

WA's Energy Transition

Community Information Day

6 November 2024

Jai Thomas

Deputy Director General (DEMIRS)

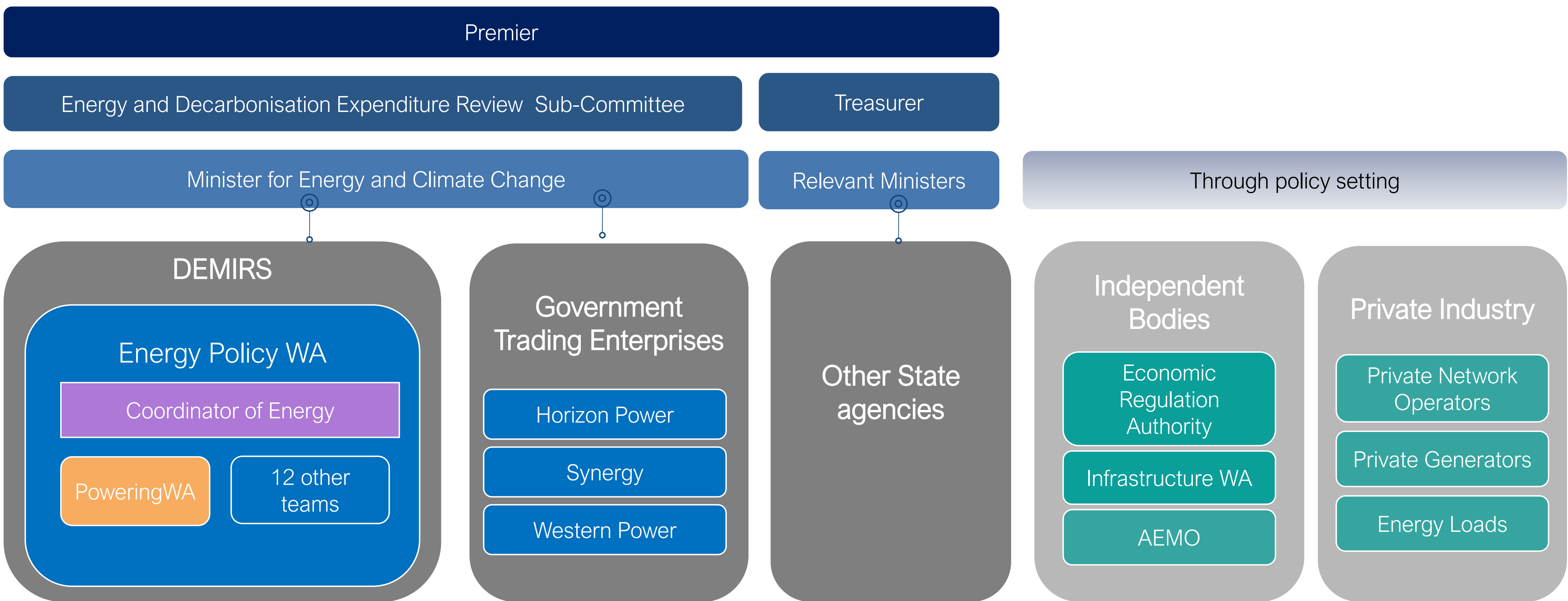
Coordinator of Energy (Energy Policy WA)



