

3 November 2023

Australia: electricity supply investment Investment project pipeline swells to \$105bn, as renewable energy drive gathers momentum

The drive to boost investment in renewable energy projects is gaining momentum.

The pipeline of investment projects for electricity supply has increased sharply in recent years - to now exceed \$100bn. Investors are responding to greater clarity around public policy and an increased urgency to decarbonise electricity generation.

Here we focus on developments in this sector, comparing end 2019 with the latest picture, as at September quarter 2023. For this analysis, we draw upon the Investment Monitor database compiled by Deloitte Access Economics.

Electricity supply, investment pipeline climbs to fresh highs

The value of investment projects for electricity supply has progressively climbed over recent years - to now stand at \$105bn (as reported in the Investment Monitor).

This tends to understate the full extent of the pipeline - with the value of some projects, particularly those at the possible stage, unclear at this time.

That pipeline of \$105bn, as at the September quarter 2023, has progressively increased from \$46.5bn at the end of 2019, prior to the pandemic.

The \$105bn pipeline includes some \$36bn of definite projects (those either under construction or with a firm commitment) and \$69bn of potential projects (those under consideration or possible).

The value of definite projects has jumped by \$20bn since end 2019, from \$16bn to \$36bn.

There is an element of cost escalation driving that \$20bn increase. But more generally, the lift reflects a genuine increase in investment projects. The cost of the Snowy Mountain Hydro 2.0 scheme has increased by \$6.9bn over that time - from \$5.1bn at end 2019 to \$12.0bn now (with that figuring jumping from \$5.9bn to \$12.0bn in the latest quarter). The end date for the project has been pushed back to 2029, originally 2026 and originally costed at \$2bn (as at end 2017).

The value of potential projects in the Investment Monitor has also more than doubled from end 2019, rising from \$30bn to \$69bn.

Electricity supply investment focused on renewable energy

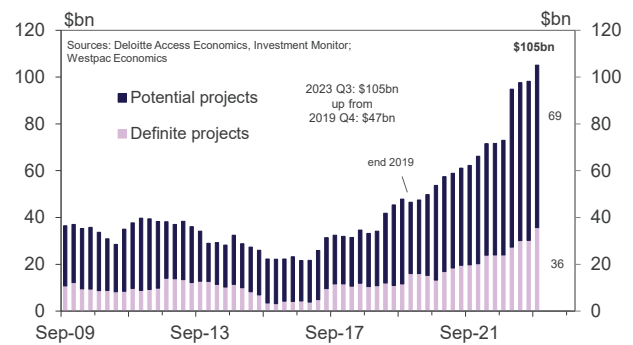
Renewable energy projects are driving the investment in electricity supply - they dominate the project pipeline.

The Investment Monitor includes a handful of potential gas and coal projects - the number and value of which has declined, down from \$5.4bn at end 2019 to \$4.3bn currently. Reportedly, there are no such projects currently underway.

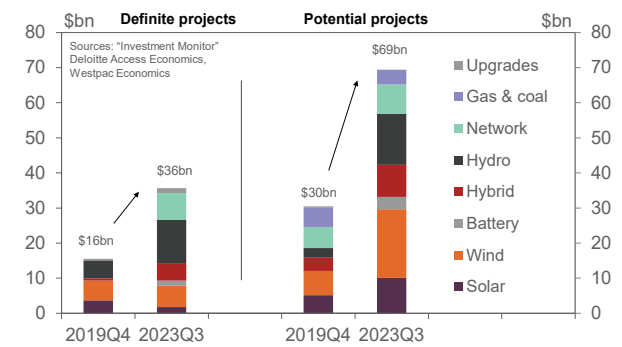
Definite projects (ex Snowy 2) valued at \$23.7bn currently includes: wind, \$6.1bn; solar, \$1.8bn; hybrid projects, \$5.0bn; batteries, \$1.4bn; and hydro, \$0.3bn. There is also investment in the transmission network, \$7.6bn; and upgrades, \$1.5bn.

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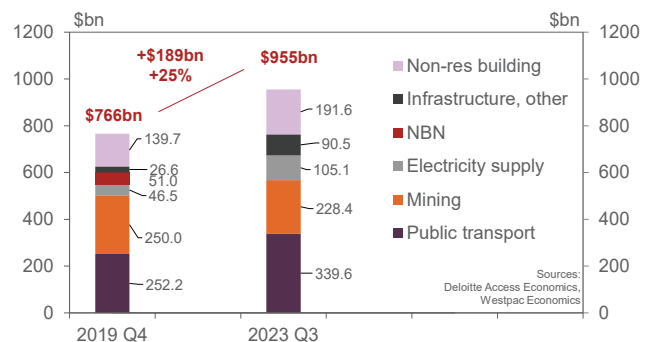
Electricity supply, project pipeline: \$105bn



Electricity supply projects: renewables focus



Investment pipeline: projects



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The investment uplift between end 2019 to now is centred on additional hybrid projects proceeding, as well as a focus on investing in the transmission network and batteries - both of which were largely absent at end 2019.

