

2026 Integrated System Plan

Publication webinar

7 July 2026



**This webinar will be recorded
and published online**



We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country, and hope that our work can benefit both people and Country.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO is proud to have launched its Innovate Reconciliation Action Plan (RAP) in June 2026. Pictured left and featuring on the cover of the Innovate RAP is Wiradjuri artist Lani Balzan's 'Journey of unity: AEMO's Reconciliation Path', a visual representation of our ongoing journey towards reconciliation – a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Read our
RAP



Agenda

Time (AEST)	Item	Speaker
10:00 am	Agenda & welcome	Samantha Lloyd , Manager Stakeholder Engagement
10:05 am	Overview – <i>The ISP is a roadmap for the energy transition</i>	Nicola Falcon , Executive General Manager System Design
10:15 am	2026 ISP key findings – <i>AEMO's integrated modelling seeks the optimal development path</i>	Samantha Lloyd , Manager Stakeholder Engagement Samantha Christie , Manager Strategic Planning
10:45 am	Q&A	<i>Facilitated by Samantha Lloyd</i>
11:30 am	Close	Samantha Lloyd

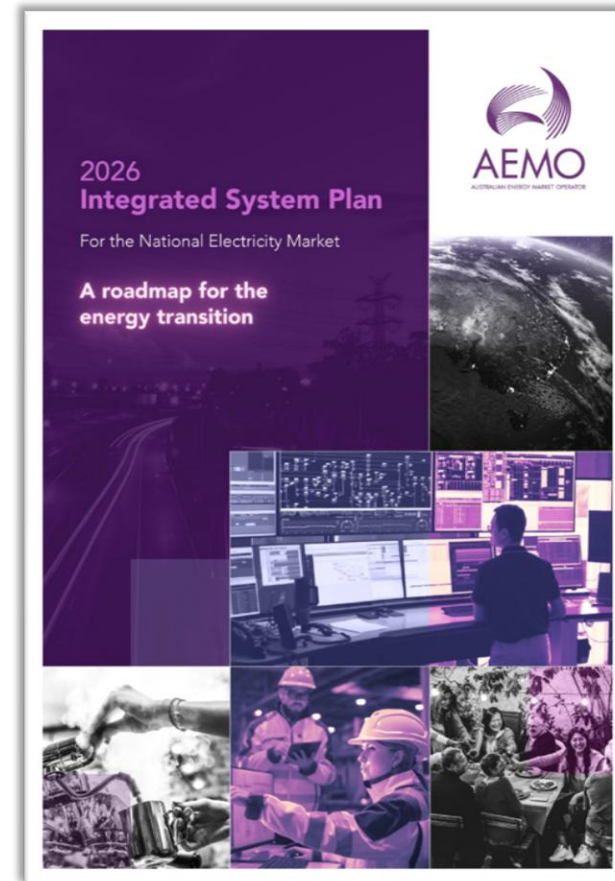
Today's objectives



Present overview and key findings of the 2026 ISP



Respond to questions using Slido in a Q&A session after the presentation



[Report and supporting material](#)

How to interact today

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- Ask questions using Slido www.sli.do #AEMO
- Ask your own questions or up-vote others' questions
- Provide feedback through our [post-webinar survey](#)

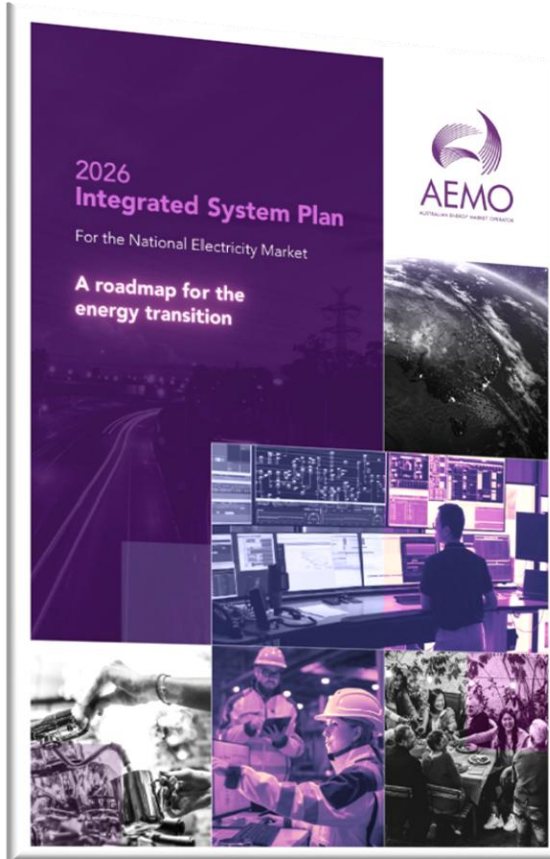
The ISP is a roadmap for the energy transition



Nicola Falcon

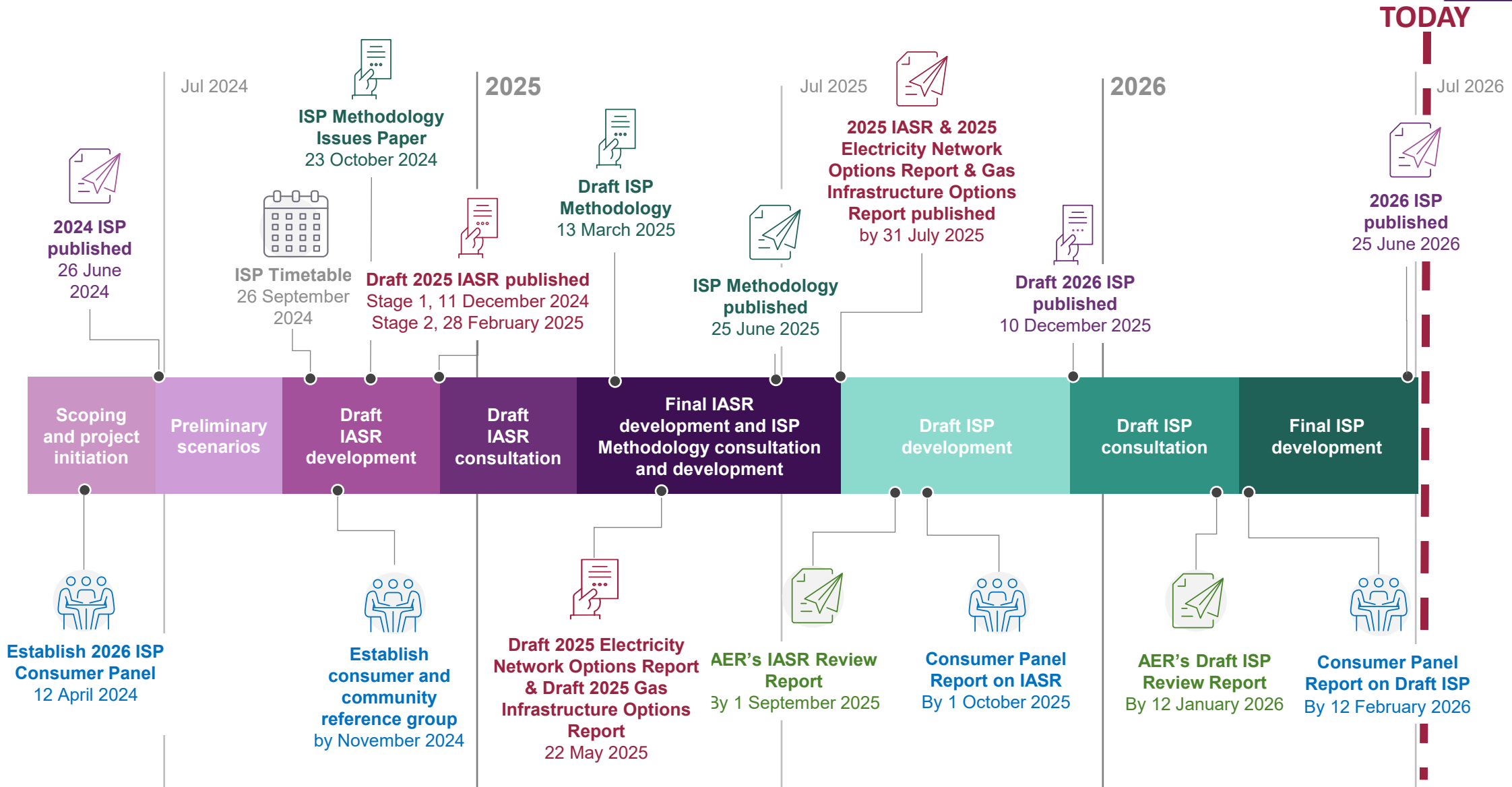
Executive General Manager, System Design