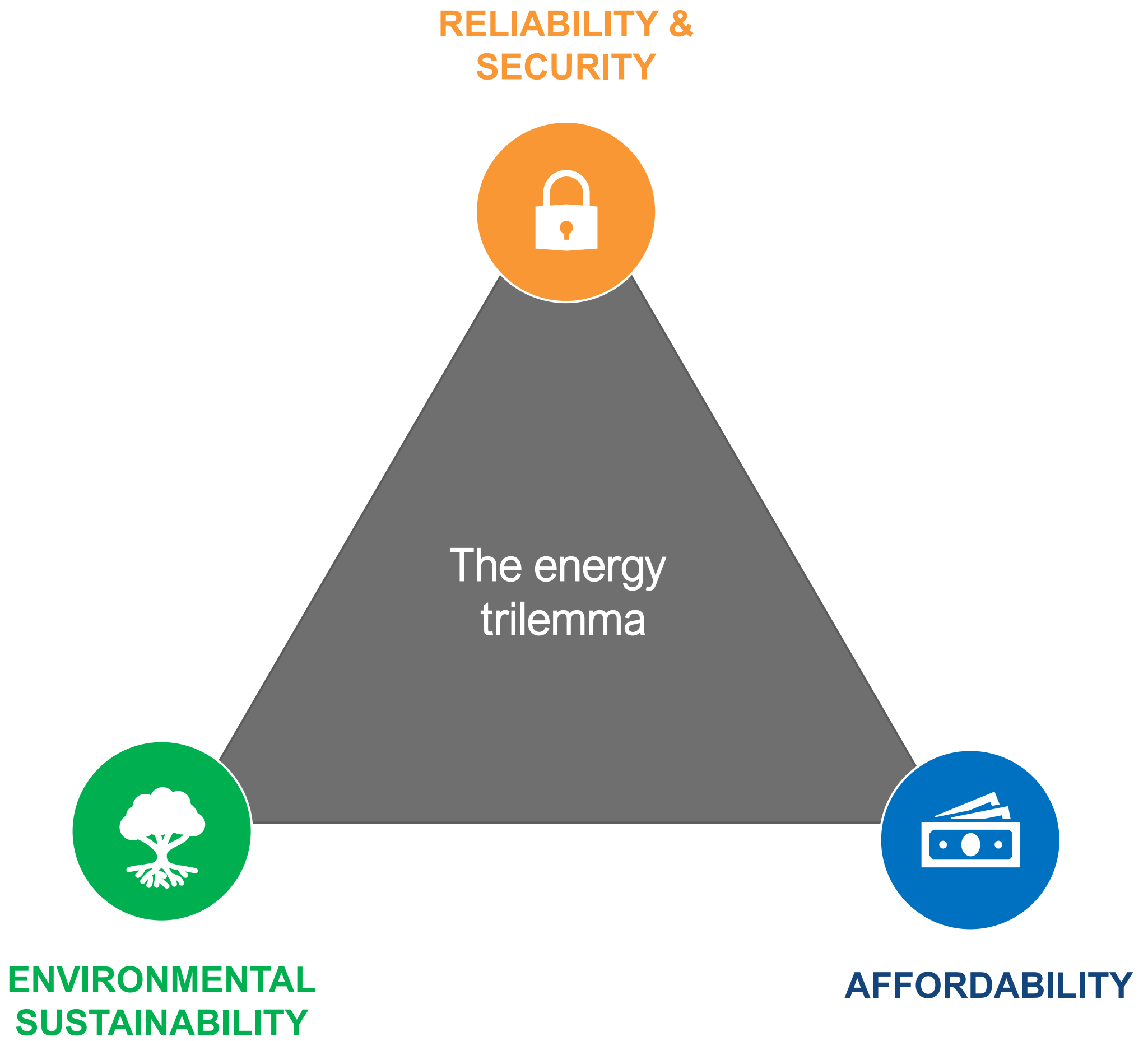
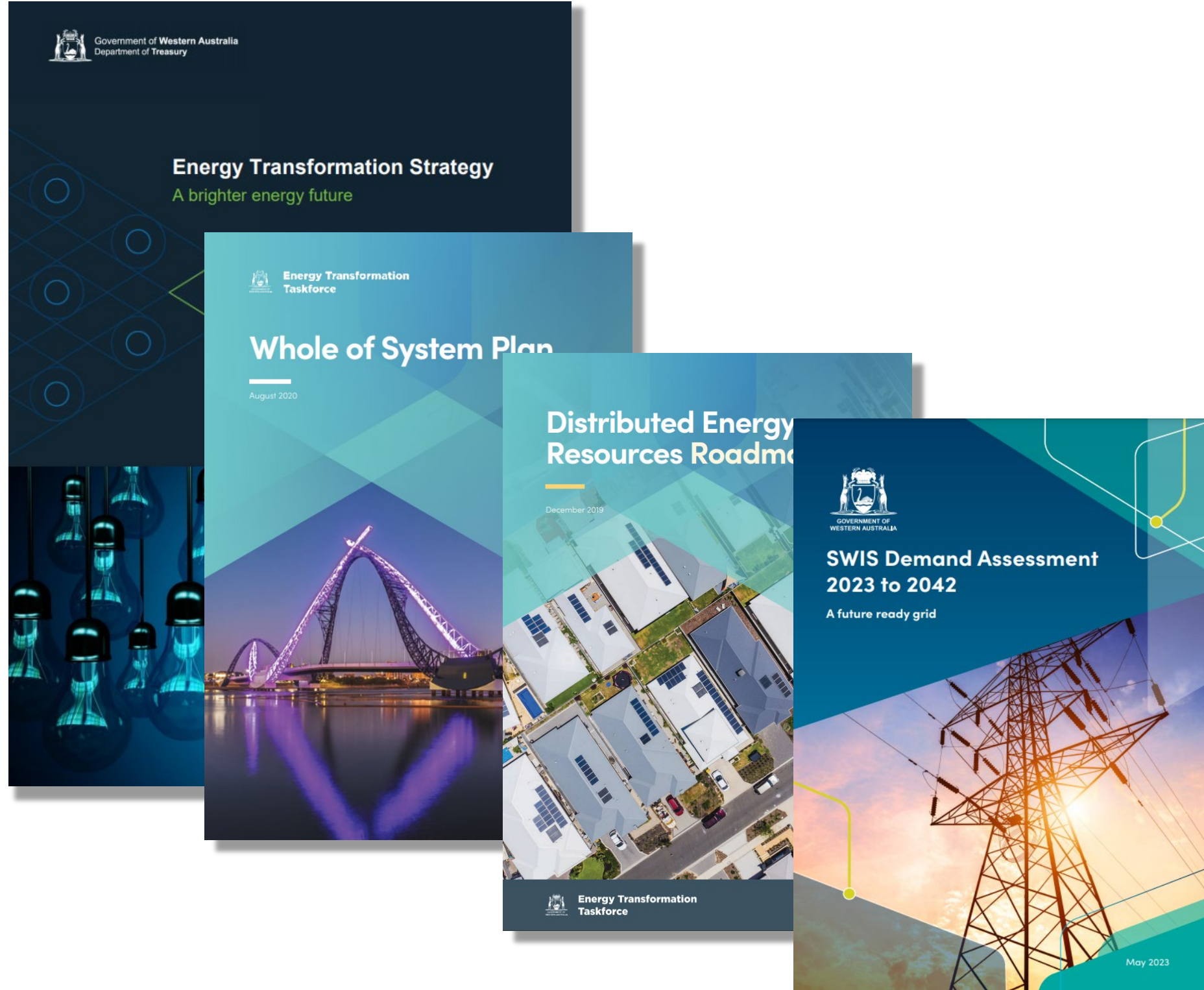
Government of Western Australia
Department of Mines, Industry Regulation and Safety
Energy Policy WA

Working together for a
brighter energy future.

Energy Policy WA's purpose is to deliver innovative and quality advice and initiatives that shape the energy sector for the benefit of Western Australians now and into the future.



