Draft 2026 Integrated System Plan

Publication webinar

16 December 2025

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 Group is proud to have launched its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate 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

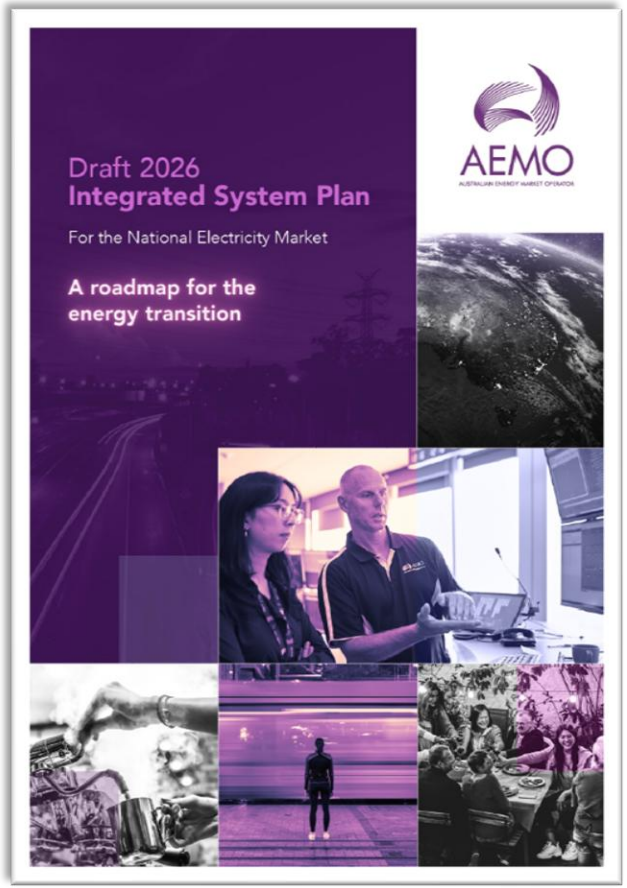
Agenda

Time (AEDT)	Item	Speaker
1:30 pm	Agenda & welcome	**Samantha Lloyd**, Manager Stakeholder Engagement
1:35 pm	**Overview** – *The ISP is a roadmap for the energy transition*	**Nicola Falcon**, Executive General Manager System Design
1:40 pm	**The proposed Plan** – *AEMO's integrated modelling seeks the optimal development path*	**Samantha Lloyd**, Manager Stakeholder Engagement **Samantha Christie,** Manager Strategic Planning **Andrew Turley,** Group Manager Forecasting
2:25 pm	Q&A	*Facilitated by Samantha Lloyd*
3:00 pm	Close	**Samantha Lloyd**

Today's objectives

Present key elements of the Draft 2026 ISP to support stakeholder engagement and consultation submissions.

Ask questions using Slido for response by AEMO in a Q&A session after the presentation



Report and supporting material

How to interact today

www.sli.do
#AEMO

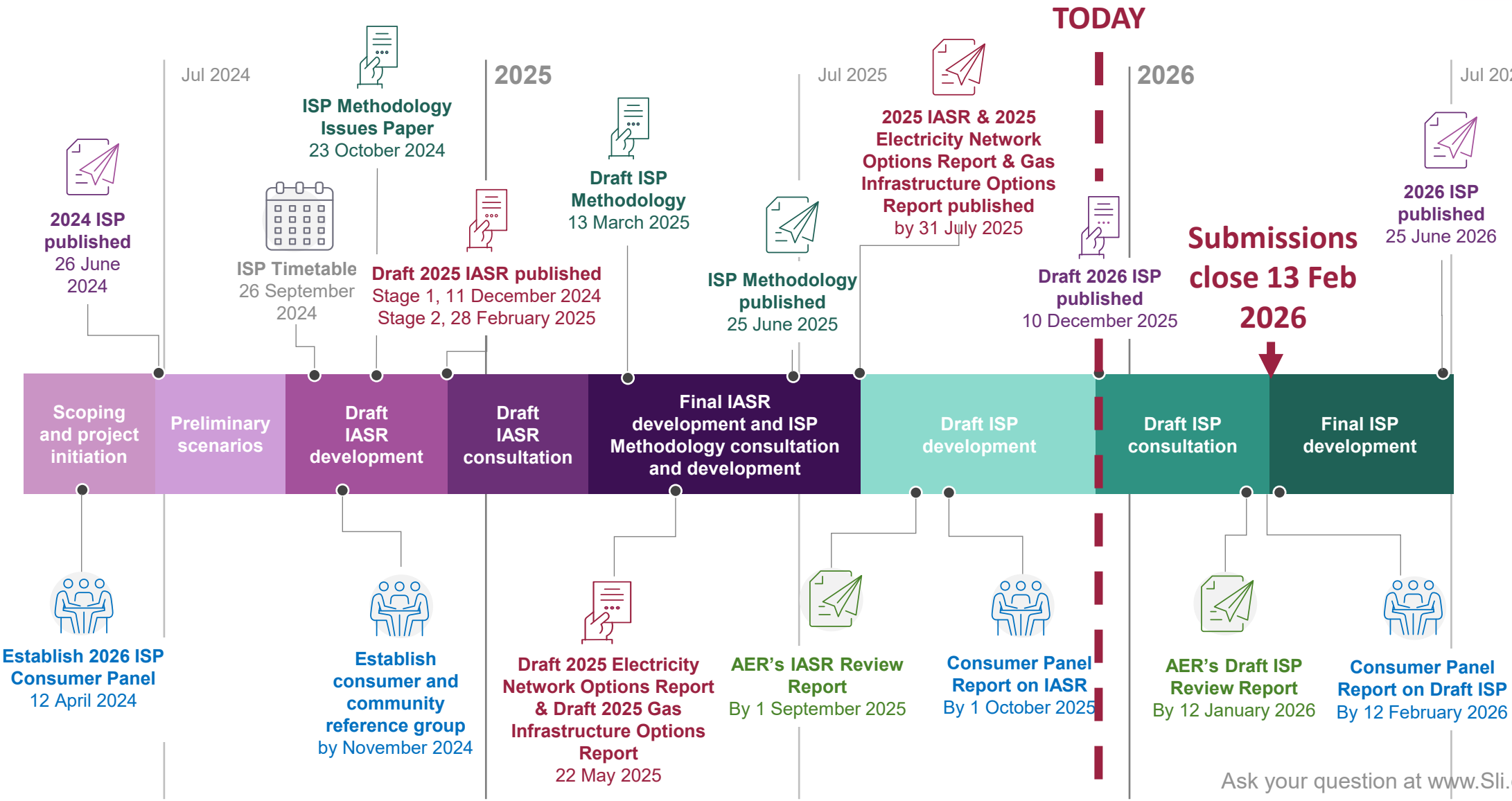
- Ask questions using Slido www.sli.do #AEMO
- Ask your own questions or up-vote others' questions
- Provide feedback through our post-webinar survey

The ISP is a roadmap for the energy transition

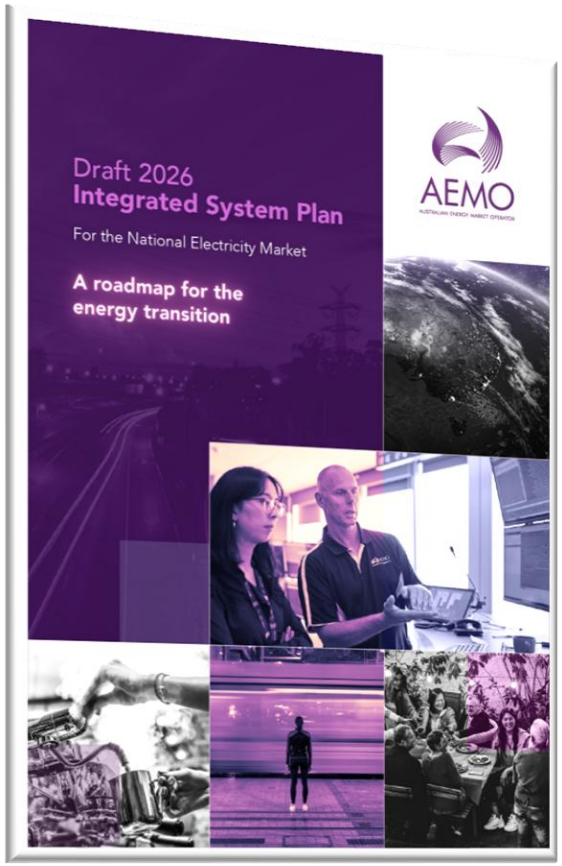
Nicola Falcon

Executive General Manager, System Design

Identifying the 'optimal development path' in the ISP takes two years of extensive consultation



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.

