

The Loddon Mallee Future Energy Forum

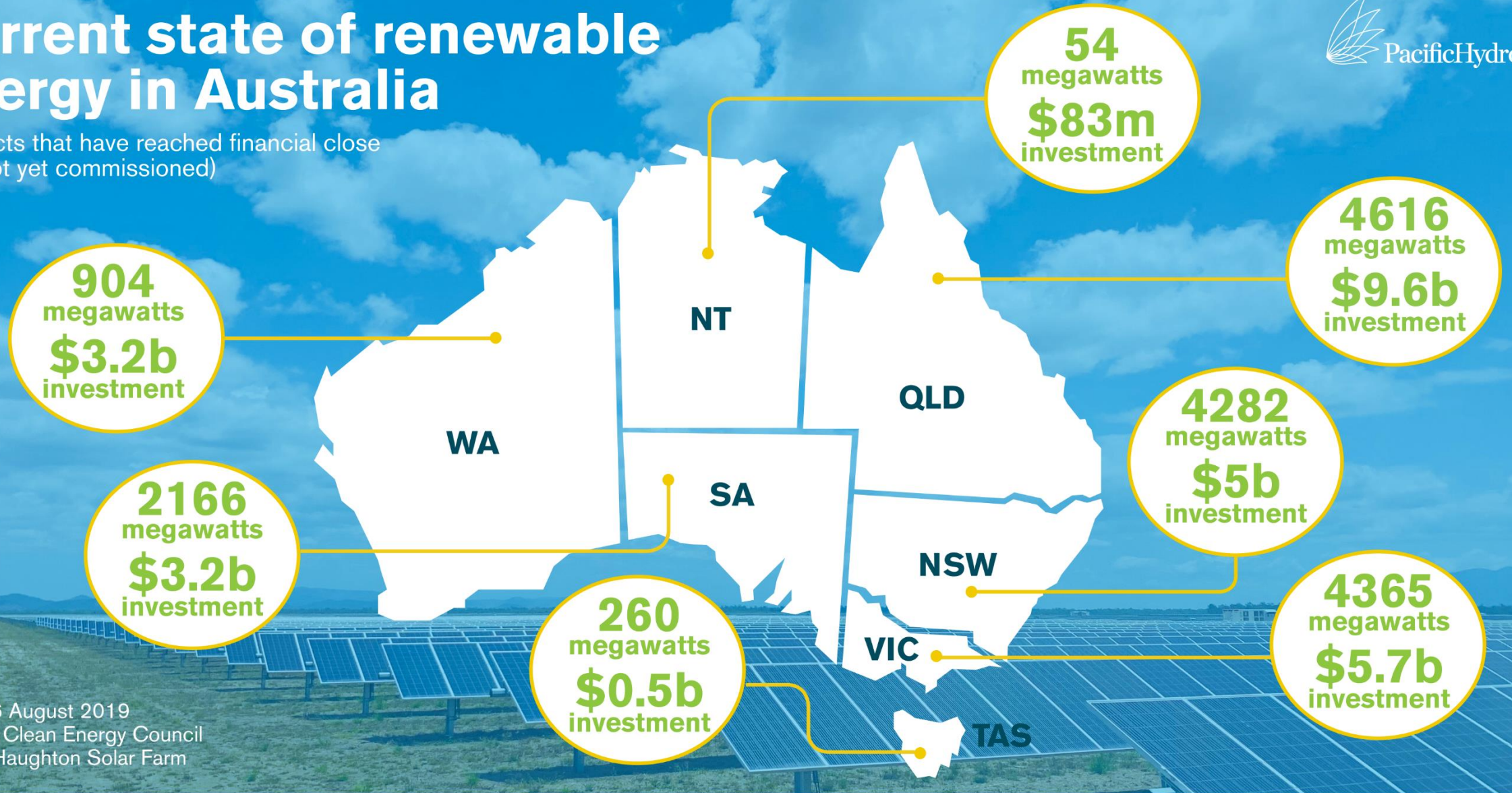
The energy transition and what it means for the Loddon Mallee

31 October 2019

Rachel Watson, CEO

Current state of renewable energy in Australia

(Projects that have reached financial close and not yet commissioned)



As at 26 August 2019
Source: Clean Energy Council
Photo: Haughton Solar Farm

TOTALS:

