

# Missed opportunity: How fossil fuel investment is crowding out roads and renewables

***Public road and rail projects worth \$7 billion have been sidelined due to Australia’s ‘clogged’ infrastructure pipeline. Meanwhile, the coal and gas industries have committed to \$41 billion worth of new fossil fuel projects with similar construction and engineering inputs. Fossil fuel expansion will crowd out both road and rail projects and drive up the cost of the approx. \$58 billion in renewable energy infrastructure projects also planned by the Federal Government.***

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## INTRODUCTION

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The Australian Government has a \$120 billion infrastructure investment pipeline for road and rail projects for public use. Following a recent review, Infrastructure Minister Catherine King announced that 50 projects worth \$7 billion would be postponed due to cost blowouts and shortages of workers and equipment that have “led to a clogged infrastructure pipeline that does not reflect current market capacity”.<sup>1,2</sup>

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<sup>1</sup> Canales and Kolovos (2023) *Federal Government to Slash 50 Infrastructure Projects Due to Cost Blowouts*, <https://www.theguardian.com/business/2023/nov/16/federal-government-to-slash-82-infrastructure-projects-due-to-cost-blowouts>

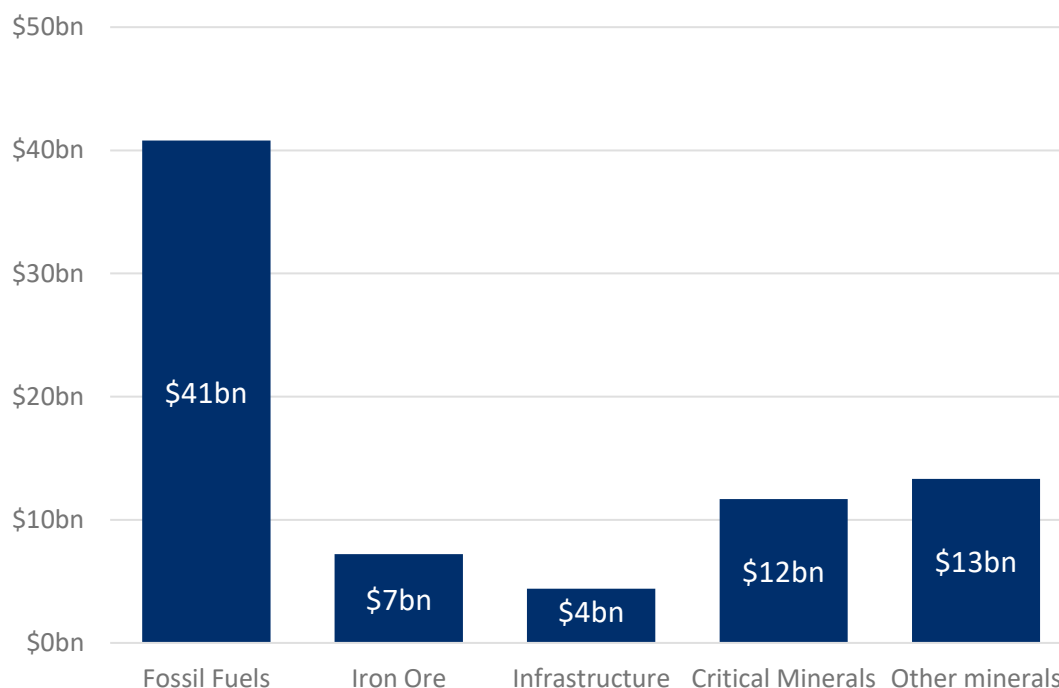
<sup>2</sup> DITRDCA (2023) *Independent Strategic Review of the Infrastructure Investment Program - Executive Summary*, <https://www.infrastructure.gov.au/department/media/publications/independent-strategic-review-infrastructure-investment-program-executive-summary>, p.1