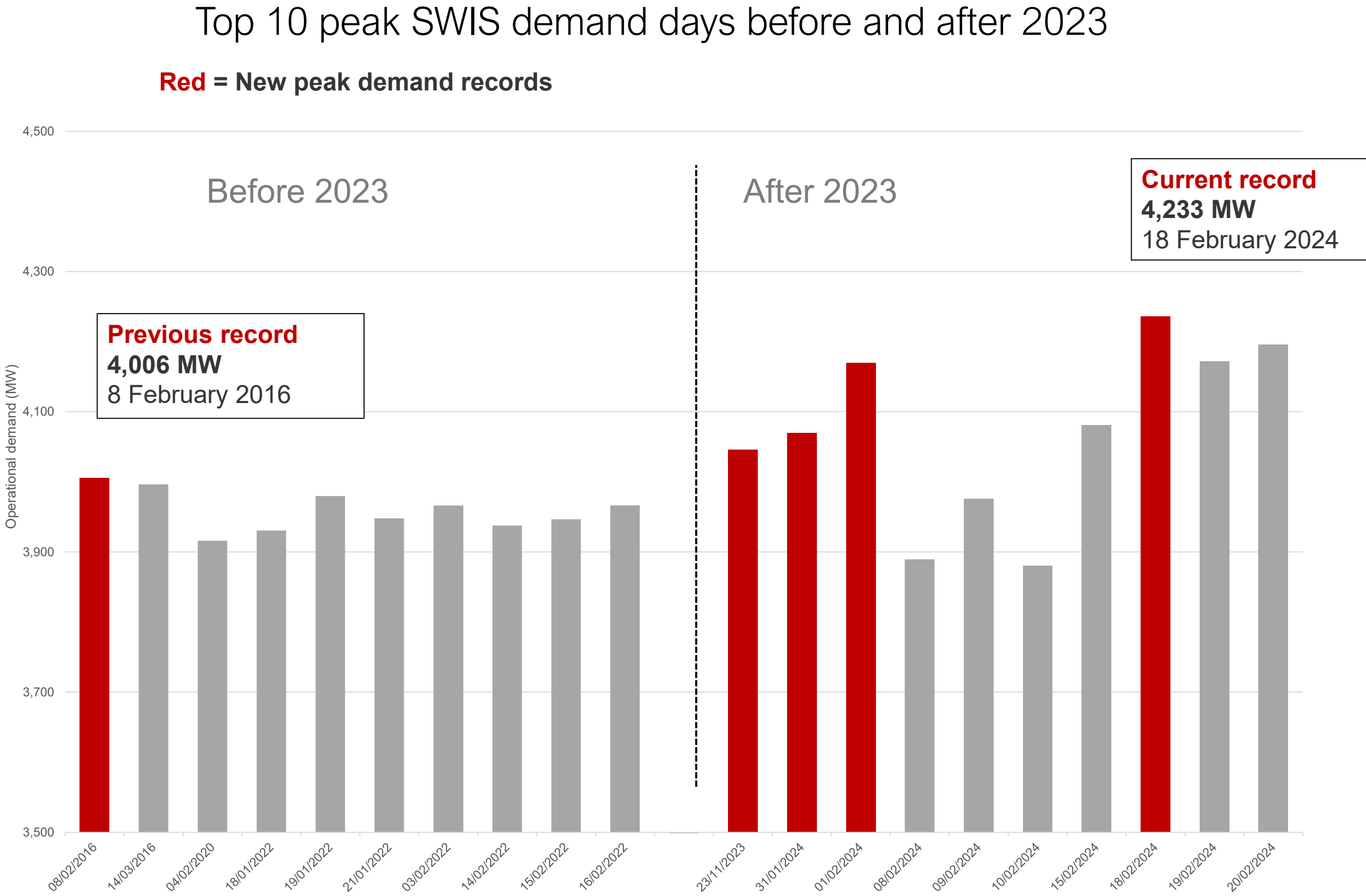
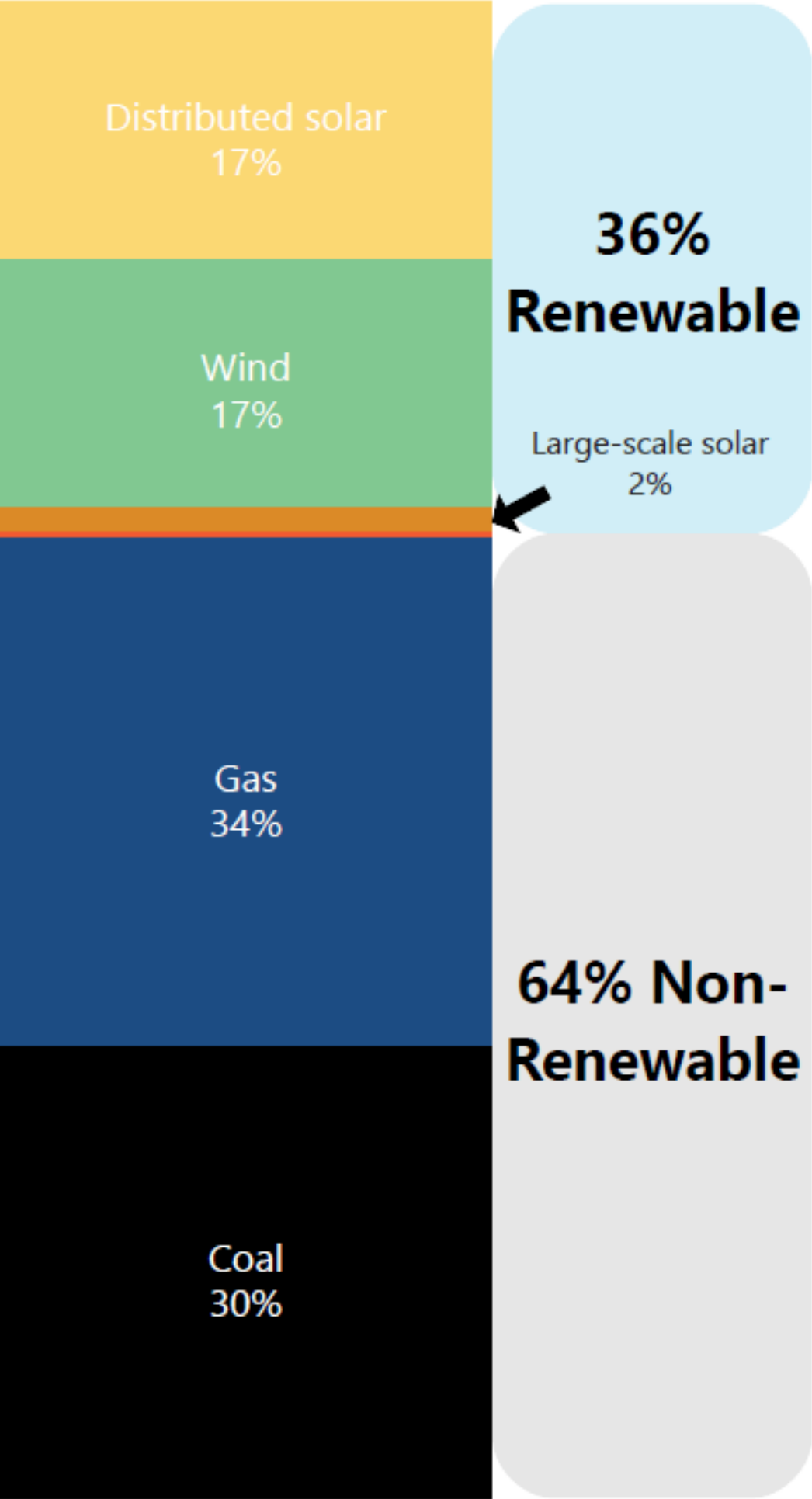
Our policies and initiatives must simultaneously balance three key objectives to ensure the best outcomes for all Western Australians.