The Integrated System Plan is a roadmap for the energy transition



- A roadmap for the National Electricity Market (NEM) energy transition.
- Optimal development path for generation, storage, and network investments to **meet consumer needs and government renewable and emissions targets to 2050**.
- Includes enhanced **consideration of gas, distribution networks and demand-side factors**.
- **Provides analysis and insights** for a range of stakeholders.
- Serves regulatory purpose of **identifying 'actionable' transmission projects** which should progress as quickly as possible.

The 2026 ISP reflects two years of consultation and analysis



“ *The 2026 ISP reaffirms that **renewable energy**, connected by **transmission and distribution**, firmed with **storage** and backed up by **gas**, presents the least-cost way to supply secure and reliable electricity to consumers through to 2050, as coal plants retire and while meeting government policies.*

AEMO's integrated modelling seeks the optimal development path

Samantha Lloyd, Manager Stakeholder Engagement

Samantha Christie, Manager Strategic Planning

Stakeholder engagement for the ISP is a two-year, inclusive process

Consultation



1,940
stakeholders
engaged



19
webinars and
workshops hosted



62
reports and
reference material



333
stakeholder
submissions

Key feedback themes

Transmission
network
development

Generation and
storage projects

Consumer energy
resources

Modelling
framework

Project
deliverability

Distribution
networks

System security
and operability

Demand outlook

Gas role, supply,
and infrastructure

Social licence and
engagement

Coal-fired
generators –
pathway and role

Communication
and framing of
the ISP

Final ISP includes updates from Draft



Aligned project pipeline



Updated fuel and technology
cost inputs



Updated consumer battery
uptake assumptions



Refined gas infrastructure
options and modelling



Updated transmission
options



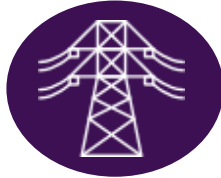
Updated sensitivity analysis



Refined terminology

AEMO has updated inputs, assumptions and approaches since the Draft 2026 ISP

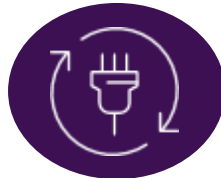
Transmission network options updates



Included committed, anticipated and policy-supported generation and storage projects



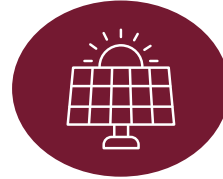
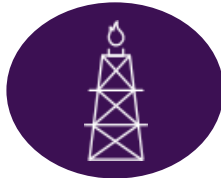
South Australian government's target of net 100% renewable energy



Home batteries uptake forecast



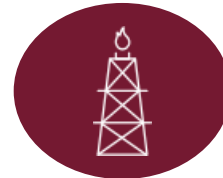
Gas forecasts and project information



Prioritised existing project pipeline



Updated coal flexibility assumptions



Increased firming to ensure reliability



Aligned with advice from jurisdictional bodies for transmission planning

AEMO has planned the 2026 ISP for three plausible future scenarios that meet policy, with *Step Change* most likely



- *Step Change* reflects a pace of energy transition that supports Australia's contribution to limit global temperature rise to less than 2°C, with consumer energy resources contributing strongly to the transition.



- *Slower Growth* also reflects Australia's current policies and commitments to decarbonisation, but more challenging economic conditions and supply chain constraints lead to slower investment in grid-scale assets and consumer energy resources, with some larger energy-intensive industrial users assumed to close.



- *Accelerated Transition* reflects decarbonisation to support Australia's contribution to limit global temperature rise to 1.5°C. Its rate of transformation is greater than that required by current policy commitments, made possible by global technology progress and a faster growing economy than other scenarios.