Key messages

- The NEM transition is well underway
- The roadmap remains clear
- Slower progress will erode benefits to consumers
- Coordinated action is required for delivery

AEMO's integrated modelling seeks the optimal development path

Samantha Lloyd, Manager Stakeholder Engagement
Samantha Christie, Manager Strategic Planning
Andrew Turley, Group Manager Forecasting

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

STAGE 1

Apr 2024 – Sept 2024

Preliminary engagement

- Four 2026 ISP Consumer Panel members appointed; over 35 meetings held since July 2024 (ongoing).
- 2026 ISP Stakeholder Engagement Strategy delivered.

IAP2 goal: Collaborate

STAGE 2

Oct 2024 – Jun 2025

ISP Methodology

- 58 formal non-confidential submissions.
- 203 webinar attendees.
- Three reports published.

IAP2 goal: Consult

STAGE 3

Jul 2024 – Aug 2025

2025 IASR, Electricity Network Options Report & Gas Infrastructure Options Report

- 183 formal submissions.
- 957 webinar attendees.
- 34 reports / reference materials published.

IAP2 goal: Consult

STAGE 4

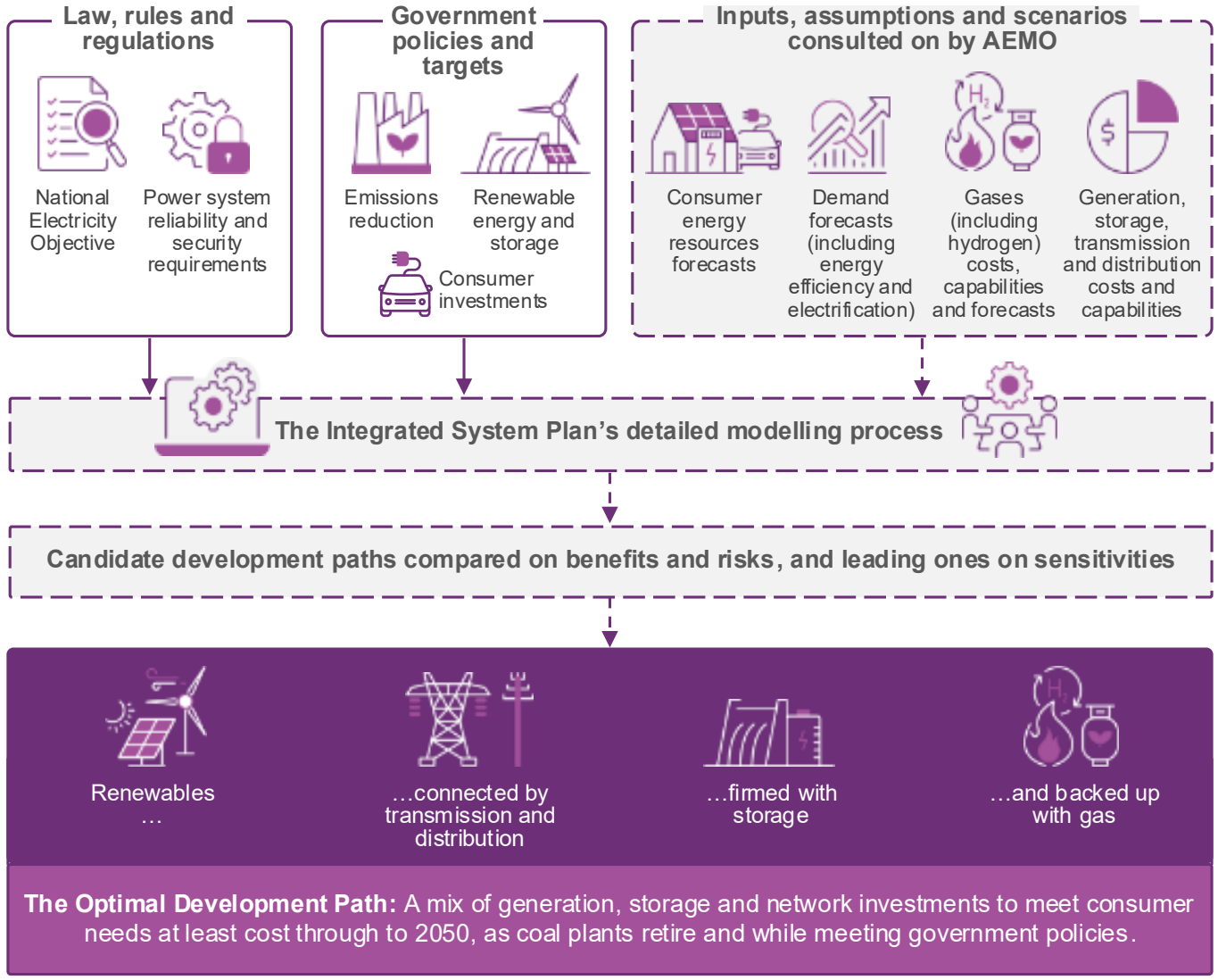
Dec 2025 – Feb 2026

Draft 2026 ISP

- 19 reports / reference materials published.
- 1 webinar / 1 verbal submission session

IAP2 goal: Consult

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



AEMO plans for three scenarios for the future that meet govt policies, with *Step Change* identified as 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 CER 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 CER, with some larger energy-intensive industrial users assumed to close.

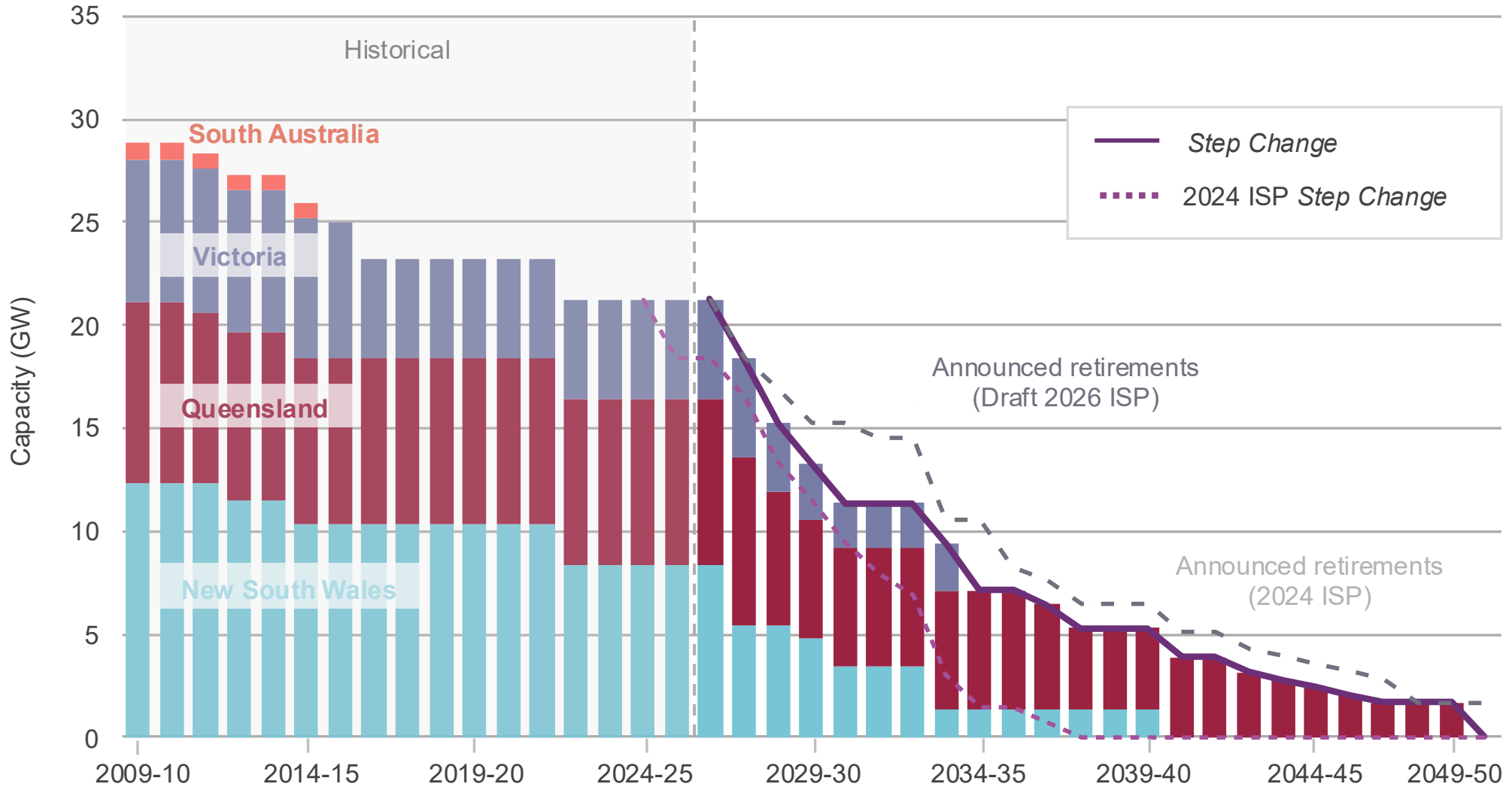
- *Accelerated Transition* reflects decarbonisation to support Australia's contribution to limit global temperature rise to 1.5°C. Its rate of transformation is greater than that required by current policy commitments, made possible by global technology progress and a faster growing economy than other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