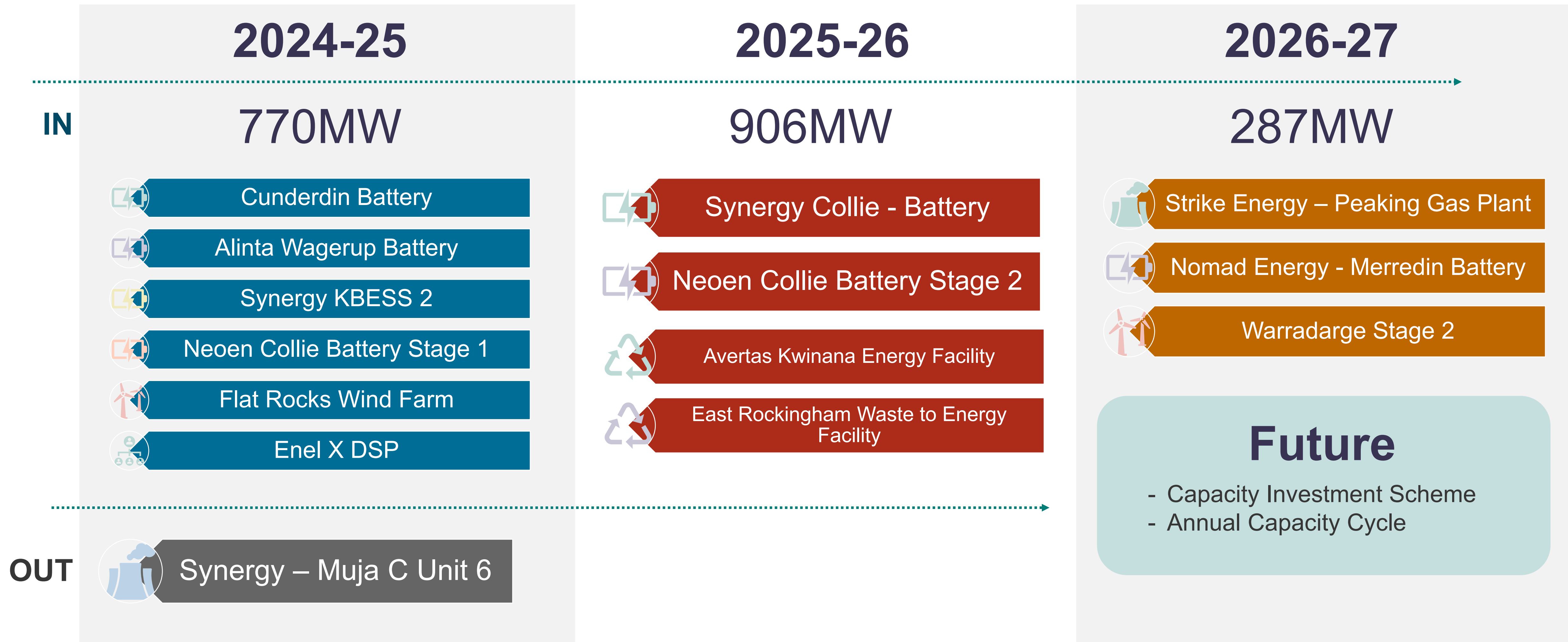
WA is undergoing an energy transition driven by state and federal legislation and policy.