The pipeline of potential electricity supply projects, currently at \$69bn, is spread across the spectrum, including: wind, \$19.6bn; hydro, \$14.6bn; solar, \$10.1bn; hybrid projects, \$9.1bn; and the transmission network, \$8.3bn; as well as batteries, \$3.5bn.

There are a raft of projects under consideration, some 65, with a total value of \$34.4bn - the two largest worth a combined \$6.3bn.

The pipeline of potential projects, 35 projects with a combined value of \$35bn, is more concentrated - the largest 3 accounting for 60% of the total. The Qld governments \$12bn Pioneer-Burdekin hydro project stands out. There is the \$5bn (up from \$3.5bn previously) second Bass Strait inter-connector between Tasmania and Victoria. Alinta Energy's \$4bn offshore wind project is also sizeable.

Australia's investment project pipeline

Growth in the pipeline of electricity projects is within the context of an increase in the overall investment pipeline. The total project pipeline for Australia is valued at \$955bn. That is up from \$766bn at the end of 2019, a figure flattered by inclusion of the \$51bn NBN, work on which was all but complete at that time.

The \$955bn basket of investment projects has an increasing focus on public transport, at \$340bn (up from \$250bn at end 2019), but a relatively reduced mining focus, at \$228b (down from \$250bn at end 2019). More broadly, there is a lift in projects across non-residential building and the rest of the infrastructure complex, see chart above.

Electricity supply, construction work up sharply

Official ABS data confirms that the growing pipeline of electricity supply projects is translating to a sharp lift in investment.

Total private non-mining infrastructure activity was valued at \$9.7bn in the June quarter 2023, a 25% increase on a year earlier and 50% above that at the start of 2021.

Electricity activity has emerged as the single largest segment within private non-mining infrastructure, at \$3.5bn in June 2023 (a little over a third of the total). An 88% increase in private electricity activity from the start of 2021 to mid-2023 accounts for half of the total rise in private non-mining infrastructure over that time.

For the public sector, the demands for additional investment to grow the capital stock to meet the needs of a rapidly rising population are substantial. Total public infrastructure activity was valued at \$14.4bn in the June quarter 2023. There has been a sharp upswing, with activity up 24% on a year ago to be 65% above that at the start of 2021.

Public transport infrastructure is the key focus of state governments, and activity on these projects' accounted for just over 60% of the lift in public infrastructure since the start of 2021. Utilities ex electricity account for a touch over 20% of the increase over that period

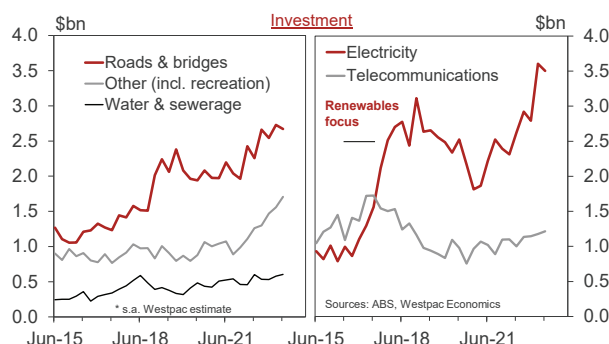
Electricity projects accounts for 14% of the rise in public sector infrastructure activity since the start of 2021. Work on public electricity supply projects stood at \$1.6bn in the June quarter 2023, 10% higher than a year and almost double that at the start of 2021.

Going forward, as potential electricity projects progress through the pipeline to the definite stage then activity in the electricity supply area will likely ramp up further. With the Australian economy still operating at a level of capacity, an issue for the nation is to free up the resources necessary to be directed towards progressing these much needed projects.

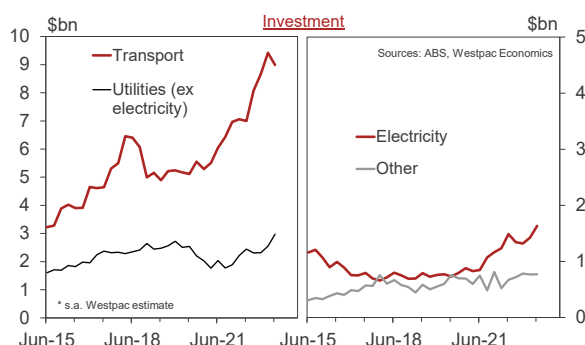
Andrew Hanlan, Senior Economist

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Infrastructure activity: private non-mining



Infrastructure activity: public



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