All scenarios meet emissions reduction and renewable energy targets and include committed energy policies

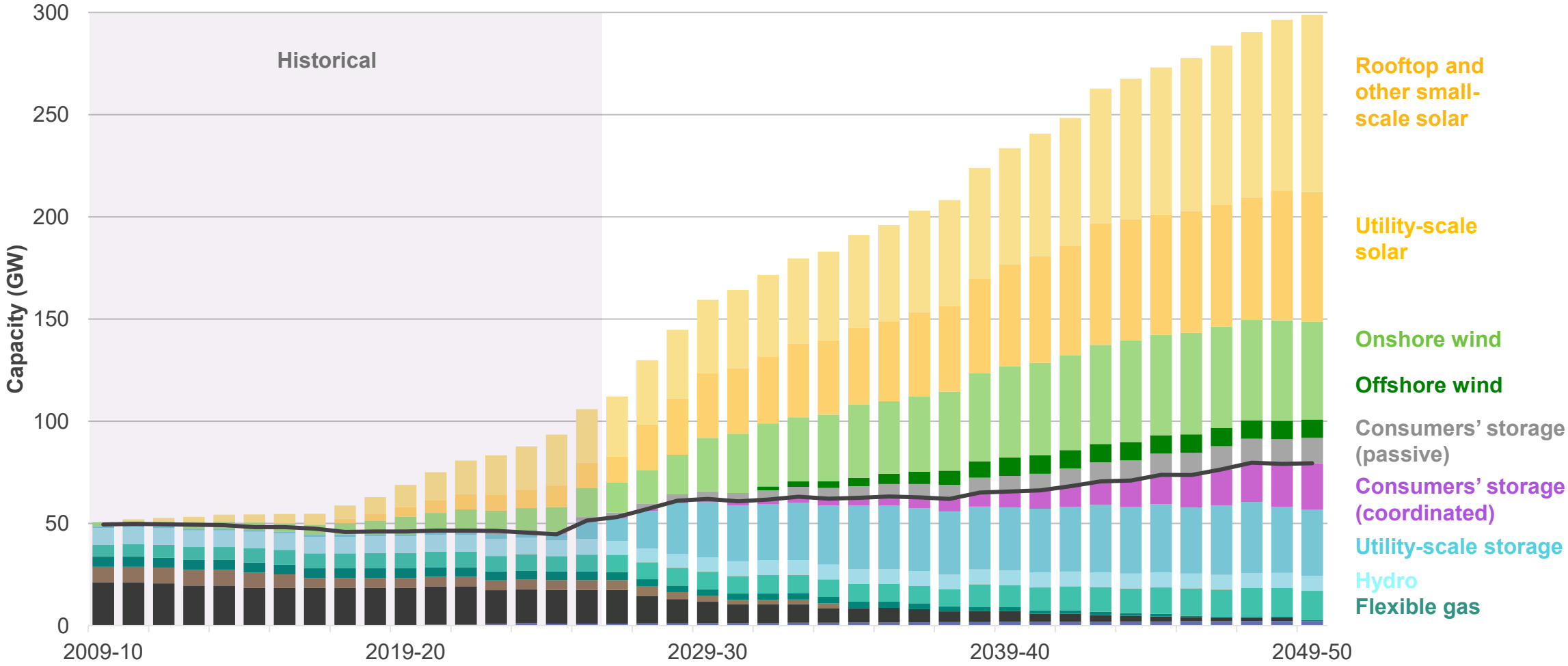
- **Commonwealth:** Powering Australia Plan's 82% renewable energy by 2030, 43% emission reduction by 2030 and 62-70% by 2035, the Safeguard Mechanism, and the expanded Capacity Investment Scheme
- **Queensland**: 30% emissions reduction by 2030 and 75% by 2035, Queensland Energy Roadmap, and Borumba Pumped Hydro project.
- **New South Wales**: 50% emissions reduction by 2030 and 70% by 2035, and Electricity Roadmap targets for renewable capacity and deep storage.
- **South Australia**: Firm energy reliability mechanism, and 60% emissions reduction by 2030.
- **Victoria**: Victorian Renewable Energy Target and emission reduction targets (including 40-50% reduction by 2030), plus storage and offshore wind targets.
- **Tasmania:** Tasmanian Renewable Energy Target, and Battery of the Nation options.
- **All jurisdictions:** Value of greenhouse gas emissions reduction.

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.*

Two-thirds of the remaining coal fleet projected to retire by 2035 and more flexible operation required



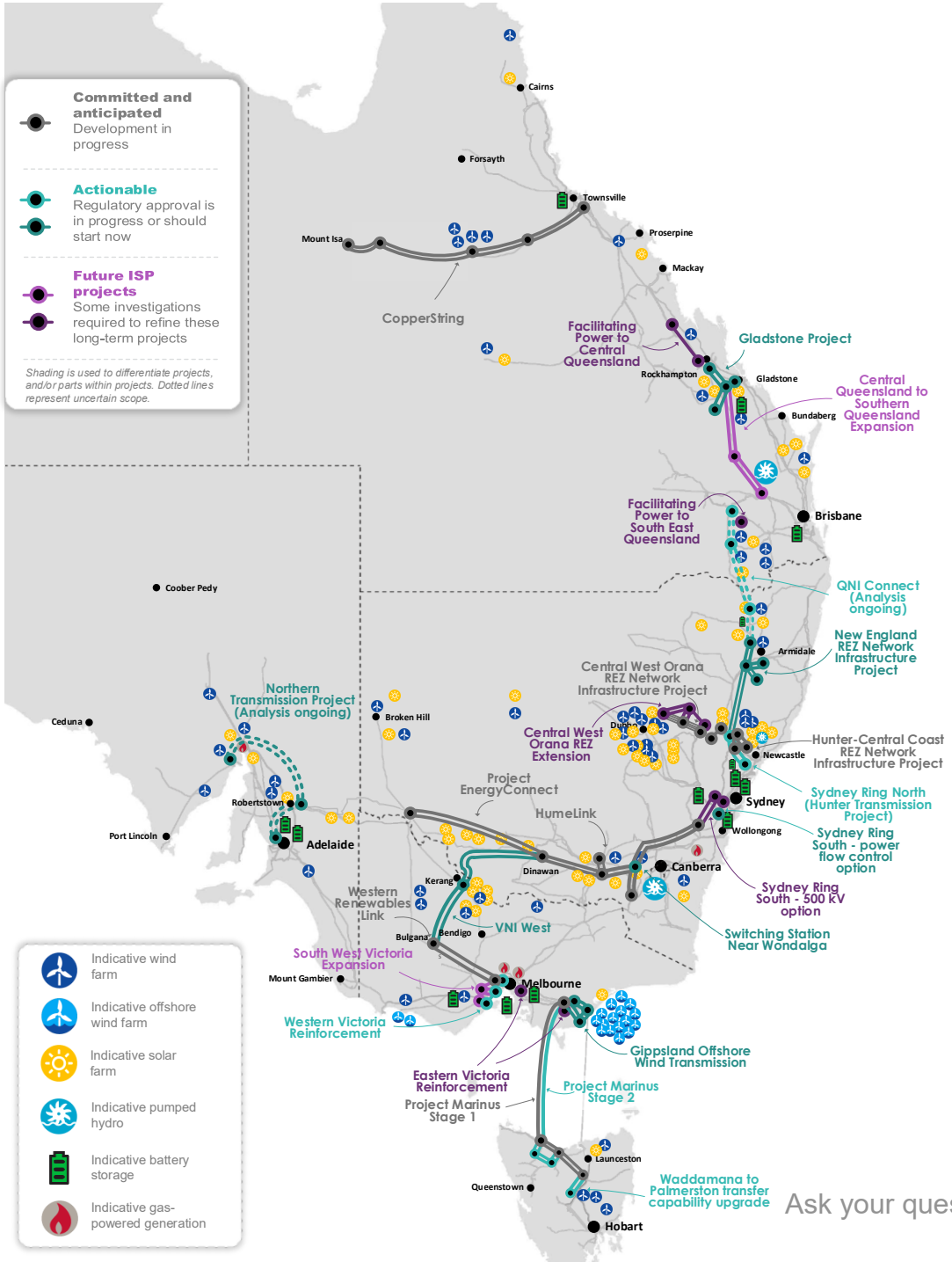
120 gigawatts of grid-scale wind and solar by 2050 and almost 90 gigawatts from consumer-owned solar