15,747
Megawatts

\$27.7b
Investment

3,224
Victorian Jobs

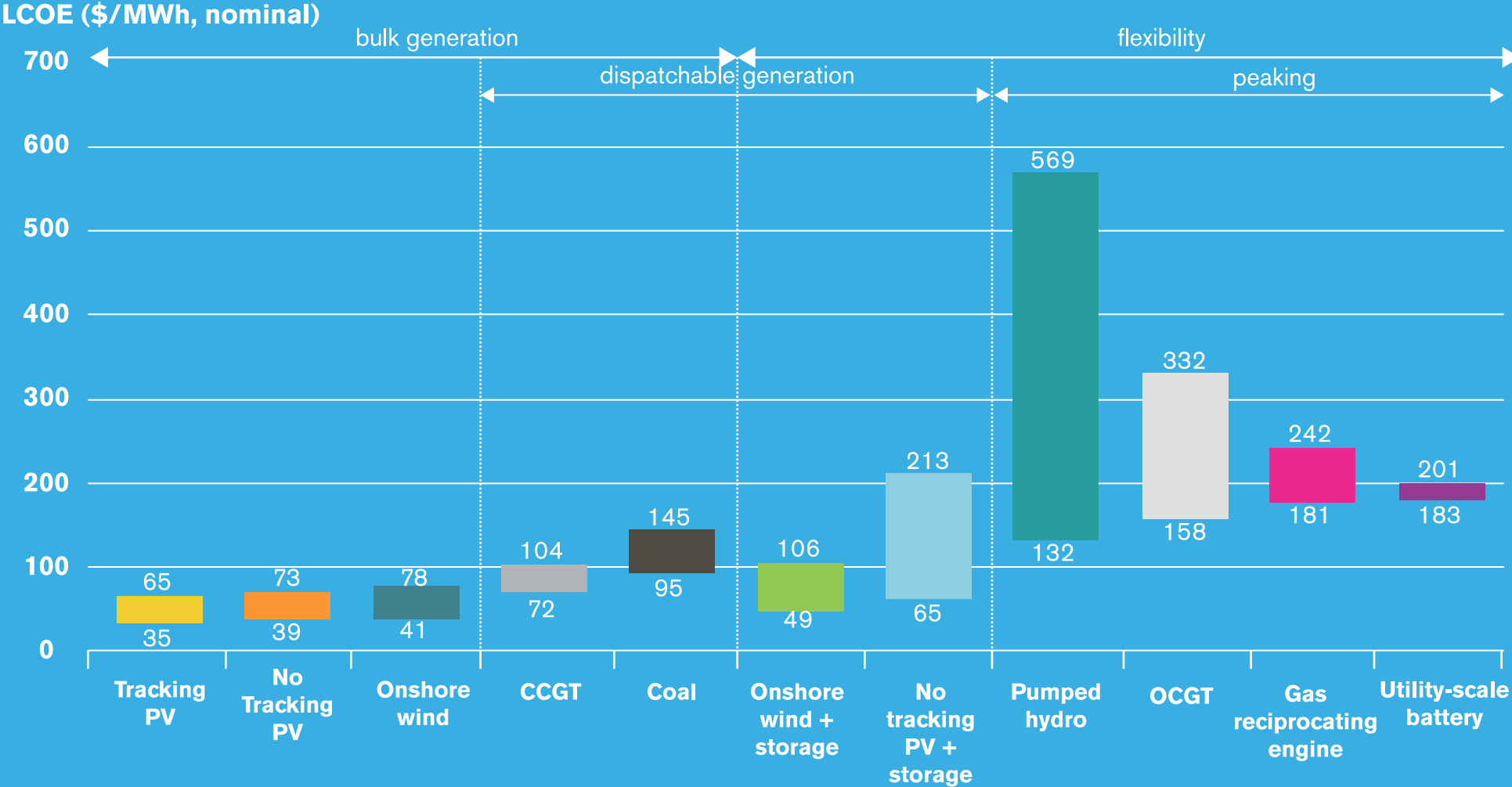
Some myths about renewable energy

“It’s too expensive”

“It’s unreliable”

“We don’t need it”