Commonwealth	State
<ul style="list-style-type: none"> • Net Zero Emissions by 2050 • 43% reduction by 2030 • Safeguard Mechanism • 82% renewable energy by 2030 – Rewiring the Nation, Capacity Investment Scheme 	<ul style="list-style-type: none"> • Net Zero Emissions by 2050 • Emissions reduction legislation in progress – will require 2035 target • 80% reduction in Government emissions by 2030 – includes coal retirements

On average, our main grid produces 36% renewable generation, but peak demand is increasing.



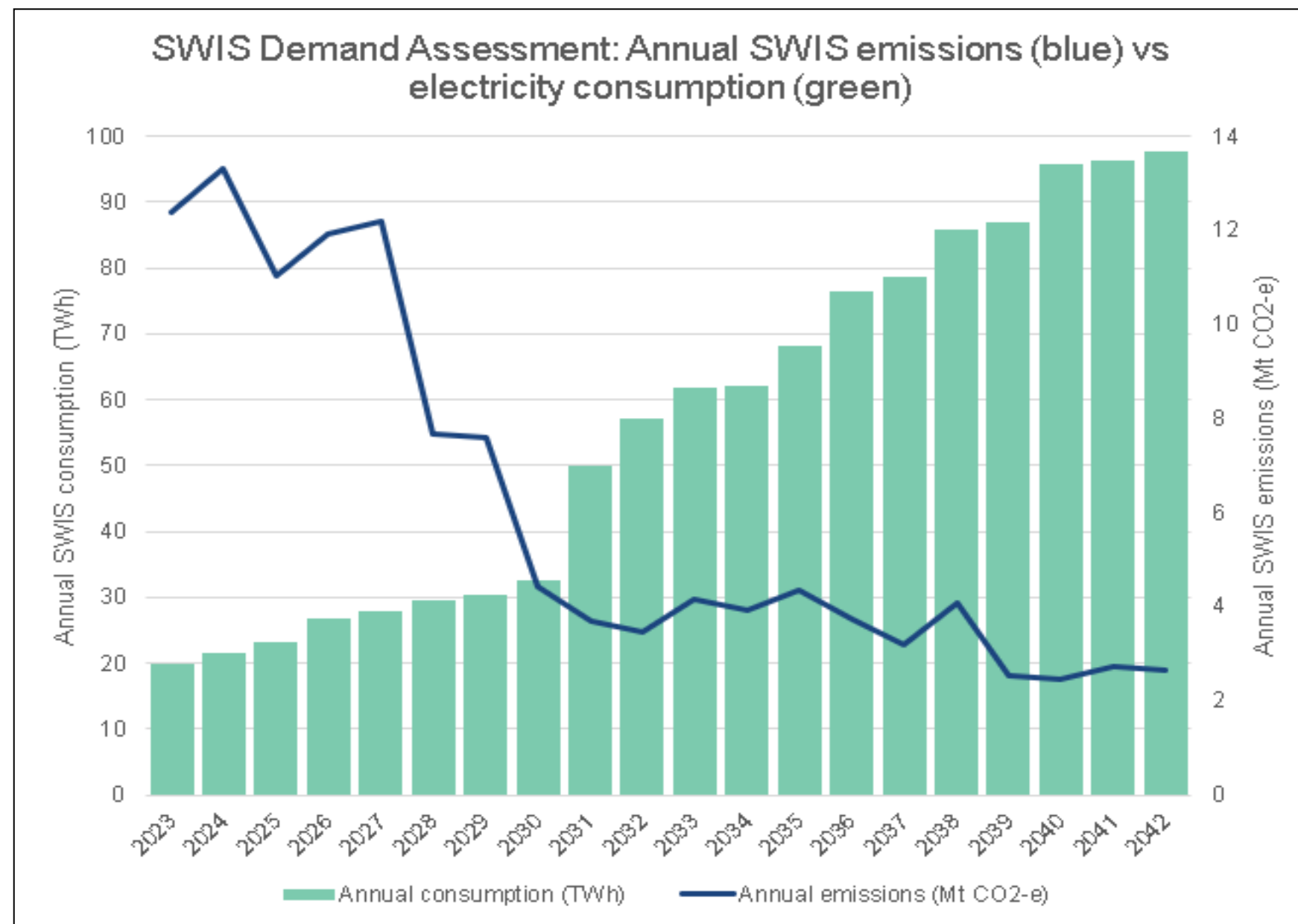
The wave of big battery investments has arrived



Demand for electricity will continue to grow

Electrification is a decarbonisation tool.