Step Change, 46%

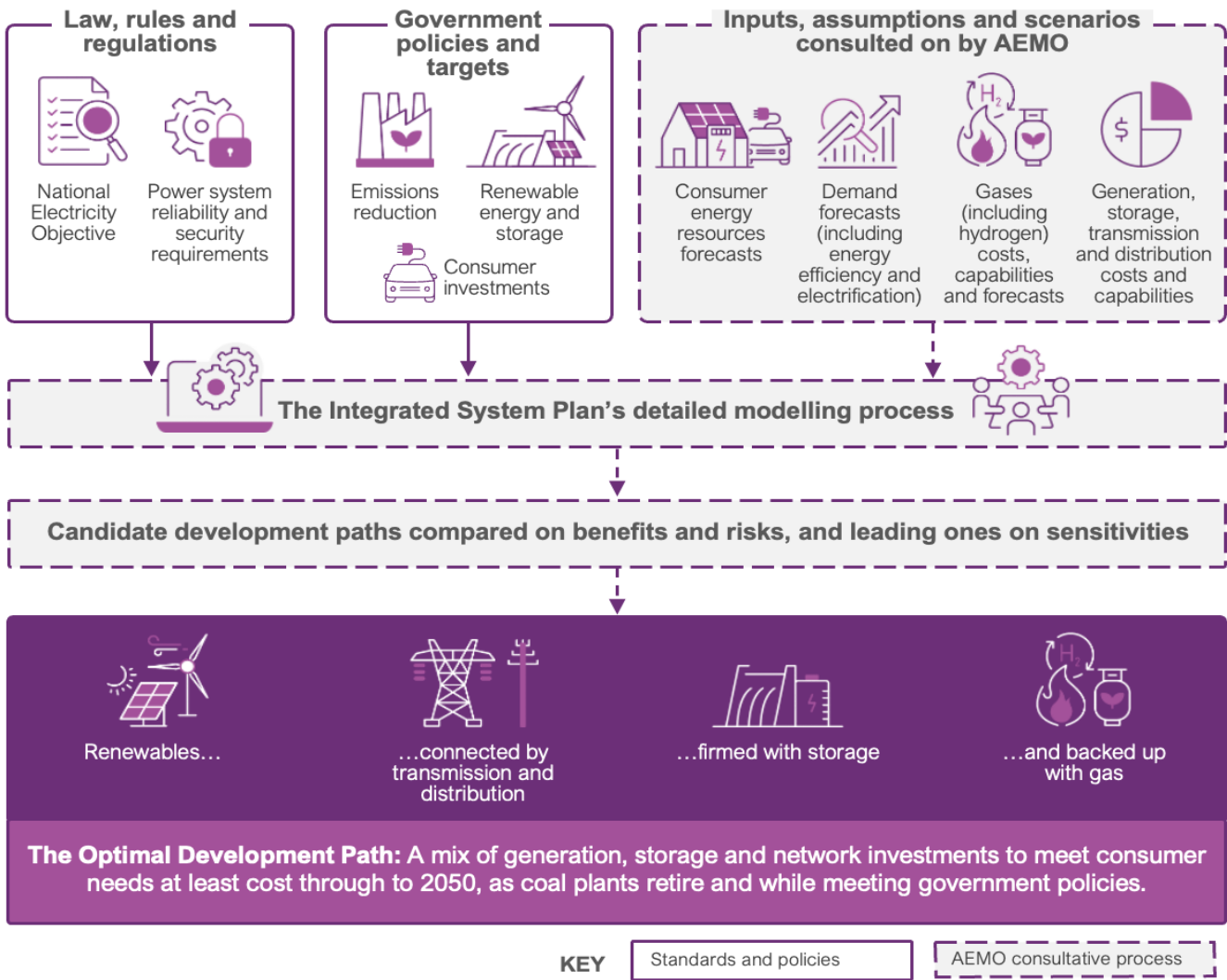
Slower
Growth, 27%

Accelerated
Transition,
27%

All scenarios meet relevant emissions reduction, and renewable energy and storage policies and targets

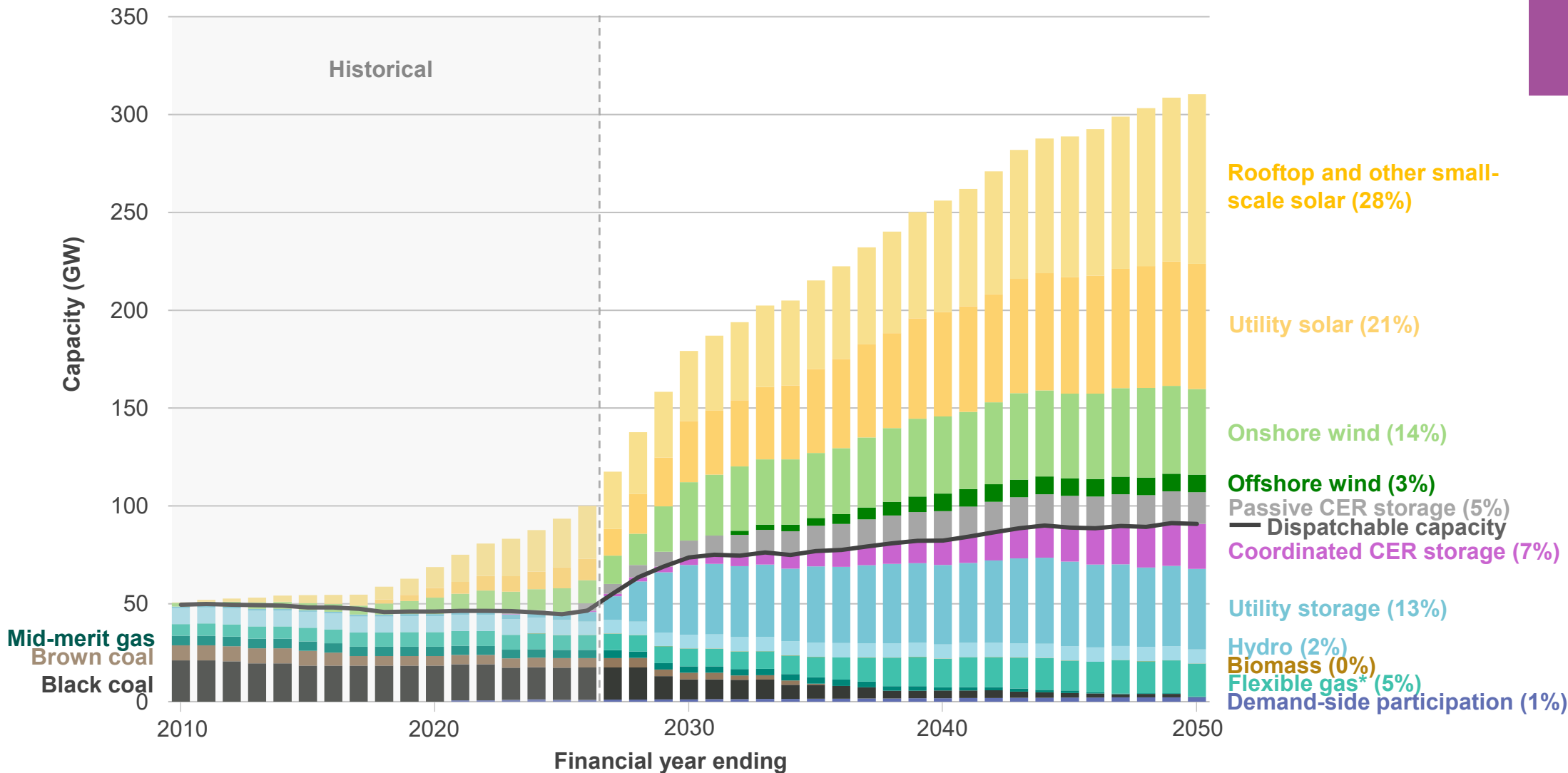
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- ✓ **Commonwealth:** Powering Australia Plan's 82% renewable energy by 2030, 43% emission reduction by 2030 and 62-70% by 2035, the Safeguard Mechanism, the expanded Capacity Investment Scheme and the Cheaper Home Batteries Program.
 - ✓ **Queensland:** 30% emissions reduction by 2030 and 75% by 2035, Queensland Energy Roadmap, and Queensland electric vehicles sales target by 2030.
 - ✓ **New South Wales:** 50% emissions reduction by 2030 and 70% by 2035, and Electricity Roadmap targets for renewable capacity and deep storage.
 - ✓ **South Australia:** SA Renewable Energy Target (100% from 2027 onwards), Firm Energy Reliability Mechanism, 60% emissions reduction by 2030, and electric vehicles target by 2030.
 - ✓ **Victoria:** Victorian Renewable Energy Target and emission reduction targets (including 40-50% reduction by 2030), plus storage and offshore wind targets, and the Victorian gas substitution roadmap.
 - ✓ **Tasmania:** Tasmanian Renewable Energy Target, and Battery of the Nation projects.
 - ✓ **All jurisdictions:** Value of greenhouse gas emissions reduction.