Levelized cost of electricity in Australia



Source: BloombergNEF

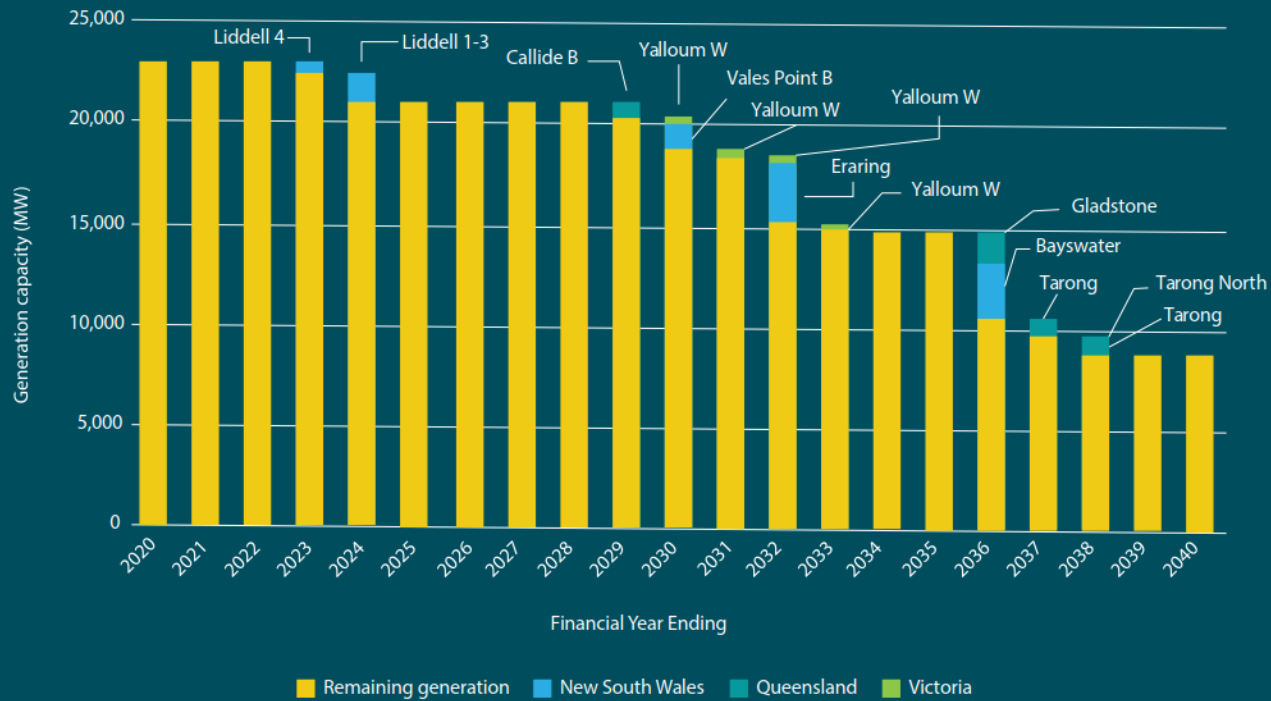
Renewables growth and energy reliability



