

Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

Response received at:

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Response ID:

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- 1 Confirm that you have read and understand this privacy notice.
Yes
- 2 Please indicate how and if you want your submission published.
Public
- 3 Published name
Civil Contractors Federation
- 4 Confirm that you have read and understand this declaration.
Yes
- 5 First name
Not answered
- 6 Last name
Not answered
- 7 Email
Not answered

- 8** Phone
Not answered
- 9** Who are you answering on behalf of?
Organisation
- 10** Organisation name
Civil Contractors Federation
- 11** What best describes you or your organisation?
Not answered
- 12** What sector do you represent?
Not answered
- 13** What state or territory do you live in?
Australian Capital Territory
- 14** Postcode
2600
- 15** What area best describes where you live?
City
- 16** 1. Do you support the proposed guiding principles?
Not answered
- 17** 1.1 Please add details to your response.
Not answered
- 18** 2. Do you support the use of the avoid-shift-improve framework as a tool to identify opportunities for abatement?
Not answered

- 19** 2.1 Please add details to your response.
Not answered
- 20** 3. Do you agree the development of a national policy framework for active and public transport will support emissions reduction?
Not answered
- 21** 3.1 Please add details to your response.
Not answered
- 22** 4. What should be included in a national policy framework for active and public transport and how should it be developed?
Not answered
- 23** 5. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the movement of people contributes to transport emissions reduction?
Not answered
- 24** 6.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure that the movement of goods contributes to transport emissions reduction?
Not answered
- 25** 6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?
Not answered
- 26** 7. Do you agree with the proposed net zero pathway for light road vehicles?
Not answered

- 27 7.1 Please add details to your response.
Not answered
- 28 8. The Australian Government is currently developing an Australian New Vehicle Efficiency Standard and has already begun to implement actions in the National Electric Vehicle Strategy.8.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce light vehicle emissions?
Not answered
- 29 8.2 How would these actions address the identified challenges and opportunities to reduce light vehicle emissions?
Not answered
- 30 9. Do you agree with the proposed net zero pathway for heavy road vehicles?
Not answered
- 31 9.1 Please add details to your response
Not answered
- 32 10. The proposed pathway for heavy road vehicles relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels.Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.
Not answered
- 33 10.1 Please add details to your response. Why did you rank them in that order?
Not answered
- 34 11. What role should low carbon liquid fuels play in the heavy vehicle

decarbonisation?

Not answered

35 12. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce heavy vehicle emissions?

Not answered

36 13. Do you agree with the proposed net zero pathway for rail?

Not answered

37 13.1 Please add details to your response.

Not answered

38 14. The proposed pathway for rail relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels. Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.

Not answered

39 14.1 Please add details to your response. Why did you rank them in that order?

Not answered

40 15. What role should low carbon liquid fuels play in rail decarbonisation?

Not answered

41 16. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce rail emissions?

Not answered

42 16.1 How would these actions address the identified challenges and

opportunities to reduce rail emissions?

Not answered

43 17. Do you agree with the proposed net zero pathway for maritime?

Not answered

44 17.1 Please add details to your response.

Not answered

45 18. The Australian Government is engaging in consultation as part of the development of the Maritime Emissions Reduction National Action Plan and those consultations will also inform the final Roadmap and Action Plan. 18.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce maritime emissions?

Not answered

46 18.2 How would these actions address the identified challenges and opportunities to reduce maritime emissions?

Not answered

47 19. Do you agree with the proposed net zero pathway for aviation?

Not answered

48 19.1 Please add details to your response.

