

## Chart of the Week

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“Put differently, over the next 10-15 years, 77% of the current generation sent-out in NSW would have to come from elsewhere; largely from technologies whose generation has grown by only ~7pp in the last 4 years. These trends suggest the energy transition in NSW over the next decade would gather significant pace, and the Central-West REZ is a major move in that direction”

## Now speed up, gas pedal, gas pedal: faster transition for NSW?

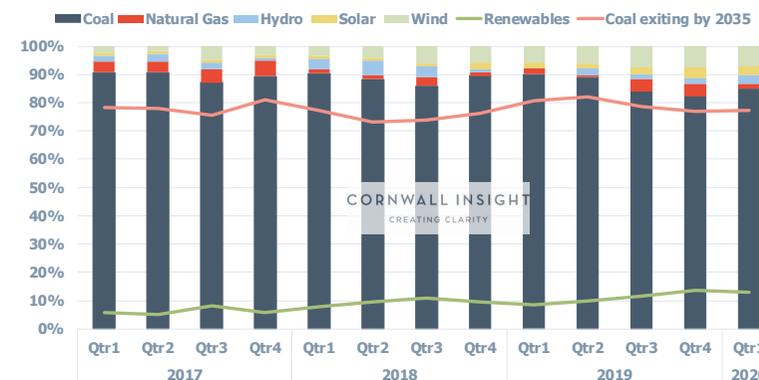
Last month, the NSW government issued a call to renewable developers to respond to a **Registration of Interest** to develop a pilot Renewable Energy Zone (REZ) in the Central-West region of the state. This REZ – with an estimated worth of \$4.4 billion in private investments - is expected to unlock 3GW of new renewable generation.

Remarkably, this *is* only one of many to come. In this Chart of the Week, we look at the evolution of the energy mix in NSW to establish how far the state is down the energy transition given impending retirements over the next decade and half. Unsurprisingly, and as we have covered in previous issues, black coal provides the bulk of the power supply in the state. What is rather startling however, is the gap in power generation over the last 4 years between generators earmarked for retirement before 2035 and renewables.

As shown in Figure 1, renewables have contributed an average of ~10% to total generation in NSW in the last 4 years. By contrast, over the same period, coal generators (exiting the market by 2035) provided on average ~77% of total generation in the state. Put differently, over the next 10-15 years, ~77% of the current generation sent-out in NSW would have to come from elsewhere; largely from technologies whose generation has grown by only ~7pp in the last 4 years. These trends suggest the energy transition in NSW over the next decade would gather significant pace, and the Central-West REZ is a major move in that direction.

NSW is also looking to improve its import capacity with ~3GW of interconnector expansions in different stages of regulatory approvals (see Table 1). Other innovative models for network reinforcements within the state are also being planned in preparation for new generation seeking to connect. Front of mind is the New England Connection Capacity Auction from Transgrid. This model - a first in the NEM - will be directly funded by renewable participants in exchange for firm capacity to connect to the NSW grid. Currently seeking expressions of interest, Transgrid predicts this transmission infrastructure will unlock 1.4GW of the New England REZ

Figure 1: Renewables v retiring coal in NSW gen mix (2017-20)



between the regional towns of Tamworth and Gunnedah in the state. NSW will undoubtedly continue to push the envelope as it prepares for a shift in the pace of renewable/storage development needed to close the gap in Fig.1. It is however left to be seen if regulation can keep up.

Table 1 NSW Interconnector projects seeking/obtained regulatory approvals

Interconnector	Regions	Date	Capacity
EnergyConnect	SA & NSW	2023-24	800MW
QNI upgrade	QLD & NSW	2021-22	190MW
VNI upgrade	VIC & NSW	2022-23	170MW
VNI West	VIC & NSW	2026-27	1900MW

Whilst the urgency needed in the transition is most evident in NSW, the state is however not alone; Victoria and Queensland are also preparing for significant coal exits in the coming years. Register to our webinar tomorrow “**How ready is the NEM: retirements and renewable targets to drive the next wave of investments through 2035**” to find out more.