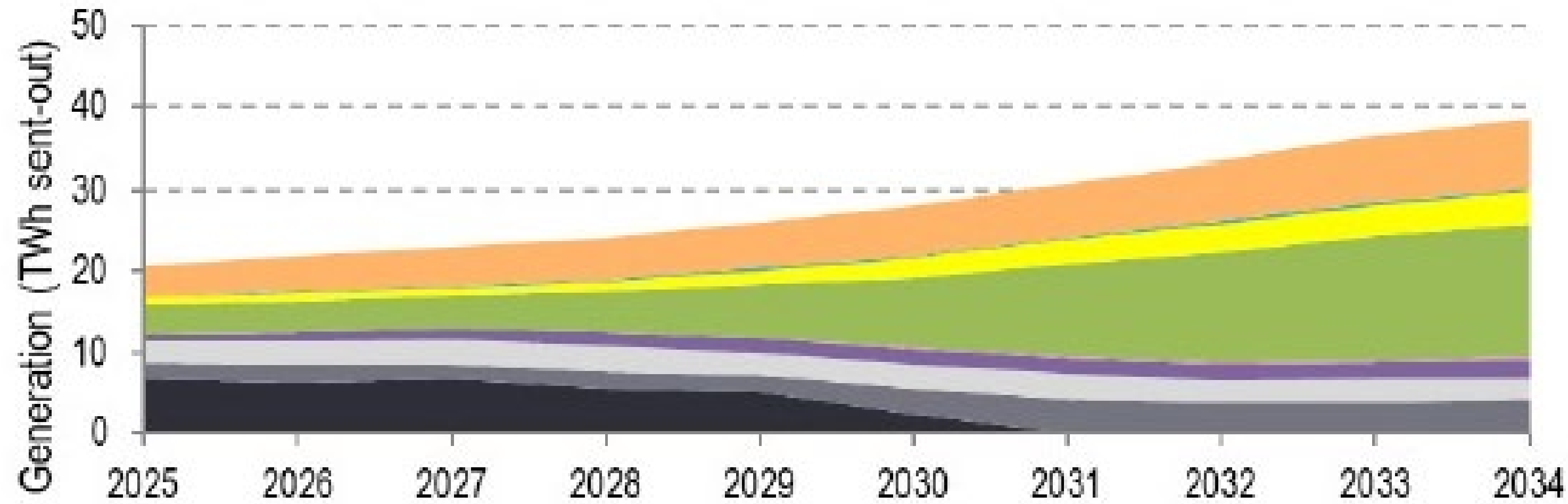
Shifting from fossil fuels to low-carbon generation sources, like wind and sun (backed by storage and gas), is the key to meeting our objectives.



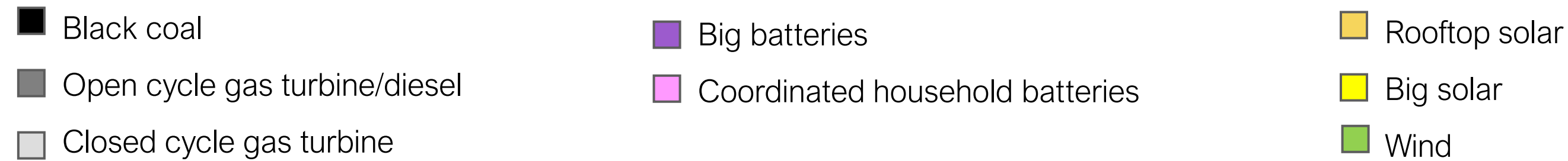
Transmission moves the electricity from where it is generated to where it is being used.

To meet that demand, an overwhelming majority of new generation will be from solar and wind (backed with storage and gas)

Future Generation Mix



- ✓ Most commercially viable
- ✓ Lowest cost
- ✓ Decentralised (adds to redundancy/reliability)
- ✓ Environmentally sustainable



Data Source: AEMO WA in the SWIS

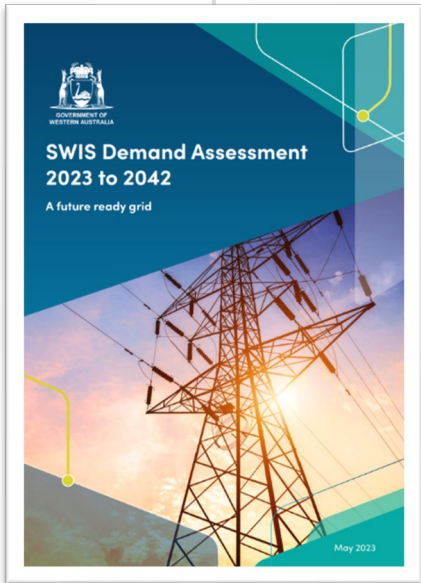
Note: Based calendar year and draft 2024 Step Change scenario

SWIS: South West Interconnected System (our main electricity grid)

The SWIS Transmission Planning Update 2024 identifies potential areas for transmission expansion of our main electricity system (SWIS).