Not answered

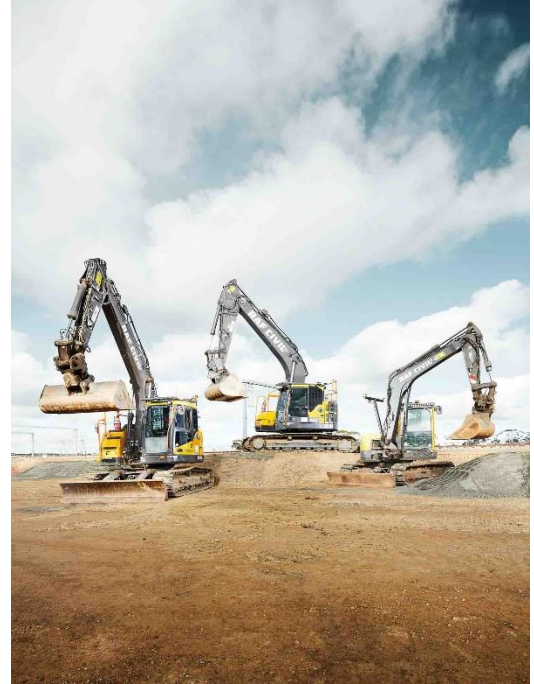
49 20. The Australian Government has already engaged in consultation on aviation decarbonisation through the development of the Aviation White Paper and those consultations will also inform final Roadmap and Action Plan.

Not answered

- 50 20.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce aviation emissions?
Not answered
- 51 21. Do you agree with the proposed net zero pathway for transport infrastructure?
Not answered
- 52 21.1 Please add details to your response.
Not answered
- 53 22. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce transport infrastructure emissions and ensure that transport infrastructure is ready for and enables low-emission transport modes?
Not answered
- 54 22.1 How would these actions address the identified challenges and opportunities to reduce transport infrastructure emissions?
Not answered
- 55 23. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the energy mix is ready to support transport emissions reduction?
Not answered
- 56 24. How should the use of low carbon liquid fuels (LCLFs) be prioritised across different transport modes over time to achieve maximum abatement?
Not answered

- 57 25. What are the best ways for the Australian Government to work collaboratively with industry, business, governments and communities to implement the proposed pathways?
Not answered
- 58 25.1 What are good domestic or international examples of partnership and collaboration on transport and transport infrastructure emissions reduction that could inform the final Roadmap and Action Plan?
Not answered
- 59 25.2 What opportunities can Government leverage to show leadership in Australia and internationally?
Not answered
- 60 26. What measures and metrics should be used to evaluate the final Transport and Infrastructure Net Zero Roadmap and Action Plan?
Not answered
- 61 26.1 What other data and evidence could governments use and how could this offer further insights on the pace, scale and location of transport emissions reduction pathways?
Not answered
- 62 27. Do you have any feedback on the proposed review process?
Not answered
- 63 28. Do you have any further feedback on the Consultation Roadmap and proposed pathways?
Not answered
- 64 28.1 Is there anything missing? Are the sections appropriately integrated? Is the Roadmap appropriately ambitious?
Not answered

- 65 29. Is there any further information or documentation that you wish to be considered with your submission?
Not answered
- 66 Would you like to upload a document?
Yes
- 67 Have you removed any identifying information from your submission?
Yes
- 68 Upload a submission
Transport and Infrastructure Sector Plan Submission - Civil Contractors Federation.pdf
- 69 Upload a submission
Not answered
- 70 Upload supporting file
Not answered
- 71 Upload supporting file
Not answered



Submissions to the Transport and Infrastructure Sector Plan 2024



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26 July 2024

Submissions to the Transport and Infrastructure Sector Plan 2024

Via: NetZero@infrastructure.gov.au

Transport and Infrastructure Net Zero Submission

The Civil Contractors Federation Australia (CCFA) is the only Registered Organisation for the civil infrastructure industry nationally, representing 1,800 businesses nationally welcomes the opportunity to provide a submission on the Transport and Infrastructure Sector Plan released by the Department of Infrastructure, Transport, Regional Development Communications and the Arts.

The CCFA appreciates that the Transport and Infrastructure Plan is instrumental in guiding the infrastructure investment over the coming years on the path to Australia reducing greenhouse gas emissions and achieving net zero by 2050. The Transport and Infrastructure 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.