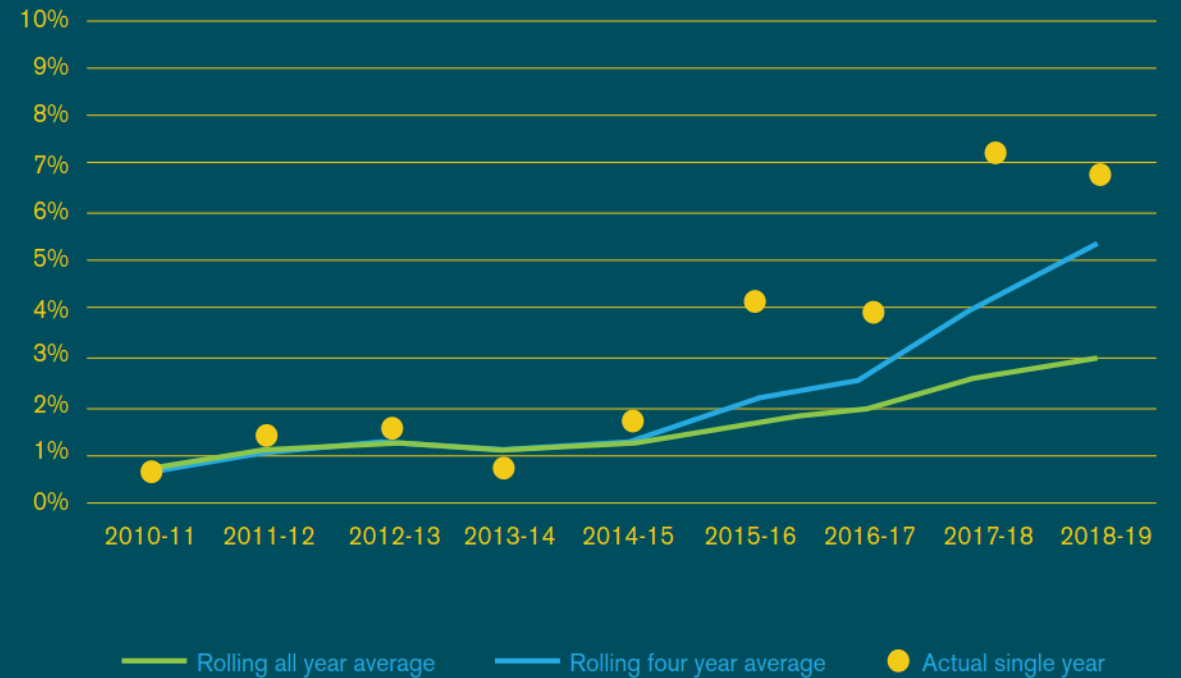
Source: Grattan Institute

We have ageing power plants

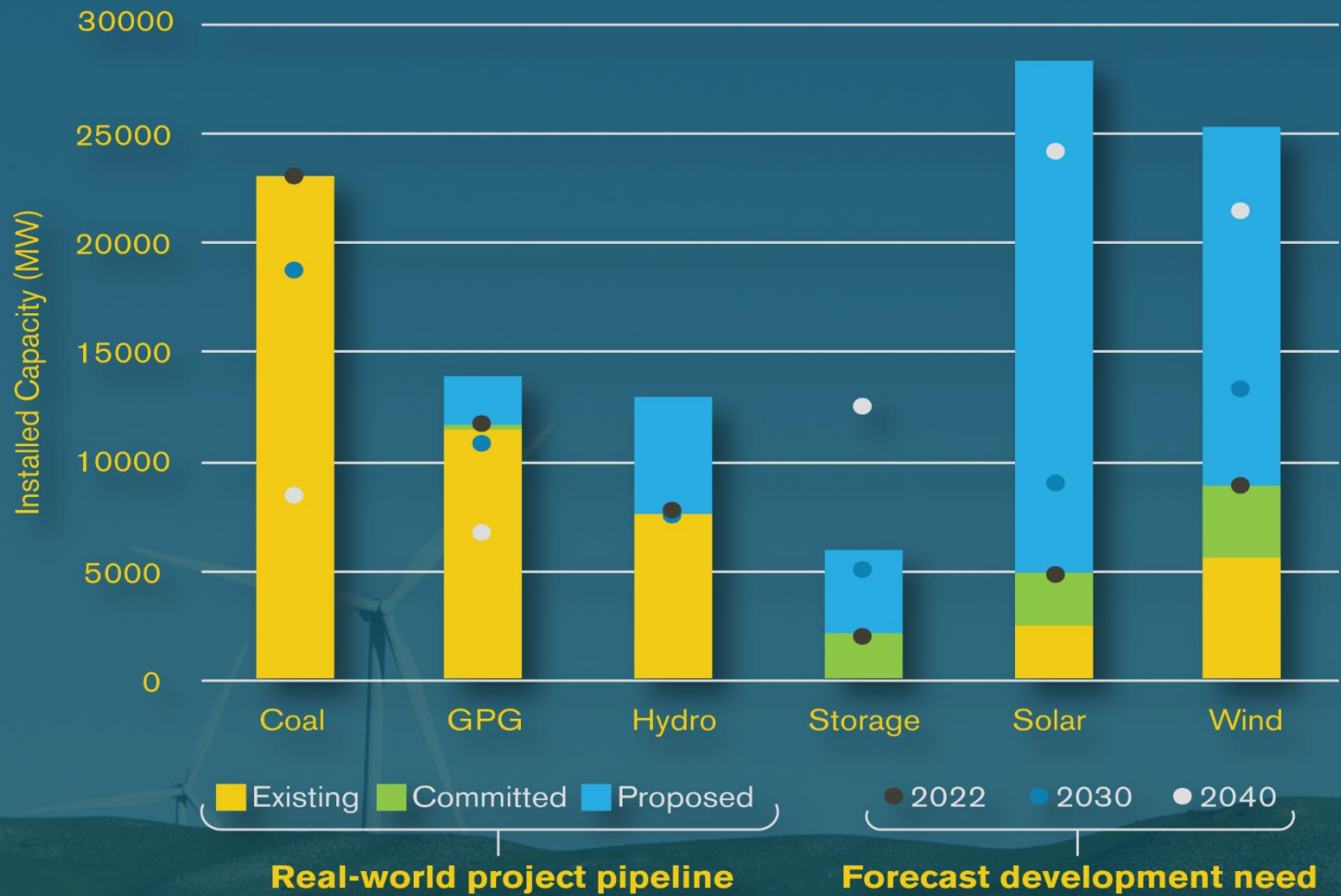