The ISP takes standards, policies and consulted-on inputs and assumptions to model the optimal development path



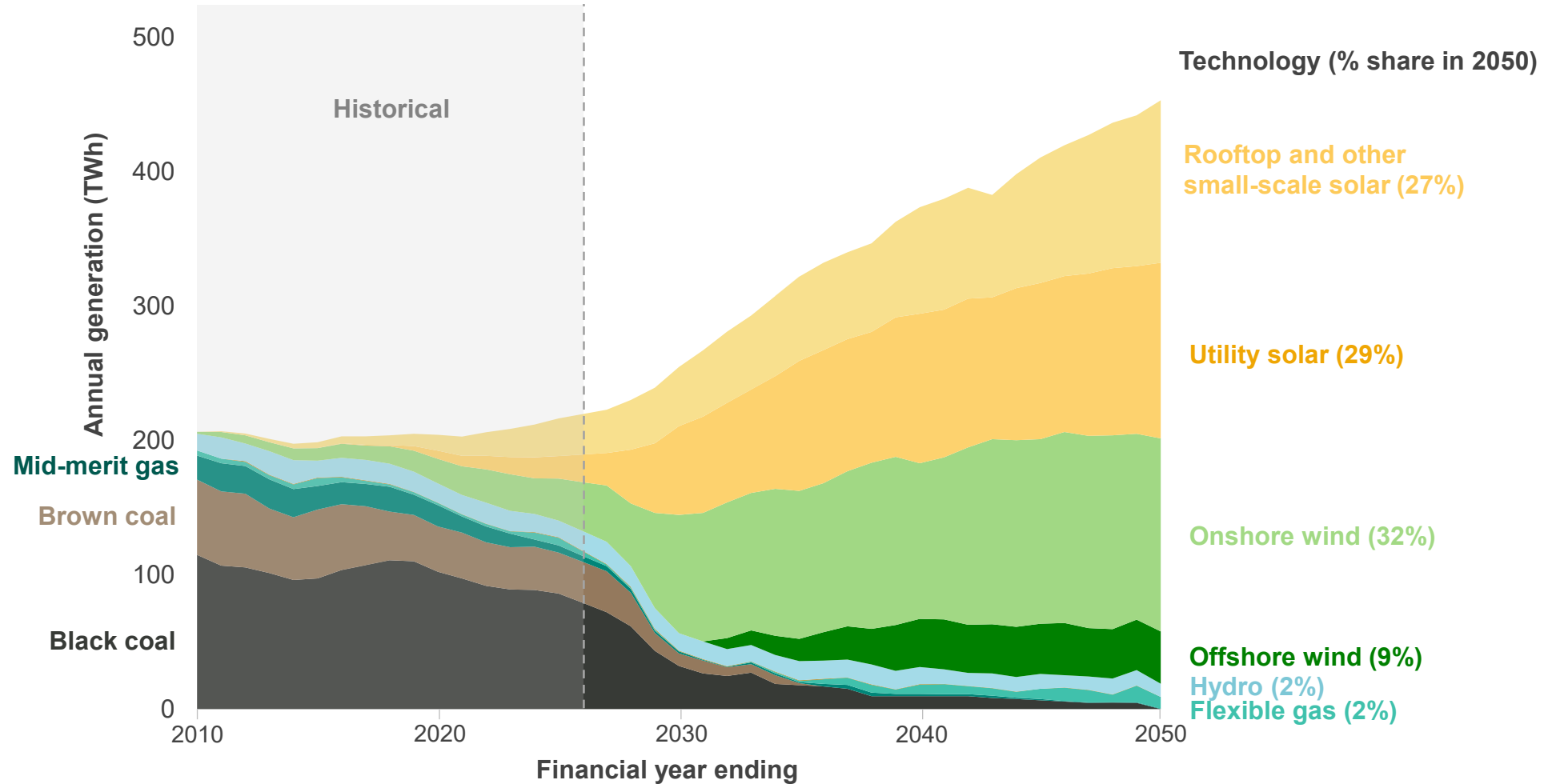
The ISP projects a mix of renewable energy, storage and firming resources to support consumer needs and meet policies

NEM capacity (GW, 2010 to 2050, *Step Change*, financial year ending)



98% of annual generation by 2050 to be met from rooftop and other small-scale solar plus grid-scale renewable energy