CCF Contractor Members are the first called up to deliver the active and public transport infrastructure the Plan recommends.

As our Contractor Members will carry the weight of obligation to deliver the Plan, we submit that there needs to be a comprehensive, whole-of-government approach to infrastructure, that includes the smallest through to the largest civil infrastructure capacity to deliver these projects effectively and cost-efficiently.

The Commonwealth must consider factors including:

- How we train and maintain a skilled workforce to build this transport infrastructure?
- How can the Commonwealth Government boost productivity to more effectively deliver infrastructure?
- How can the Commonwealth Government improve the procurement process to enable contractors to effectively and competitively tender for Government projects?

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.

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.

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 roadmap.

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 the Transport and Infrastructure Plan, Electricity and Energy Plan, and the Built Environment Plan, with interest also in the other sectoral plans for each major sector of the economy.

A National Renewables Infrastructure Plan that identifies key projects 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 resolving the current collapse in housing and will also reflect this briefly in our submission.

Mobilising Investment

It is imperative that significant government investment is channeled into active, public, and private transport infrastructure. This should focus on projects that will alleviate congestion and unlock housing close to employment opportunities.

It takes decades for major infrastructure projects to be rolled out in Australia's capital cities, such as Melbourne's Suburban Rail Loop or the Sydney Metro.

We note that the draft roadmap highlights the importance of immediate actions, medium-term planning, and long-term strategies to achieve net zero by 2050, and support steps by the Government to take a long-term approach to infrastructure investment.

The CCF reiterates the need for reform of 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.

Mobilising Investment

It is imperative that significant government investment is channelled into active, public and private transport infrastructure. This should focus on projects that will alleviate congestion, unlock housing close to employment opportunities.

It takes decades for major infrastructure projects to be rolled out in Australia's capital cities. Projects like Melbourne's Suburban Rail Loop or the Sydney Metro to be delivered.

We note that the draft roadmap highlights the importance of immediate actions, medium-term planning, and long-term strategies to achieve net zero by 2050, and support steps by Government to take a long term approach to infrastructure investment.

The CCF reiterates the need for reform of 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 decarbonisation 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.

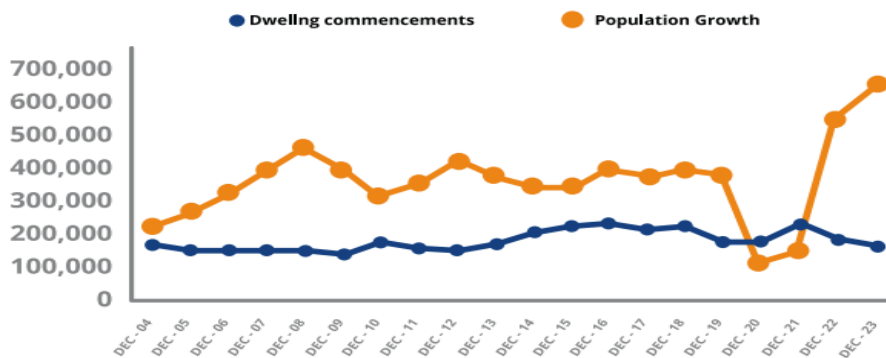
The CCF supports the uptake of hybrid vehicles and electric vehicles and the integration of hydrogen, and low-carbon liquid fuels into our national energy strategy.

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

Procurement that supports housing and community enabling infrastructure

Amid increasing demands for innovative and sustainable infrastructure solutions, CCF collaborates with various stakeholders to promote and implement modern infrastructure practices that creates housing enabling outcomes. Our collaboration is therefore ambitious to support national housing policy to address the critical shortage of affordable housing in Australia, particularly for construction workers and low-income families which sees jobs and infrastructure flow through every Australian community.