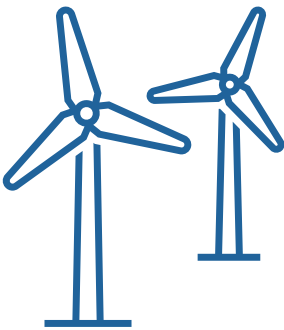
May 2023

SWIS Demand Assessment



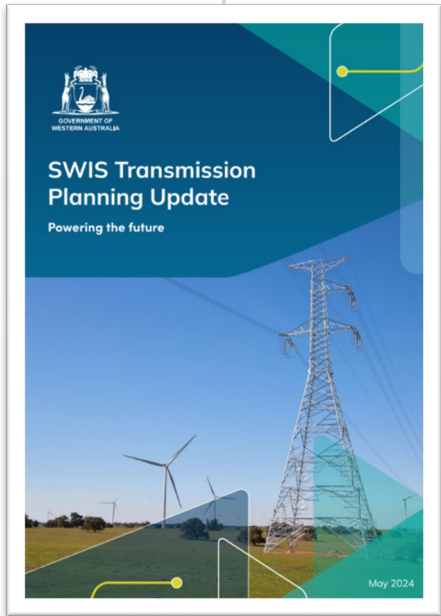
Oct/Nov 2023

Industry Expression of Interest



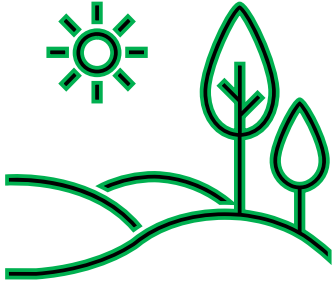
March 2024

SWIS Transmission Planning Update



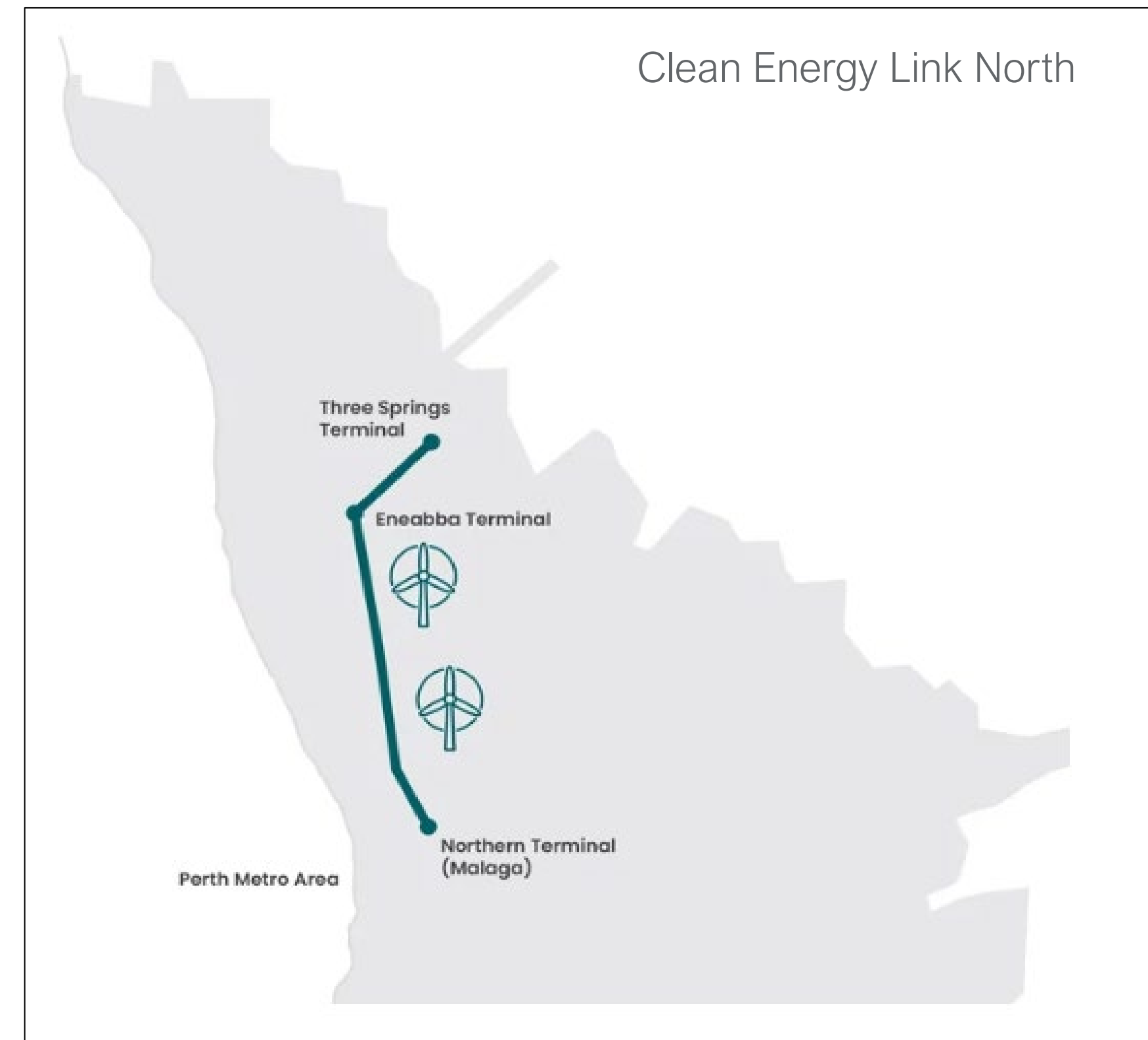
Sept/Oct 2024

Flora & Fauna Surveys



WA Government's investment in **Clean Energy Link North** will unlock ~1GW of wind generation from late 2027 and \$324m investment in transmission planning for future expansion.

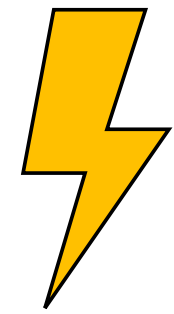
- ✓ Strengthening the existing network to ensure it can connect and transport a greater supply of renewable energy.
- ✓ Upgrading the current mix of 132 kV and 330 kV lines in parts of the northern network to allow more renewable projects to connect in the Wheatbelt and Mid-West.
- ✓ New 330 kV and 132 kV transmission line and terminal builds within the existing network footprint.
- ✓ 2027 - target date for completion



Note: 1GW is equivalent to the output of around 3-4 gas power stations

The scale of change ahead is bigger than any single agency.

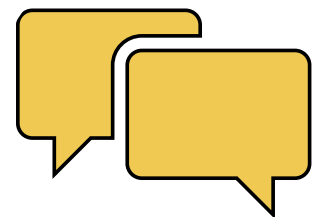
PoweringWA is a new entity set up to transform, decarbonise and future-proof energy system, starting with our main grid (SWIS) and the Goldfields, and may evolve to cover all of WA.