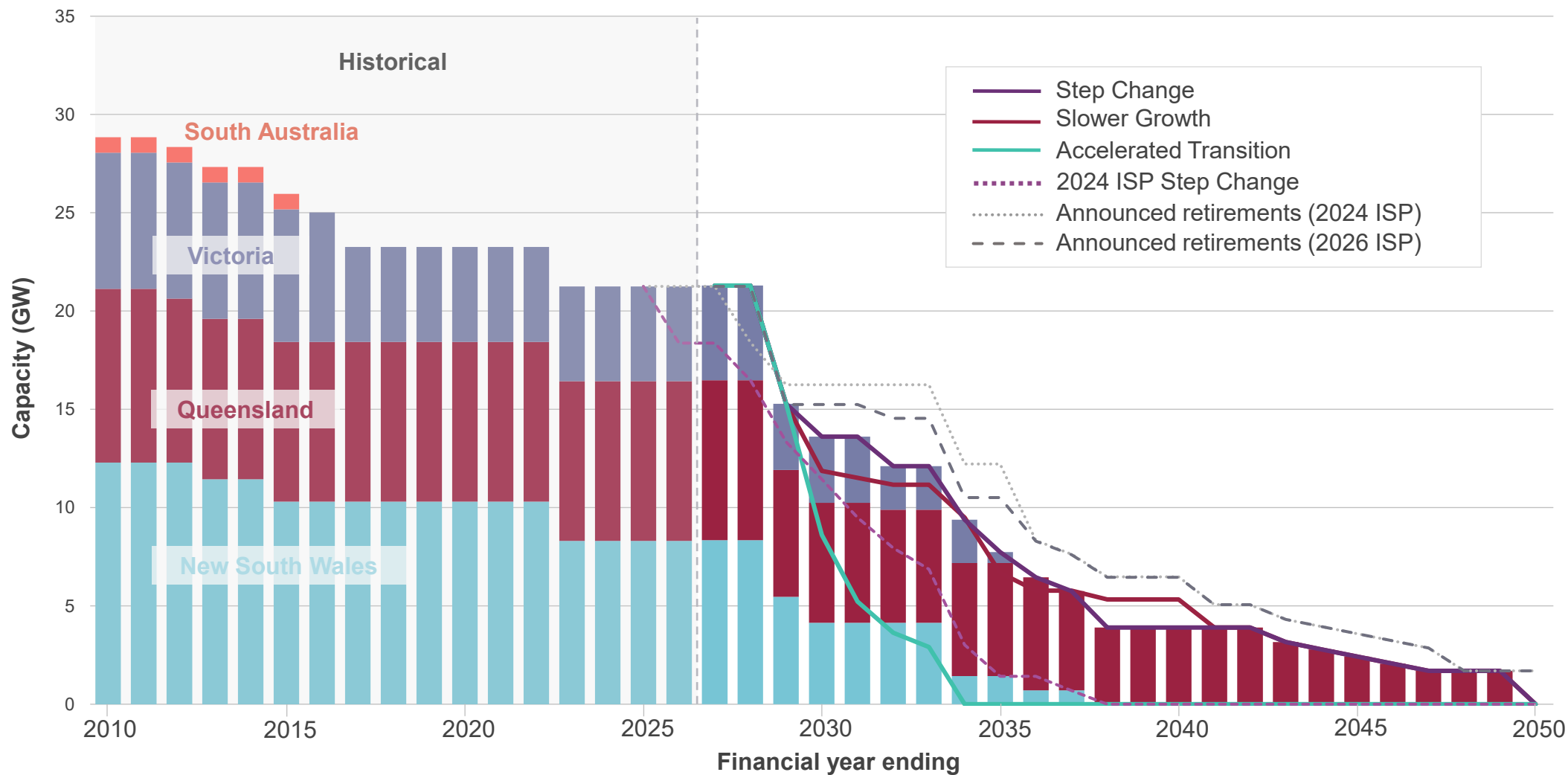
NEM annual generation (TWh, 2010 to 2050, *Step Change*, financial year ending)



Note: This chart is the projection of electricity generation by fuel type. Battery charge and discharge, and pumped hydro production, are excluded, as these technologies store electricity that has already been generated for use at other times.

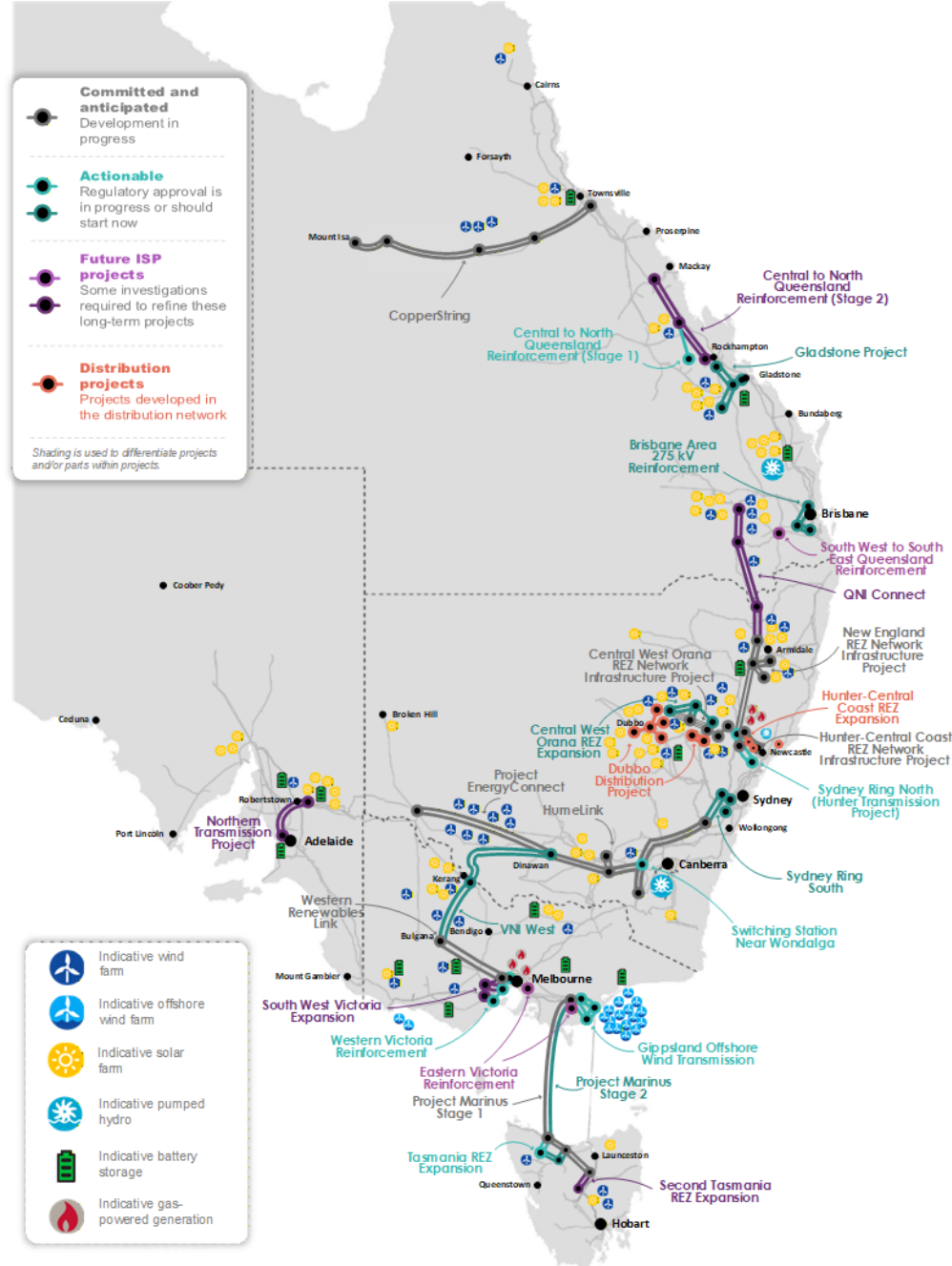
Coal remains important today, but is projected to progressively withdraw by 2049

Coal capacity, NEM (GW, 2010 to 2050 financial year ending)