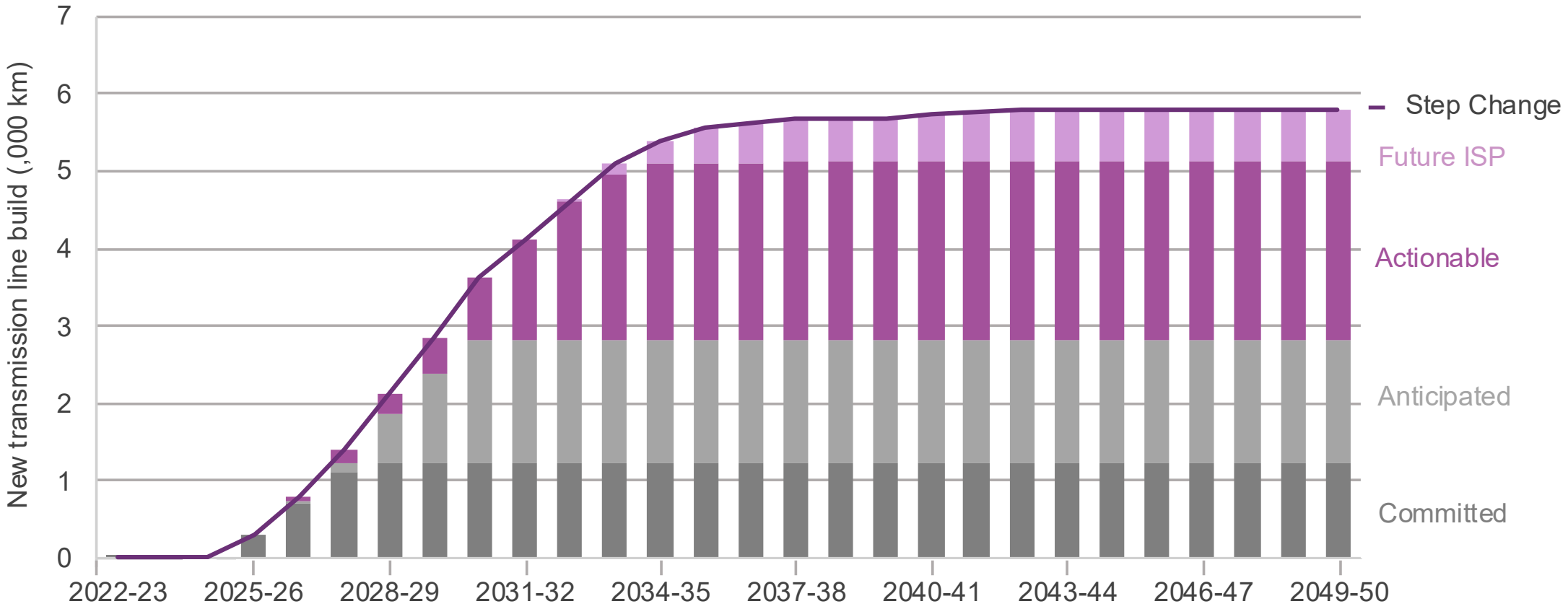
*Renewable energy connected by **transmission and distribution**, firmed with storage and backed up by gas, presents the least-cost way to supply secure and reliable electricity to consumers through to 2050, as coal plants retire and while meeting government policies.*

Eleven transmission projects are actionable in the Draft 2026 ISP optimal development path

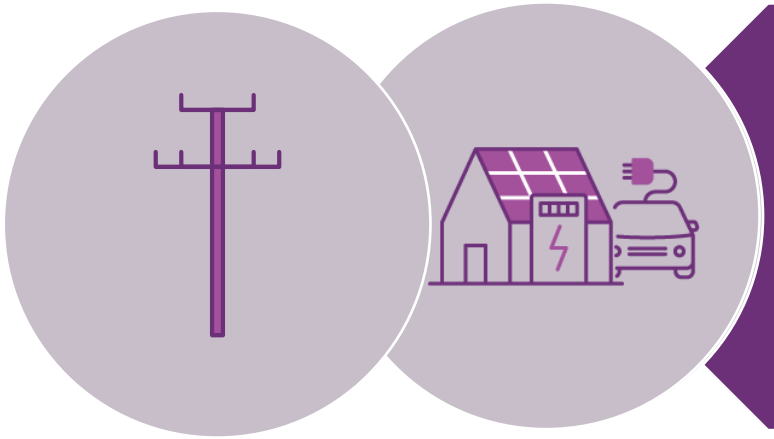
- 7 **committed** and **anticipated** transmission projects which are underway to be delivered over the next six years
- 11 **actionable projects** to be delivered over the next decade
- 7 **future** ISP projects which may be needed in the future



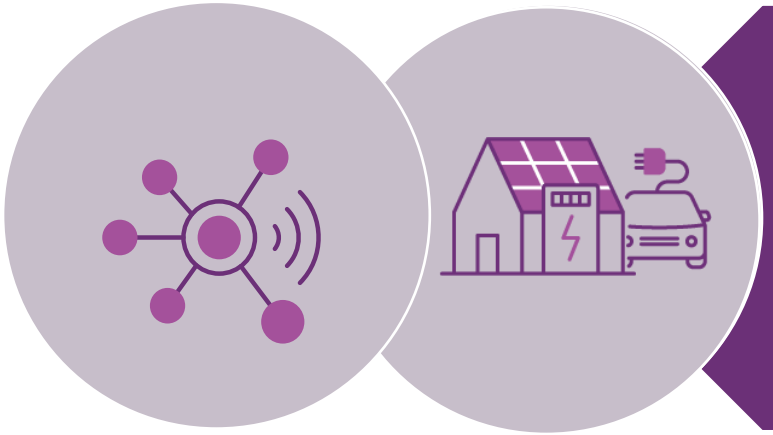
Around 6,000 km of new transmission investment identified as needed over the next decade, half of which is underway



The take-up and use of consumer energy resources, combined with efficient distribution network support, reduces system costs for all consumers



