

2020 Integrated System Plan

The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) provides a 20-year roadmap for the National Electricity Market (NEM) through the energy transition period to 2040.

Consultation

AEMO facilitated an 18-month consultation program in developing the draft and final ISP, along with the Forecasting and Planning Scenarios, Inputs and Assumption Report, including:

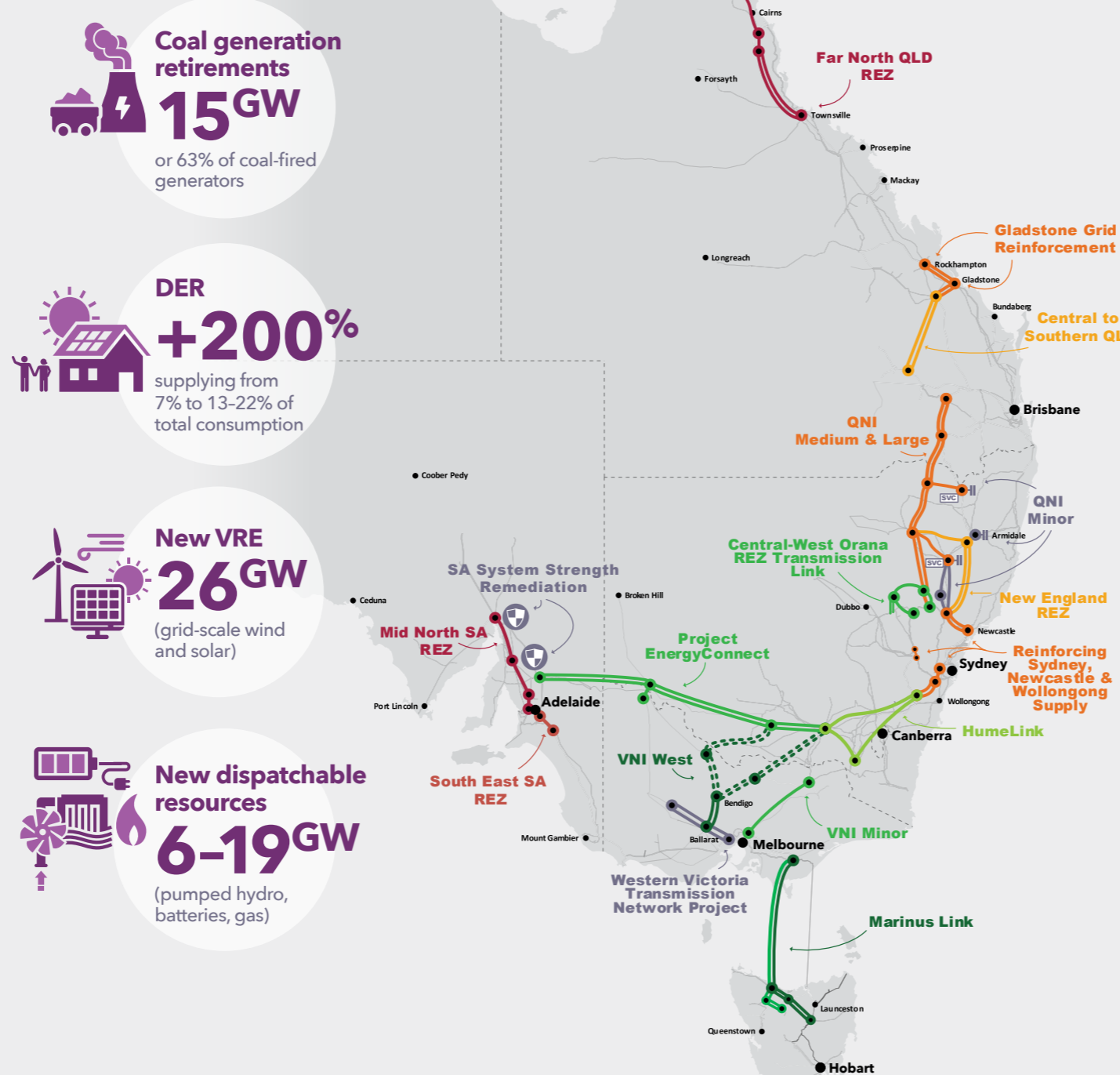
- 200+ stakeholders consulted
- 8 workshops held
- 3 webinars hosted
- 85 written submissions provided

Considerations

- Market reforms
- Government policies
- Economic growth
- Emissions reductions
- Grid technologies and services
- Consumer investment in DER

Expected changes to 2040

The ISP modelling confirms that the least-cost, least-regret transition of the NEM is from a *centralised* coal-fired generation system to a *highly diverse* portfolio dominated by distributed energy resources (DER) and variable renewable energy (VRE), supported by dispatchable resources and enhanced grid and service capabilities, to ensure the power system can reliably meet demand at all times.



Optimal development path and net benefits

The ISP sets out the optimal development path needed for Australians to enjoy an affordable, secure and reliable energy future. If implemented, these investments would deliver \$11 billion in net market benefits, while meeting the security, reliability and emissions expectations of energy consumers.

Classification	Project	Indicative timing
Committed	SA System Strength Remediation	2021-22
	QNI Minor	2021-22
	Western Victoria Transmission Network Project	2025-26
	VNI Minor	2022-23
Actionable ¹	Project EnergyConnect	2024-25
	HumeLink	2025-26
	Central-West Orana REZ Transmission Link	Mid-2020s
	VNI West ²	2027-28
	Marinus Link ² - Cable 1	2028-29 to 2031-32
	- Cable 2	2031-32 to 2035-36
Preparatory Activities Required	QNI Medium & Large	2030s
	Central to Southern QLD	Early-2030s
	Reinforcing Sydney, Newcastle and Wollongong Supply	2026-27 to 2032-33
	Gladstone Grid Reinforcement	2030s
	New England REZ Network Expansion ³	2030s
	North West NSW Network Expansion ⁴	2030s
Future ISP Projects	Far North QLD REZ	2030s
	South East SA REZ	2030s
	Mid North SA REZ	2030s

¹ Estimated practical completion including any subsequent testing - projects may be delivered earlier
² Decision rules may affect timing
³ May be accelerated by government initiatives
⁴ Not shown on map. AEMO requires that preliminary engineering designs be completed by 30 June 2021