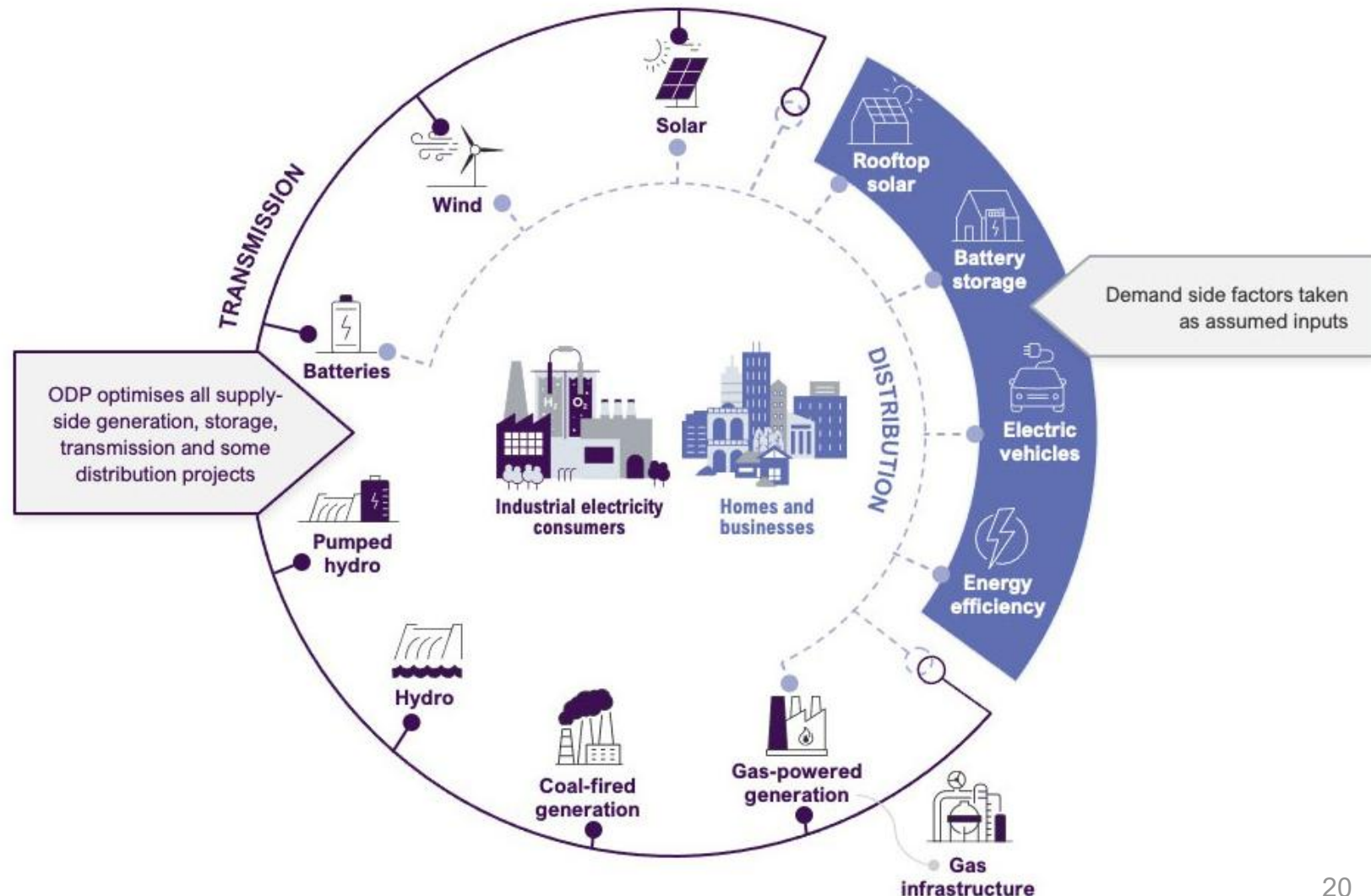
Transmission network is projected to be extended by about one-seventh

- The optimal development path would extend the existing 44,000 km transmission network by about 6,000 km
- About 40% is for strengthening between states, and 60% for connecting capacity in renewable energy zones or support within states
- Total build is about 1,435 km less than projected in the 2024 ISP



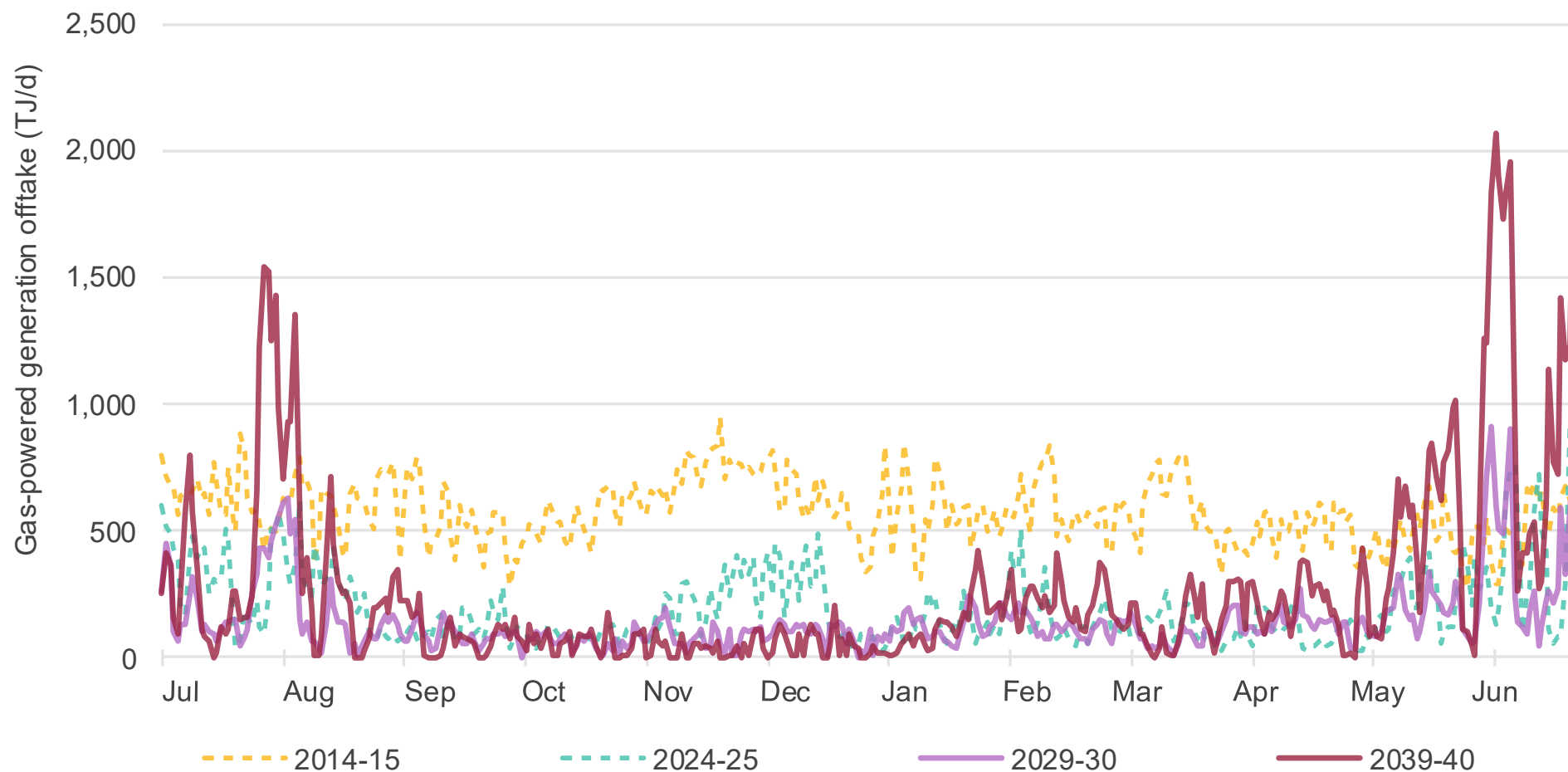
Consumer and distribution actions reduce the need for grid-scale investment