Coverage and commentary on the clogging of Australia’s infrastructure pipeline has, perhaps surprisingly, made no mention of the many large, new mining projects that are currently being developed. These projects require many of the same construction and engineering skills as infrastructure projects for public use. Analysis of data published by the federal Department of Industry, Science and Resources (DISR) suggests that a significant cause of the infrastructure pipeline’s clogging is the planned expansion of major resource and energy projects, in particular fossil fuel projects in Western Australia.<sup>3</sup>

## RESOURCE AND ENERGY MAJOR PROJECTS LIST

The DISR *Resources and Energy Major Projects - 2023 Report*, identifies 86 major resource and energy projects at the ‘committed’ stage. The estimated construction cost of these projects is \$77.4 billion, of which at least \$41.0 billion (53%) is for fossil fuel projects (Figure 1).

**Figure 1: Value of committed resource and energy projects as at October 2023**



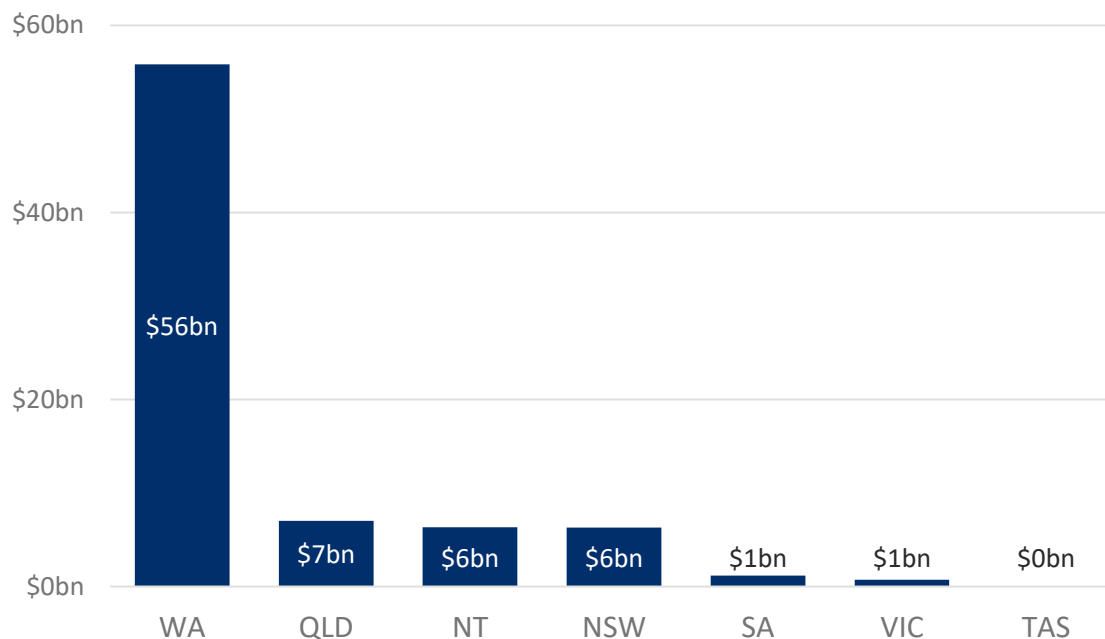
Source: Analysis of DISR (2023) *Resources and Energy Major Projects*

Across the nation, a staggering 72% of the total committed resource project expenditure is earmarked for Western Australia. New oil and gas projects in WA led by

<sup>3</sup> DISR (2023) *Resources and Energy Major Projects 2023*, <https://www.industry.gov.au/publications/resources-and-energy-major-projects-2023>

Woodside are estimated to cost over \$18 billion. Chevron is leading a \$6 billion project in the state, while Shell is leading a \$3.5 billion project there. The next largest state for resource investment is Queensland with \$7 billion in committed projects, including \$1.7 billion in coal projects, closely followed by the NT, which includes Santos' \$4.3 billion Barossa gas project, and NSW with \$2.8 billion in coal projects (Figure 2).