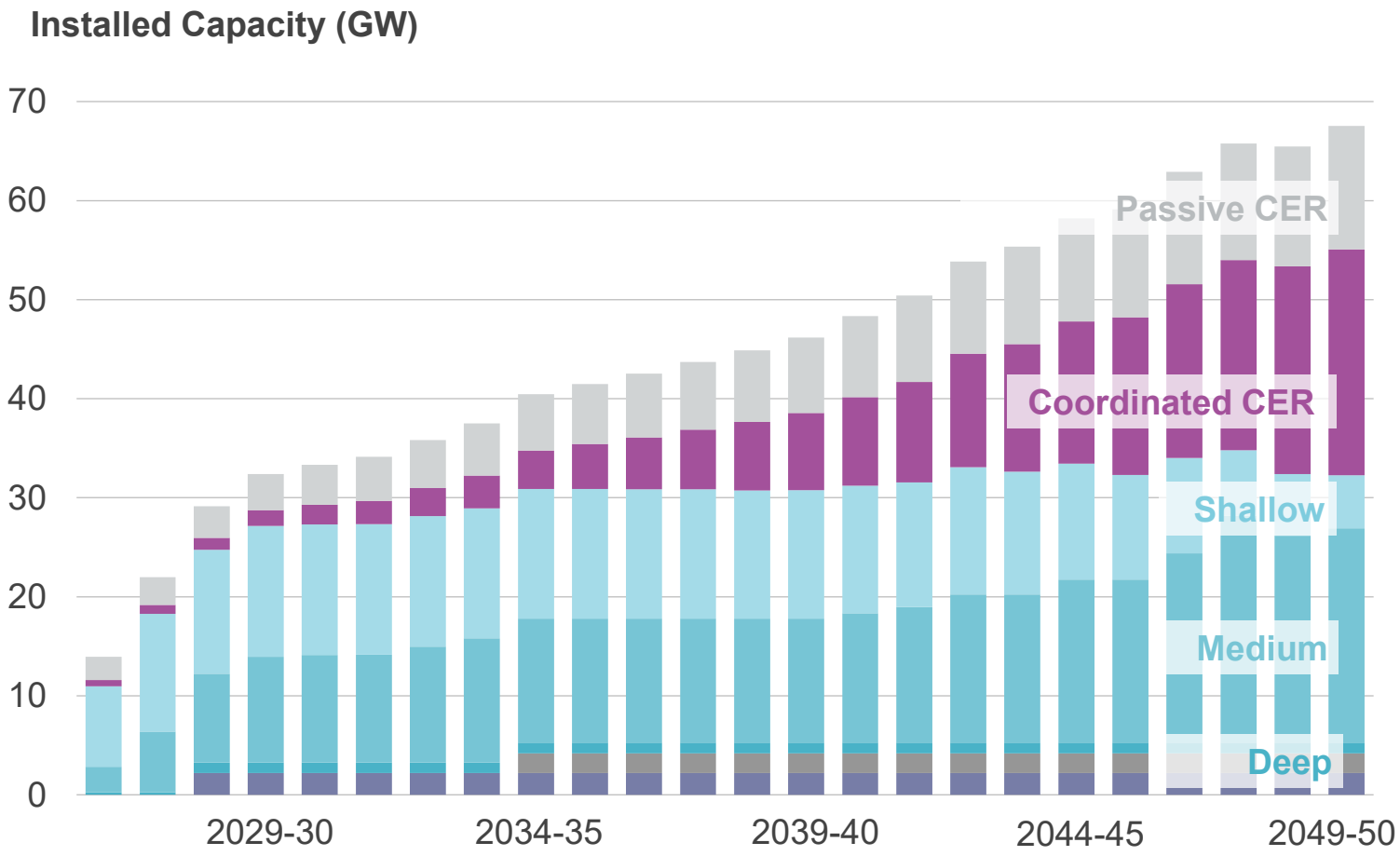
Targeted investments in the distribution network would support consumer energy resource exports

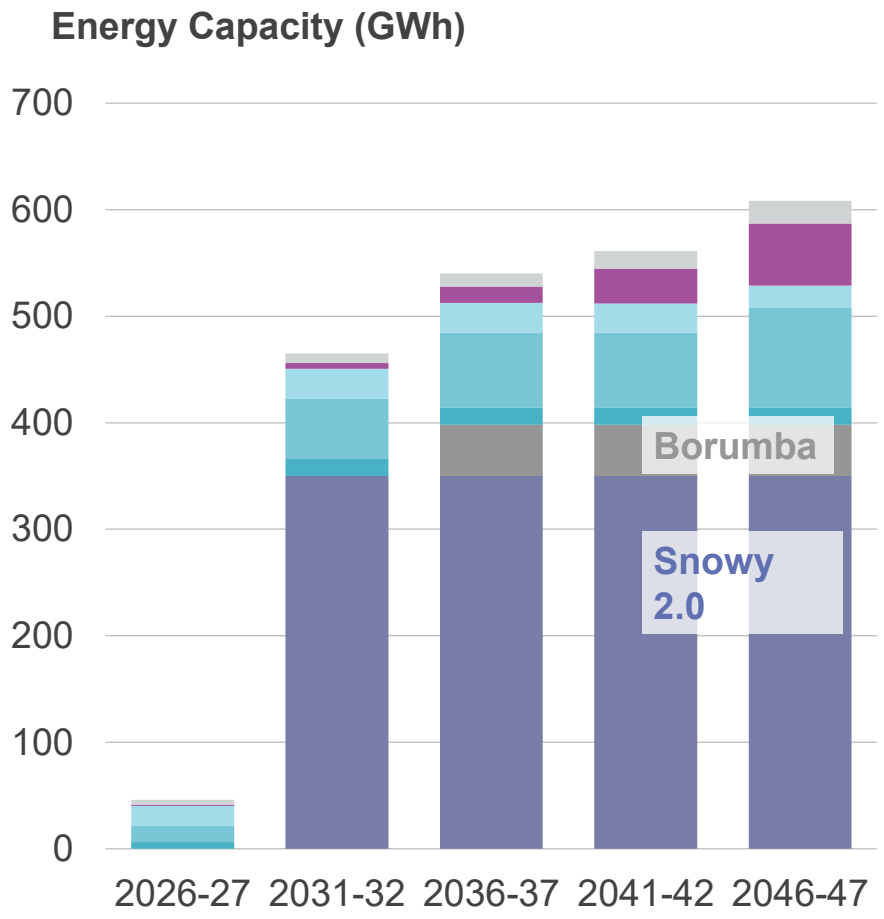


Consumer energy resources and their coordination bring system-wide benefits, as does energy efficiency

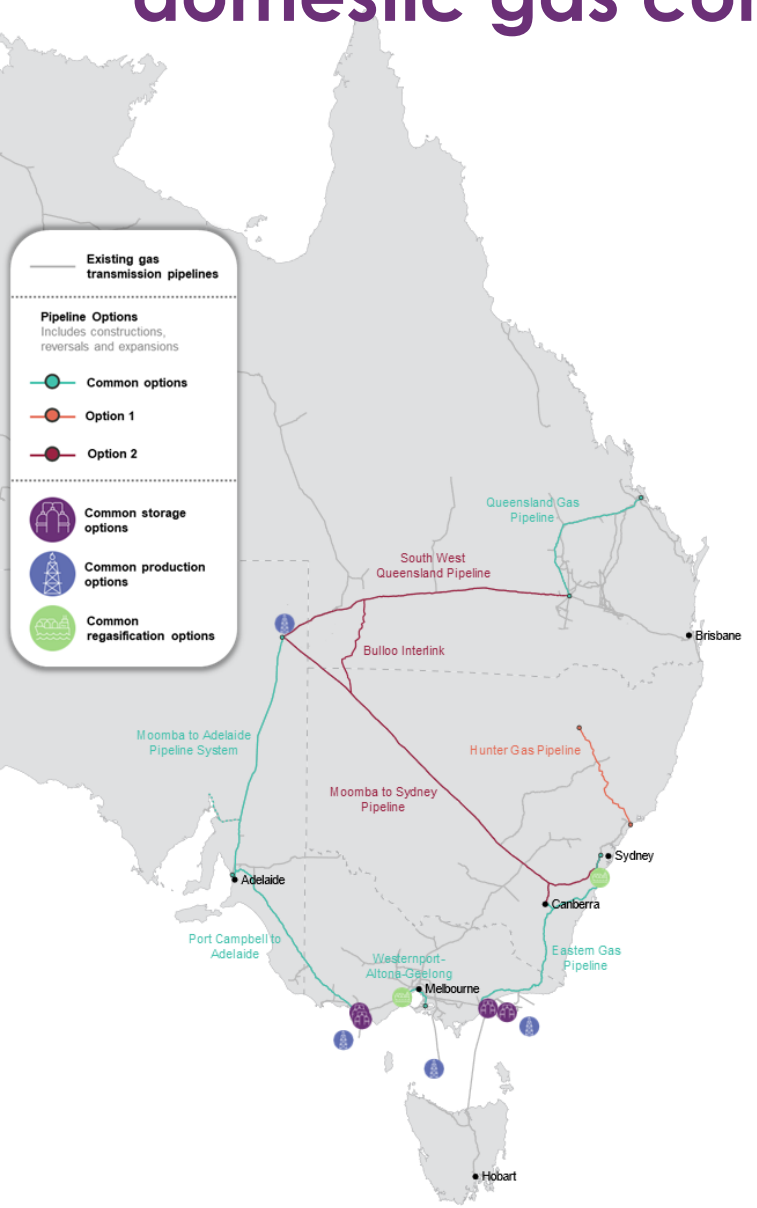
*Renewable energy connected by transmission and distribution, **firmed with storage and backed up by gas**, presents the least-cost way to supply secure and reliable electricity to consumers through to 2050, as coal plants retire and while meeting government policies.*