- Coordinating consumer energy resources and electric vehicles would avoid up to \$5 billion being spent on grid-scale storage.
- Maintaining energy efficiency policies would avoid almost \$8 billion in grid-scale infrastructure.
- Distribution networks could allow consumer energy resources to export an additional 4 GW to the grid, by optimising voltage management and other lower cost innovations.

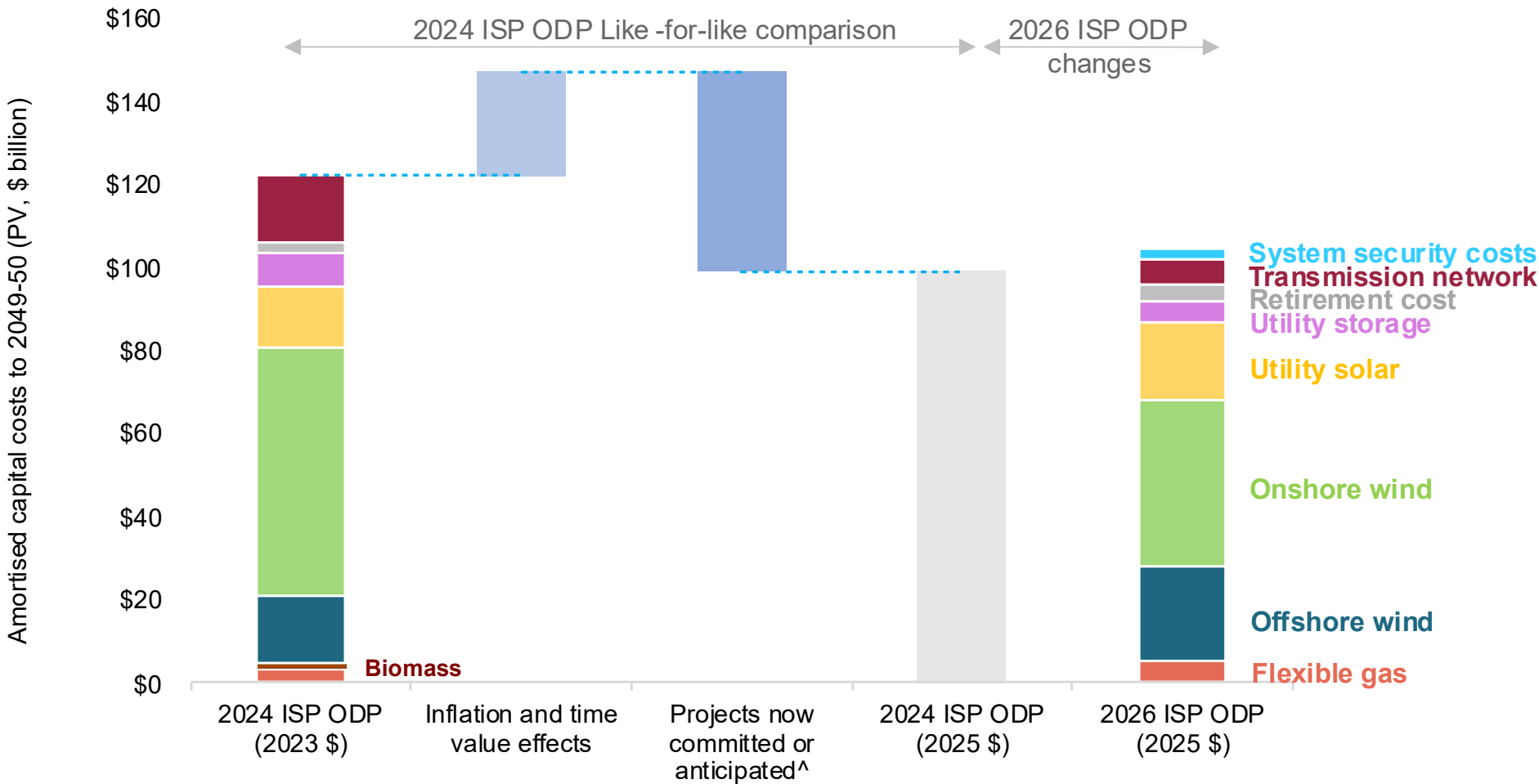


Gas powered generation is projected to be used less often, but remains critical when renewable output is low

Gas-powered generation offtake, NEM (TJ/day 2015 and 2040, *Step Change*)