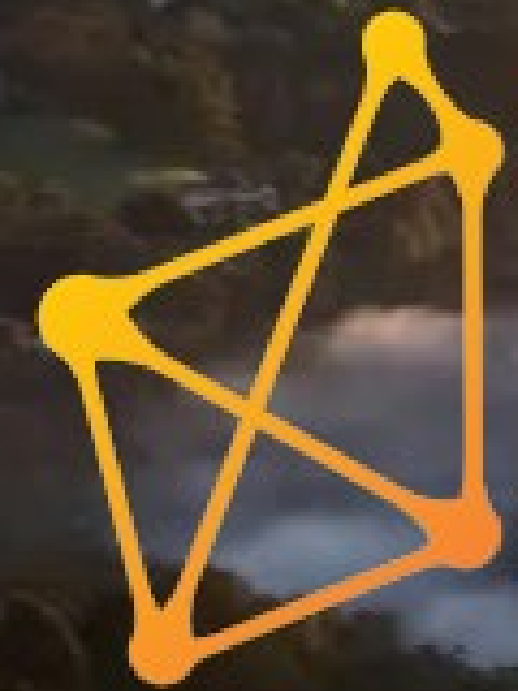
Coordinate the build of transmission, renewable generation and storage infrastructure



Work across Government and industry.

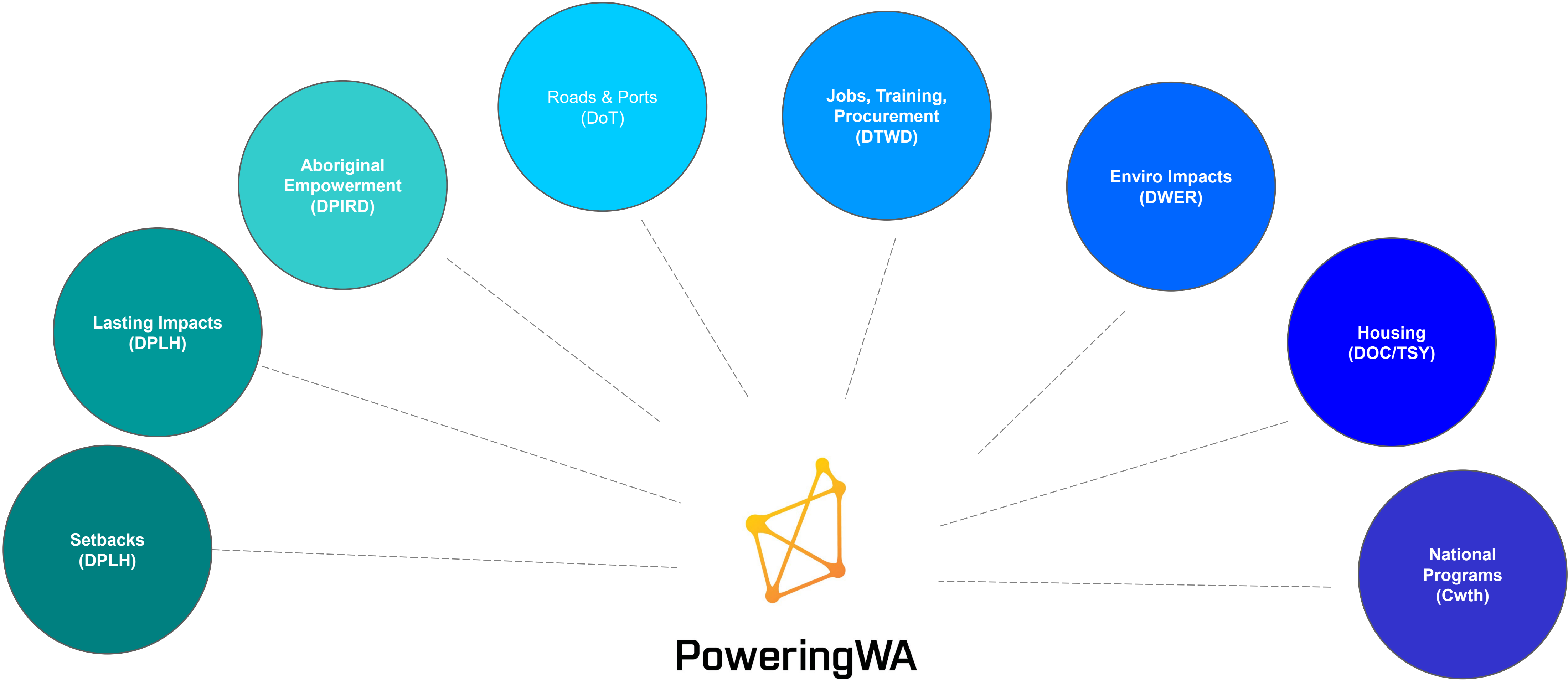


Ensure appropriate consideration is given to environment, cultural and social issues.

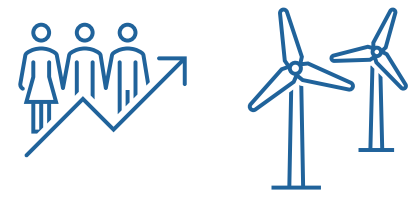


PoweringWA

PoweringWA is engaging across Government to address key challenges associated with energy transition



Hosting renewable generation projects can present great opportunities for the regions



Diversifying local economy



Building capacity in regional communities



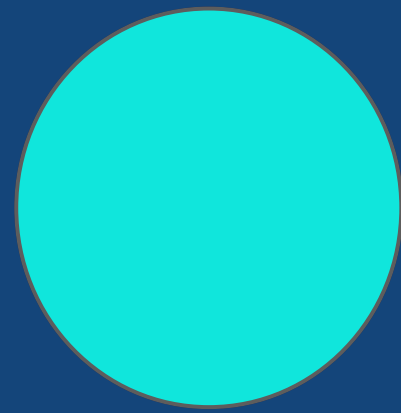
Supporting local businesses



Delivering meaningful benefits from projects



Thank you!



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