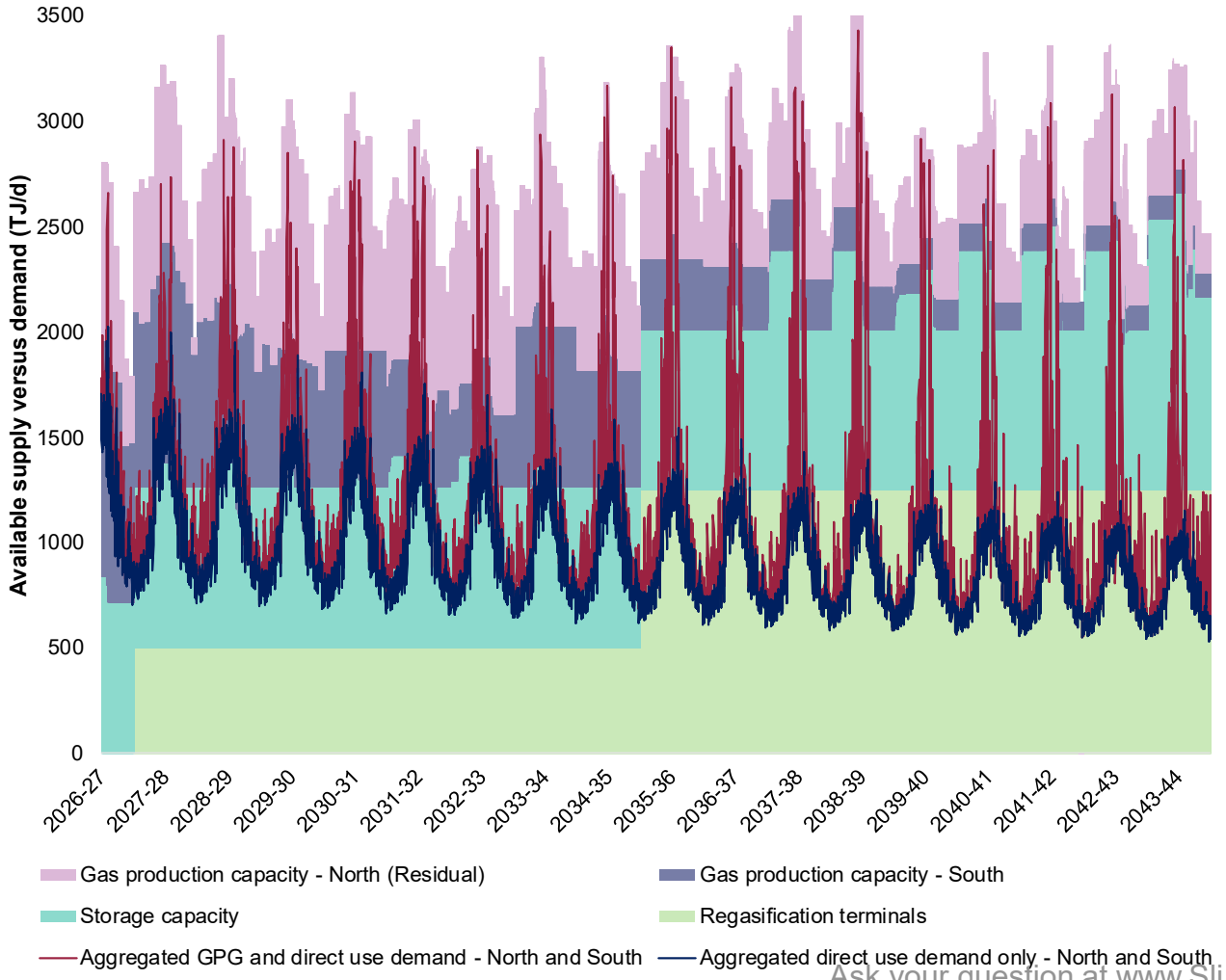
Different forms of storage are needed, including for intra-day shifting, seasonal shifting and renewable droughts





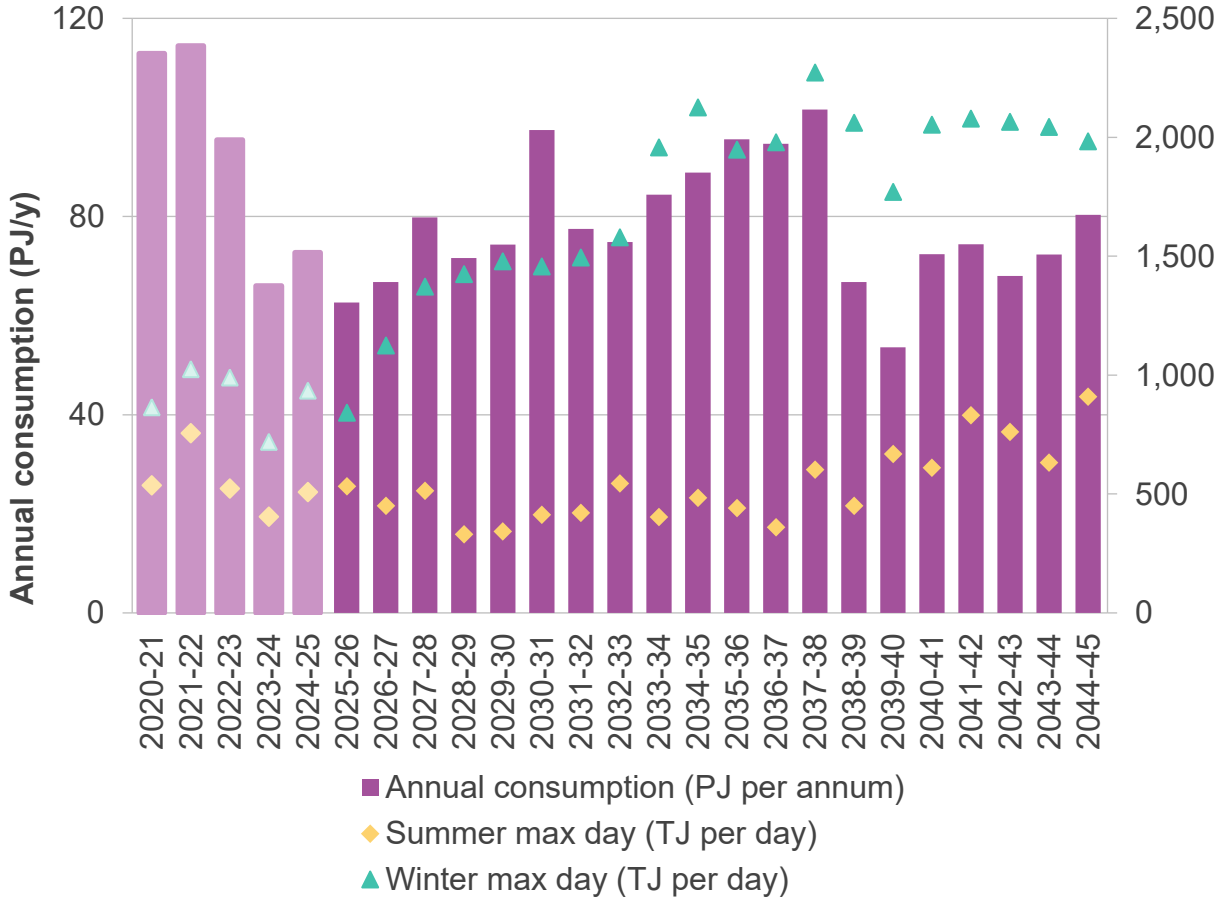
Gas infrastructure development needed to support domestic gas consumers