Ageing power plants



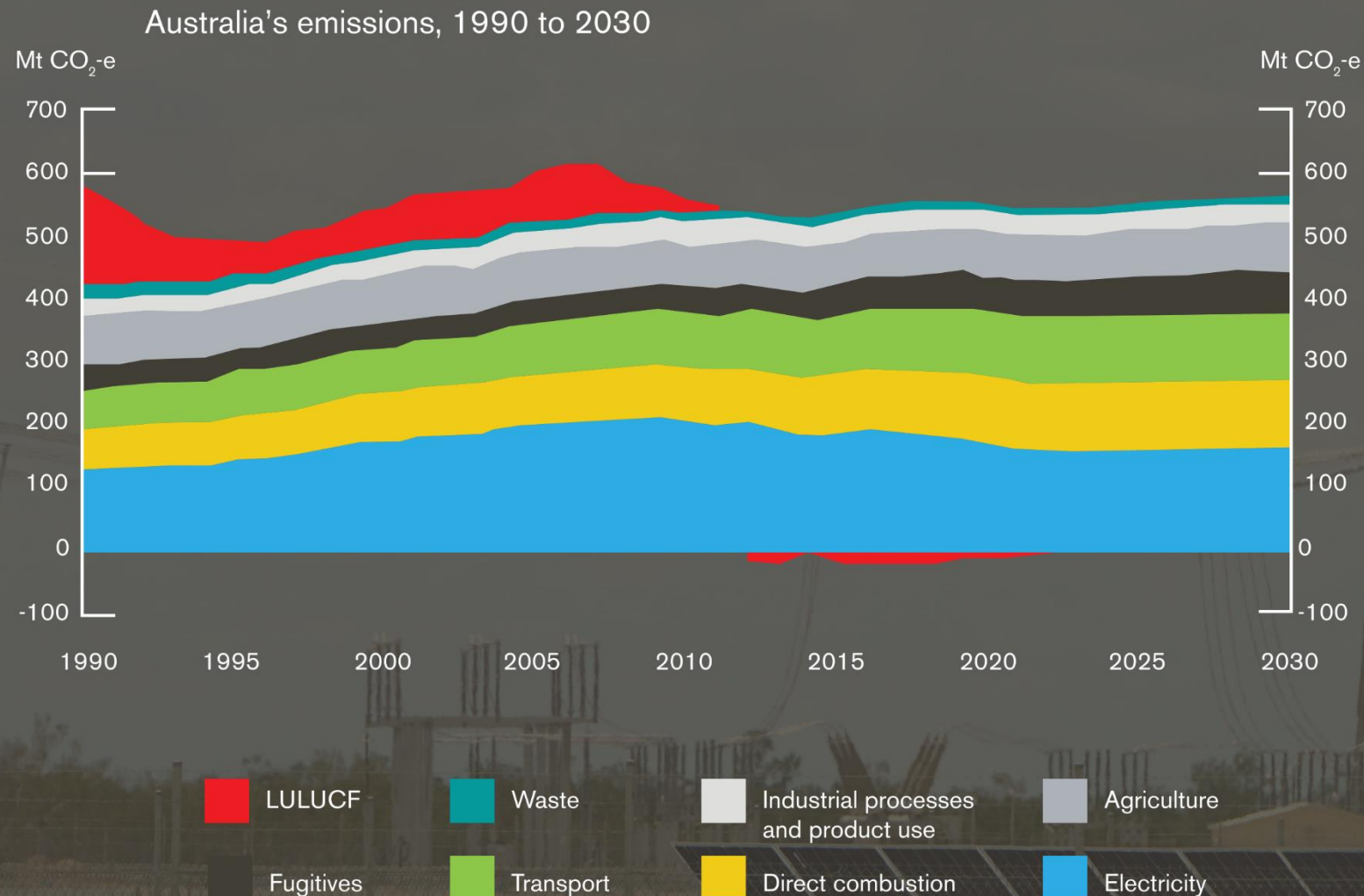
Historical brown coal full forced outage performance