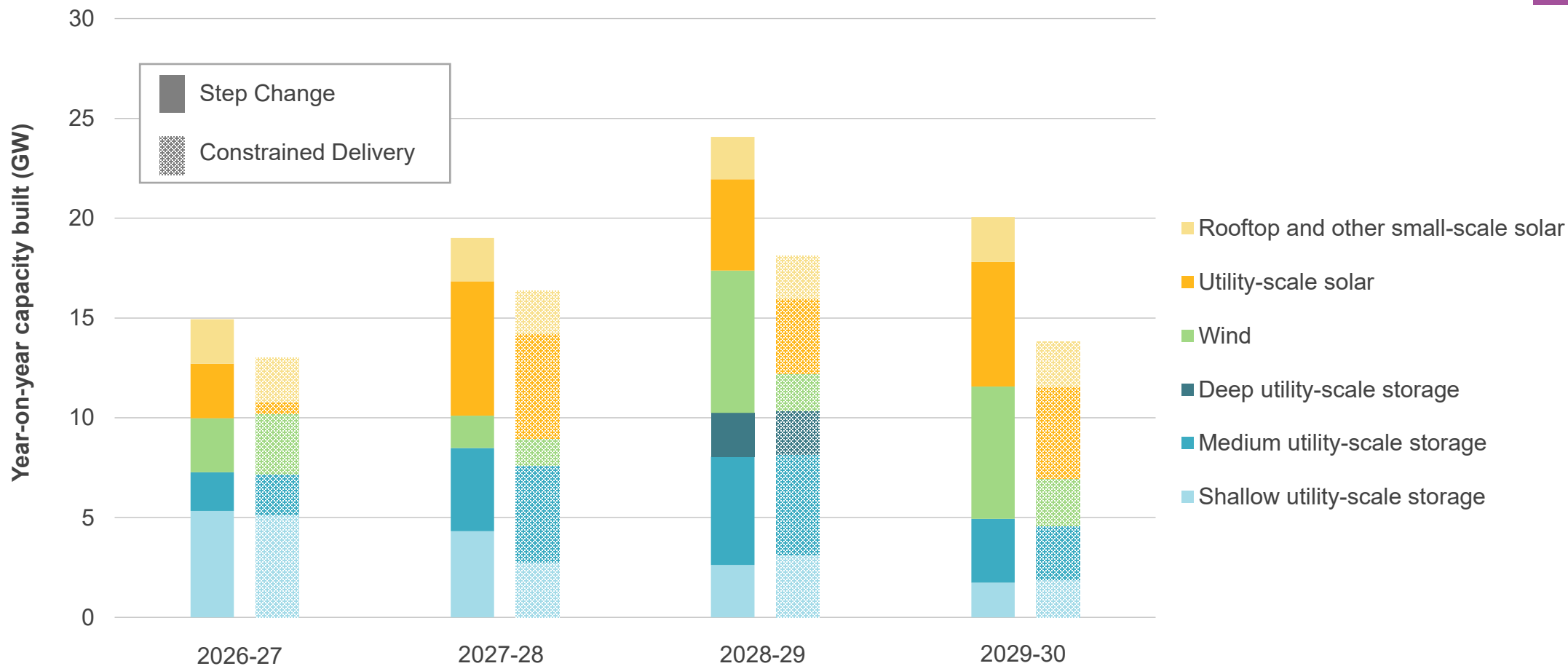


Capital costs are broadly similar to the 2024 ISP



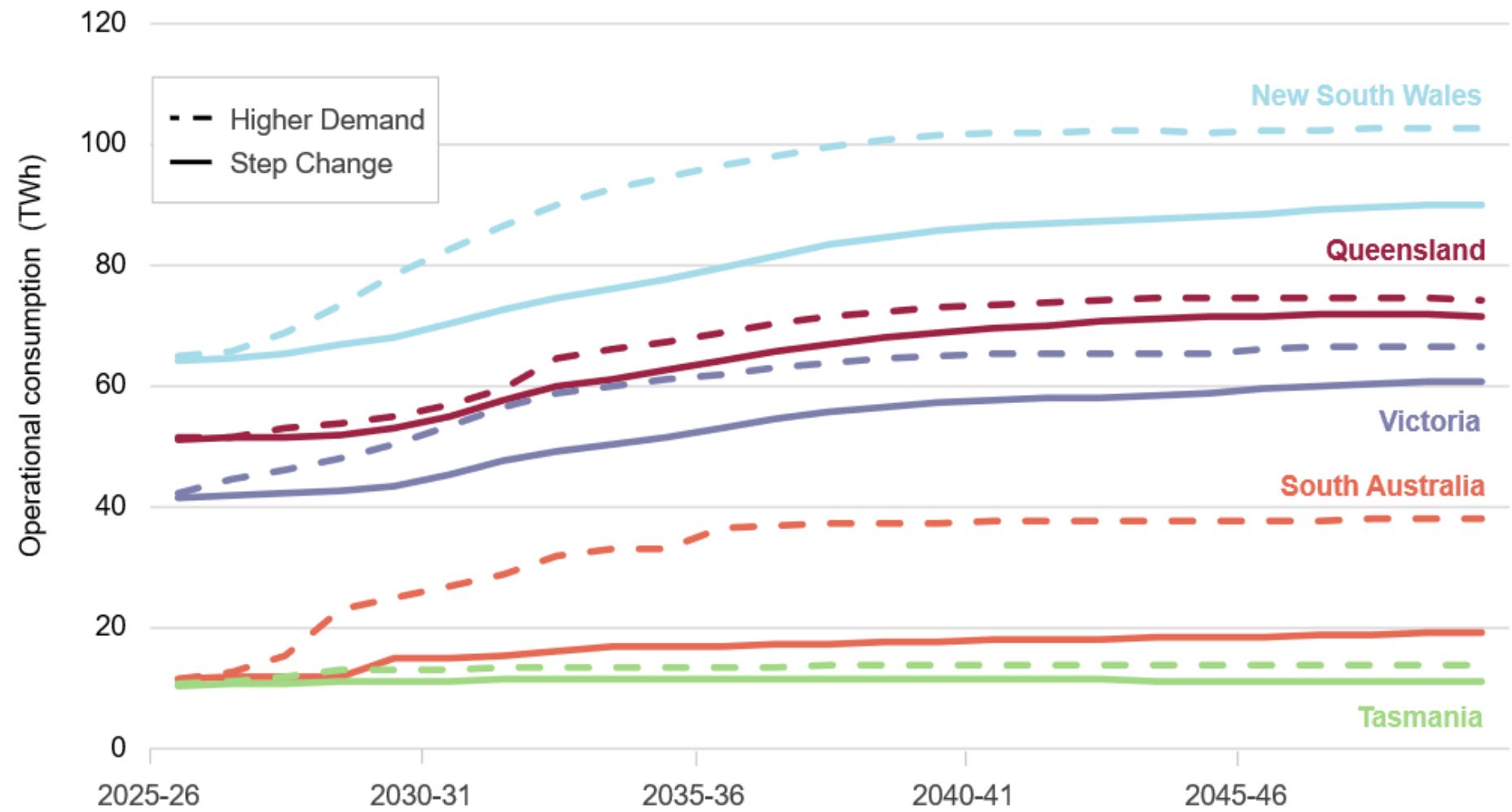
Note: This chart includes costs for generation, storage and network projects.

Timely transmission protects consumer benefits when delivery is constrained



The optimal development path remains robust if data centres and industrial demand grow faster

Impact of *Higher Demand* on operational consumption (TWh)



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Q&A

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Next steps

Fill in the [post event survey](#).



The recording and presentation will be published on the [2026 ISP project page](#) on AEMO's website.

Get involved in the 2028 ISP process by subscribing to our [mailing list](#).

Consultation will soon start on the 2027 IASR.



For more information visit

aemo.com.au