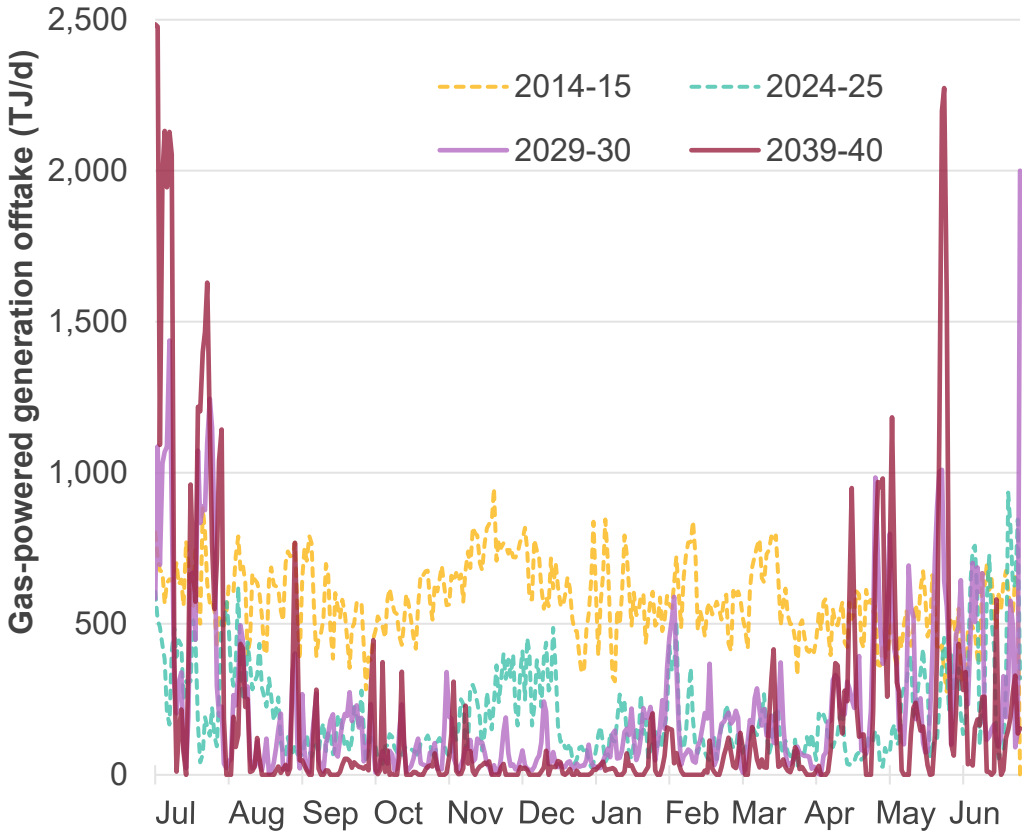


More gas-powered generation capacity is required but will operate less frequently

Actual and forecast NEM gas-powered generation annual consumption (PJ/y) and seasonal maximum daily demand (TJ/d) in *Step Change*, 2020-45

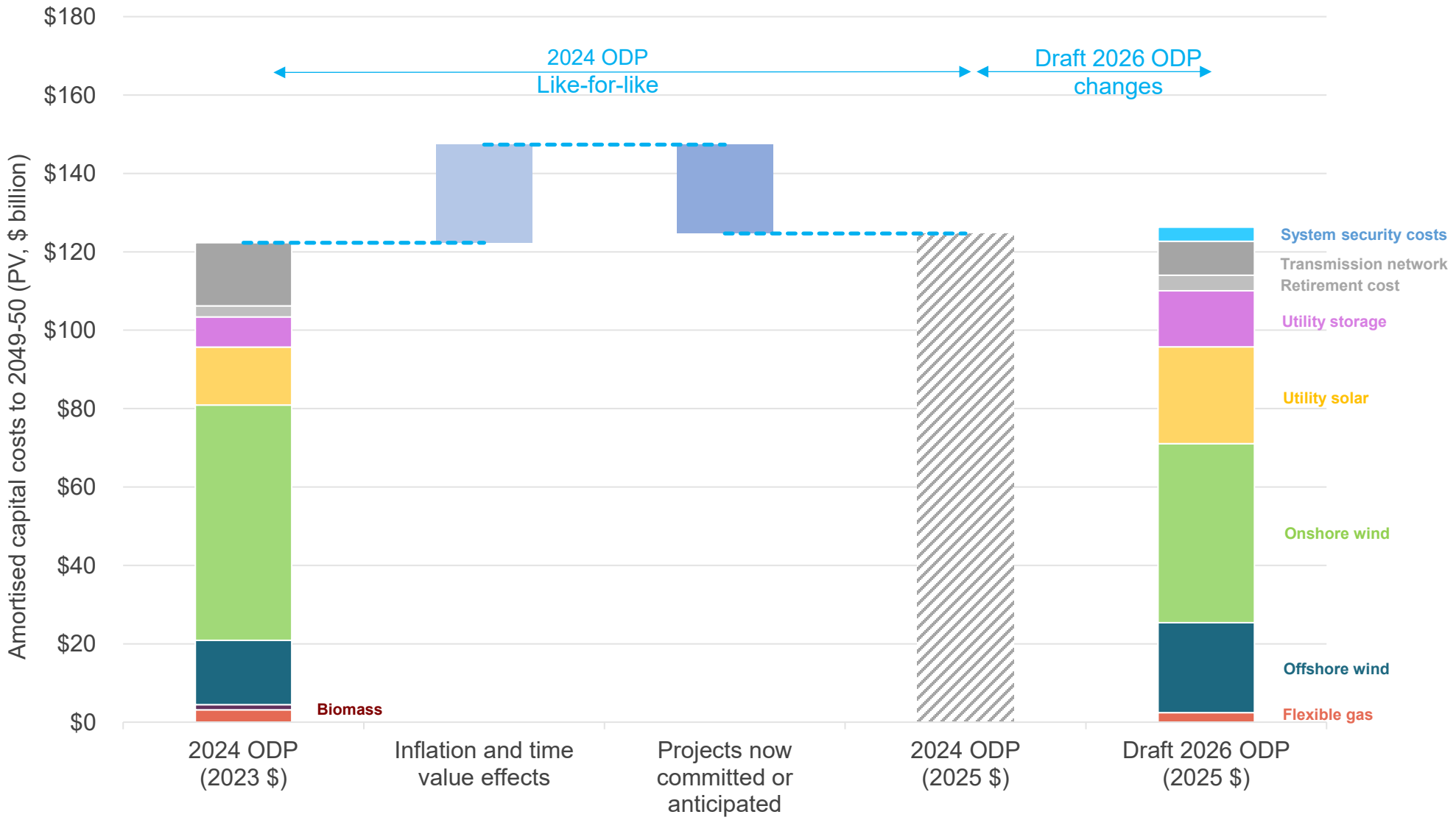


Actual and forecast daily NEM gas-powered generation offtake in 2014-15, 2024-25, 2029-30, and 2039-40, *Step Change*, (TJ/d)



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.*

Consumer needs and government policies would be met at least cost, with total capital costs similar to the 2024 ISP



Transmission projects would repay their upfront costs and deliver net market benefits of $24 billion to consumers