Changing generation mix



Emissions Reduction Opportunity



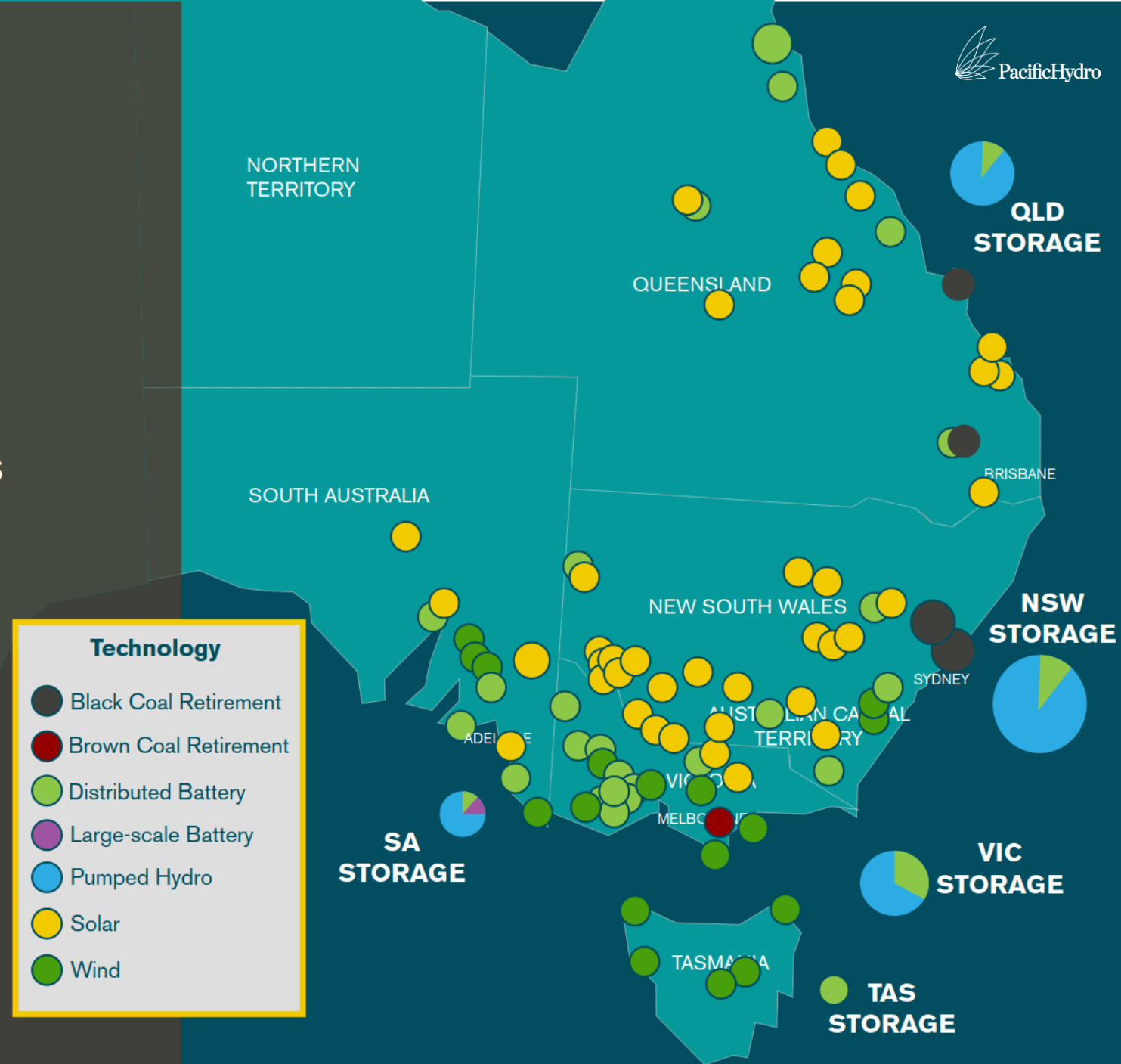
Source: Australian Government: Department of Environment and Energy

Projected locations of renewable energy - 2040

By 2040:

- Geographically diverse renewable energy developments replacing retiring generation.
- Storages provide firming support.
- Role for transmission to share capacity and energy across regions.

Source: AEMO



100% renewable energy - Can we do it?

Abundant natural resource
Storage is key

- Role of batteries
- Role of pumped hydro

Current issues

Constraints in transmission

How can transmission upgrades
unlock potential in the region?





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