its refinement and implementation.

About Civil Contractors Federation Australia

Civil Construction refers to the design, construction, and maintenance of the physical and naturally built environment, including public works such as roads, bridges, dams, airports, drainage, energy, and sewerage systems, pipelines, structural components of buildings, and railways.

Across Australia and our great State, Infrastructure Projects have been and remain the cornerstone of Australia's communities and cities. Infrastructure is a billion-dollar industry supporting our everyday way of life and every business. Civil Construction is its foundation industry, without the civil industry nothing is built.

The Civil Contractors Federation is the registered organization for the civil infrastructure industry nationally, representing 1,800 businesses ranging from those smaller business to a sizeable group of employers with around 1,000 employees each.

CCF is the only Registered Organisation recognised as the peak body representing the industry nationally for:

- Infrastructure Policy;
- Industrial Relations;
- Training and Workforce Development;
- Energy Transition including wind farms;
- Construction of all major roads, rail, bridges, ports, water, sewerage, and utilities.