**Figure 2: Value of committed projects by state at October 2023**



Source: Analysis of DISR (2023) *Resources and Energy Major Projects*

Analysis of the DISER data also highlights the strong growth in the value of committed projects over recent years. The value of committed projects has more than doubled from 40-45 projects worth \$25-30 billion in 2018-19 to 77 projects worth \$77 billion in 2023. Given how long some of the recently cancelled public infrastructure projects have been in development it is perhaps surprising that state government proponents for the recently cancelled projects have not raised concerns with the likely consequences of the rapid expansion in mining related construction.

The DISR research estimates that the current pipeline of committed resource projects will require at least 21,000 construction jobs. This represents 18% of Australia's current *Heavy and Civil Engineering Construction* workforce.<sup>4</sup> While it is not expected that all 21,000 workers would be employed at the same time, this still represents a significant increase in the demand for construction workers and engineers.

<sup>4</sup> ABS (2023) *Labour Force, Australia, Detailed*, <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release>

# RENEWABLE ENERGY INFRASTRUCTURE INVESTMENT

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Despite the existing shortages of skilled workers and the need to cancel existing infrastructure projects, the Albanese Government's recently announced expansion of the *Capacity Investment Scheme* is attempting to secure investment for the construction of an additional 32 gigawatts of renewable electricity generation and/or storage capacity.<sup>5</sup> These projects, if they go ahead, will place even more pressure on the already "clogged infrastructure pipeline".

A sense of the likely scale of the infrastructure required to deliver the promised investment in new renewable energy capacity is provided by a recently completed deal under the existing scheme which secured one gigawatt of dispatchable electricity for \$1.8 billion.<sup>6</sup> Using this as a benchmark, the expanded scheme will need at least \$58 billion in new investment, significantly higher than the \$41 billion already committed to fossil fuel projects. Importantly, the \$58 billion investment pipeline for renewable energy is likely to require at least the same number of workers as the fossil fuel pipeline, if not more.

But in an economy that is close to full employment, where construction workers, electricians, welders and building materials are already in short supply, combined with the "clogged infrastructure pipeline" that includes \$41 billion in fossil fuel projects, *plus* these plans to massively expand investment in renewables, something will have to give.

There will simply not be enough workers and materials to build it all.

## CONCLUSION: OPPORTUNITY COST OF FOSSIL FUEL EXPANSION

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When resources are used for one purpose, they become unavailable for other uses. This trade-off is what economists call 'opportunity cost'. Just as doctors performing cosmetic surgery are unavailable to treat other patients, and holiday houses are unavailable for use as permanent rental accommodation, the time construction

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<sup>5</sup> Department of Climate Change, Energy, the Environment and Water (2023), *About the Capacity Investment Scheme*, <https://www.dcceew.gov.au/energy/renewable/capacity-investment-scheme>

<sup>6</sup> Llewellyn-Smith (2023) *Dingo Bowen chews through energy Gordian Knot* <https://www.macrobusiness.com.au/2023/11/dingo-bowen-chews-through-energy-gordian-knot/>

workers spend building new gas and coal mines is time that they cannot spend building roads, renewables, or other infrastructure.

Put another way, the huge project costs and employment numbers used by the resources industry to justify the need for their new projects should, from an economic point of view, be weighed up against the ability to build other nation building projects currently stuck in the “clogged infrastructure pipeline”.

With rapid population growth and the need for Australia to transform its energy system, the true cost of new gas and coal projects is not their multi-billion price tags, but the lost opportunity to invest in the infrastructure and energy transformation the Australian economy urgently needs.

While it seems hard for the resource industry and governments to comprehend, with a fully employed construction industry and an existing backlog of infrastructure and renewable energy projects, big new fossil fuel projects requiring thousands of workers don't cause an economic boom, they cause cost blowouts, inflation and delays to other projects. Advocates for a more rapid transition to renewable energy also need to take into consideration the need to curtail fossil fuel projects to free up the workers and equipment needed to rapidly transition to a low carbon economy.