ABS DWELLING COMMENCEMENTS VS POPULATION GROWTH

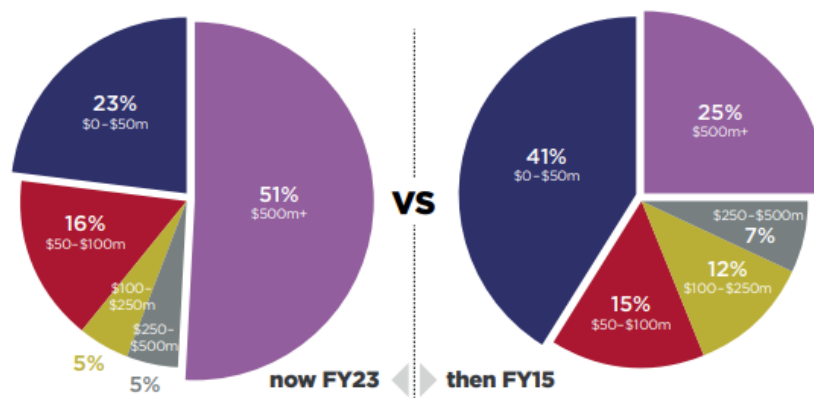


As shown above, housing supply has collapsed in Australia from a peak in FY2015. During that time, commencements sat at 219,623 dwellings climbing to 234,455 in Fy2016.

At the end of FY2013 Australian new home commencements had dropped to 173,000 homes, down again to 163,836 for calendar year 2013 with a stall to continue largely as housing enabling infrastructure (roads, subdivisions, highways, water, sewerage and energy) is not being dispersed into the smaller tranches that make its way throughout Australia.

As a case in point, New South Wales in FY2015 commenced 58,025 rising to 70,128 in FY2016 to then drop back to 49,353 homes commenced in FY2023 with that number further dropping to just 46,057 homes commenced in calendar year 2023.

All NSW Government Project Commencements by Value



In FY15, 41% of projects were valued between \$0-\$50 million, whereas in FY23, this category dropped to 23%. Conversely, projects valued over \$500 million increased from 25% in FY15 to 51% in FY23. This shift towards funding larger projects suggests that a substantial portion of the infrastructure budget is being

allocated to fewer, high-value undertakings with less frequency of \$50m, \$100m or \$200m projects that create.

This reallocation and the observed dip in housing commencements, as resources and funding that might have supported smaller-scale housing projects are instead being funnelled into these large infrastructure ventures needs to further consideration. Consequently, the emphasis on larger projects and contributions to a scarcity of available funds for housing development, impacting the overall rate of new housing commencements.

Put simply you cannot spend a dollar in housing until a dollar is spent in civil.

Building Australia's Civil 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.

Skills shortages in Civil Construction Sector (Source: [Skills Priority List | Jobs and Skills Australia](#))

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Unit Group	ANZSCO	Skill Level	Occupation	AAPL	Skills Shortage	NSW	Vic	QLD	SA	WA	Tas	NT	ACT
2332		1	Civil Engineering Professionals										
	233211	1	Civil Engineer		S	S	S	S	S	S	S	S	S
	233212	1	Geotechnical Engineer		S	S	S	S	S	S	S	S	S
	233213	1	Quantity Surveyor		S	S	S	S	S	S	S	S	S
	233214	1	Structural Engineer		S	S	S	S	S	S	S	S	S
	233215	1	Transport Engineer	Prioritised	S	S	S	S	S	S	S	S	S
Unit Group	ANZSCO	Skill Level	Occupation	AAPL	Skills Shortage	NSW	Vic	QLD	SA	WA	Tas	NT	ACT
3122	312212	3	Civil Engineering Technician		S	S	S	S	S	S	S	S	S
3121	312114	3	Construction Estimator	Prioritised	S	S	S	RS	S	S	S	S	S
3999	399999	3	Technicians and Trades Workers	Prioritised	S	S	S	S	S	S	S	S	S
7121	712111	4	Crane, Hoise or Lift Operator	Non Priority	S	S	S	S	S	S	S	S	S
7122	712211	4	Driller	Non Priority	S	S	S	S	S	S	S	S	S
7122	712212	4	Miner	Non Priority	S	S	S	S	S	S	S	S	S
7211	721111	4	Agricultural and Horticultural Mobile Plant Operator	Non Priority	RS	S	RS	RS	RS	NS	RS	RS	NS
7212	721211	4	Earthmoving Plant Operator (General)	Non Priority	S	S	NS	S	S	S	S	S	S
7212	721212	4	Backhoe Operator	Non Priority	NS	S	NS	NS	S	NS	NS	NS	NS
7212	721213	4	Bulldozer Operator	Non Priority	S	S	NS	S	S	S	S	S	S
7212	721214	4	Excavator Operator	Non Priority	S	S	S	S	S	S	S	S	S
7212	721215	4	Grader Operator	Non Priority	S	S	NS	S	S	S	S	S	S
7212	721216	4	Loader Operator	Non Priority	S	S	NS	S	S	S	S	S	S
7219	721912	4	Linemarker	Non Priority	S	S	S	S	S	S	S	S	S
7219	721913	4	Paving Plant Operator	Non Priority	NS	NS	NS	NS	S	NS	NS	NS	NS
7219	721914	4	Railway Track Plant Operator	Non Priority	S	S	S	S	S	S	S	S	S
7219	721915	4	Road Roller Operator	Non Priority	S	S	S	S	S	S	S	S	S
7219	721915	4	Road Roller Operator	Non Priority	S	S	S	S	S	S	S	S	S
7219	721999	4	Mobile Plant Operator	Non Priority	S	S	S	S	S	S	S	S	S
7331	733111	4	Truck Driver (General)	Non Priority	S	S	S	S	S	S	S	S	S
8217	821711	4	Construction Rigger	Non Priority	S	S	S	S	S	S	S	S	S
8217	821713	4	Steel Fixer	Non Priority	S	S	S	S	S	S	S	S	S
8211	821113	5	Earthmoving Labourer	Non Priority	ND	ND	ND	ND	ND	ND	ND	ND	ND
8212	821211	5	Concreteer	Non Priority	ND	ND	ND	ND	ND	ND	ND	ND	ND
8219	821911	4	Crane Chaser	Non Priority	S	S	S	S	S	S	S	S	S
8219	821912	5	Driller's Assistant	Non Priority	ND	ND	ND	ND	ND	ND	ND	ND	ND

S = Shortage, RS= Regional Shortage, NS = No Shortage, ND = No Data

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.

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,

While we commend the Commonwealth for identifying the crucial role of infrastructure investment in achieving net zero, this must be paired with strategies to develop base and specialised civil construction skills and training.

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.

Regional Connectivity and Investment

The Civil Contractors Federation (CCF) staunchly supports investment in public transport infrastructure as a vital component of Australia's future growth and sustainability. Public transport improvements can reduce congestion, lower emissions, and provide efficient urban mobility solutions. However, it is imperative that this commitment does not come at the expense of road funding, particularly for regional communities. Roads serve as the lifeblood of these areas, facilitating the movement of goods, services, and people, and connecting regional communities to economic opportunities and essential services.

Regional roads are crucial for agricultural sectors, mining industries, and tourism, which are significant contributors to the national economy. Neglecting road infrastructure can lead to isolation of these communities, hinder emergency response times, and create safety hazards due to deteriorating conditions. Furthermore, many regional areas do not have the population density to support extensive public transport systems, making well-maintained roads even more critical for their connectivity.

Ensuring a balanced approach to infrastructure investment is crucial; robust funding for both public transport and road networks will drive comprehensive national development. This dual focus will foster inclusivity and prosperity across all regions of Australia, enabling urban centers to thrive with efficient public transport while ensuring that regional communities remain connected and economically viable.

The CCF advocates for a holistic infrastructure strategy that recognizes the unique needs of both urban and regional areas, promoting equitable growth and development nationwide.

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.