Safe, secure and reliable power system

Government energy and emissions policies met

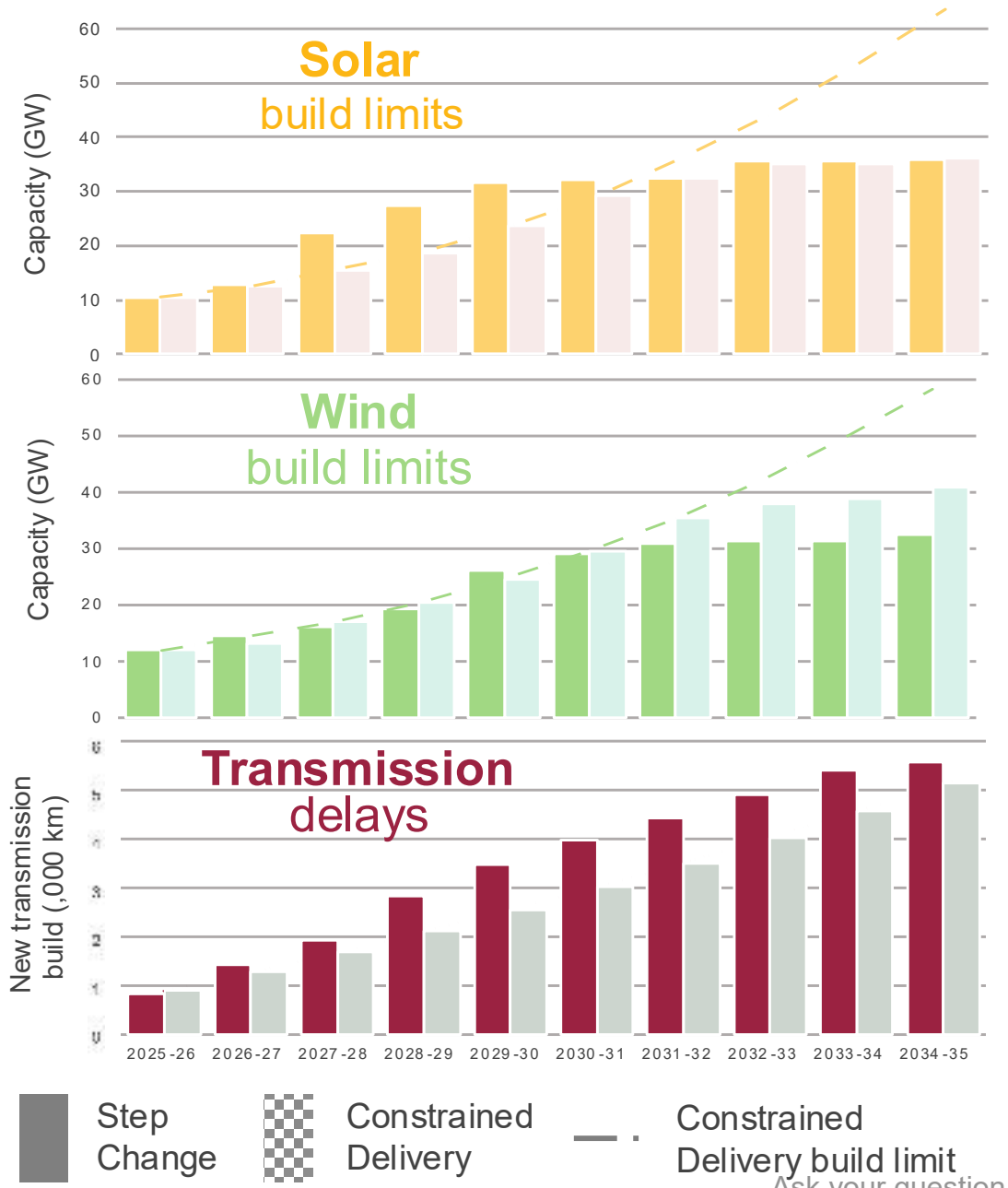
Net benefit to consumers of $24 billion (across all scenarios)

Transmission projects in the optimal development path still deliver benefits, ***even if the pace of delivery is constrained****…*

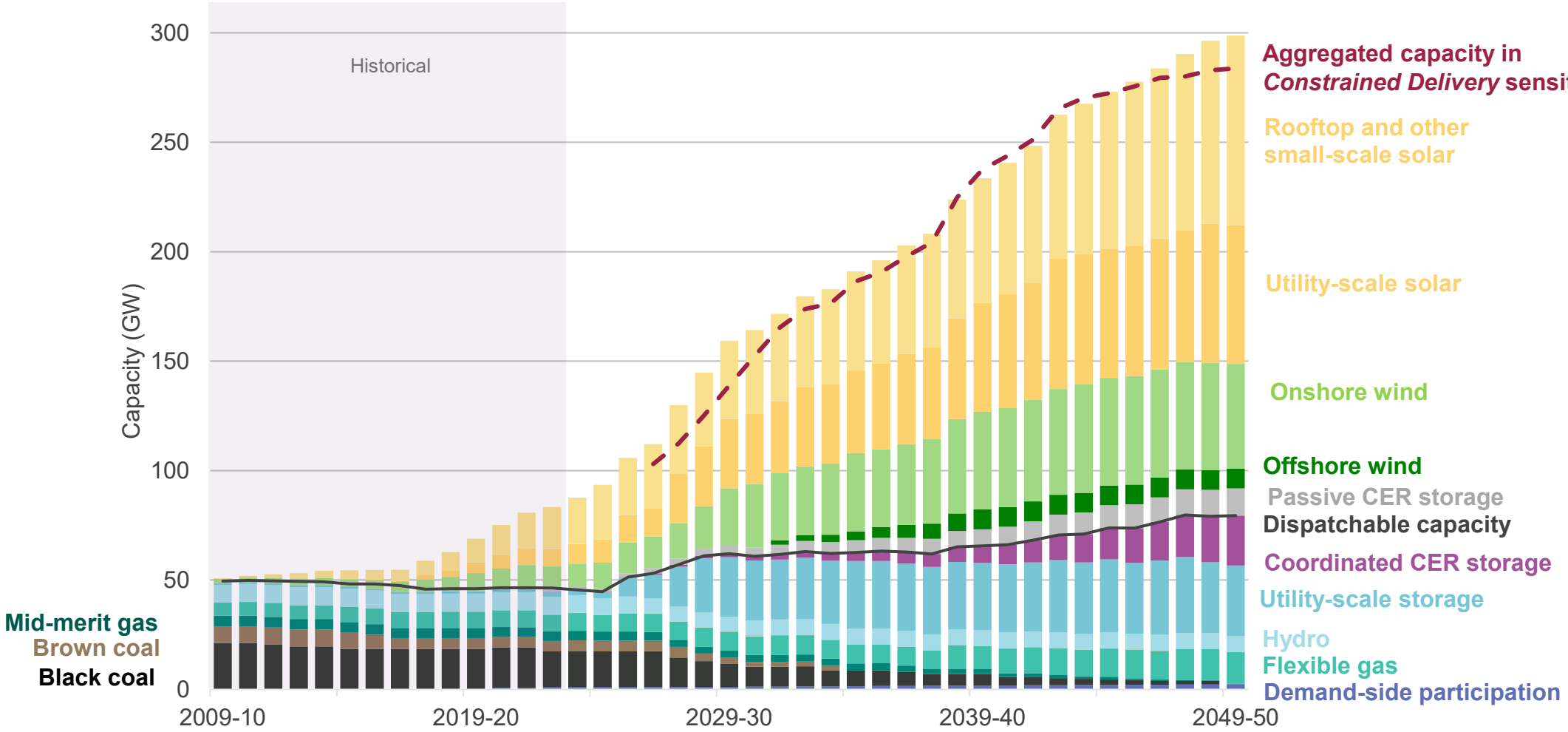
renewable energy would contribute 75% of NEM supply by 2030.

The *Constrained Delivery* sensitivity highlights the need to progress ISP investments to deliver the lowest cost outcomes to consumers

- If delivery is constrained, then progressing the transmission elements of the optimal development path still contributes $17 billion for consumers.



If near-term delivery constraints delay the optimal development path, benefits for consumers would remain positive, but they would be reduced and some 2030 policy targets would be delayed



Q&A

Please provide feedback on today's webinar.

Next steps

Consultation submissions close on 13 February 2026

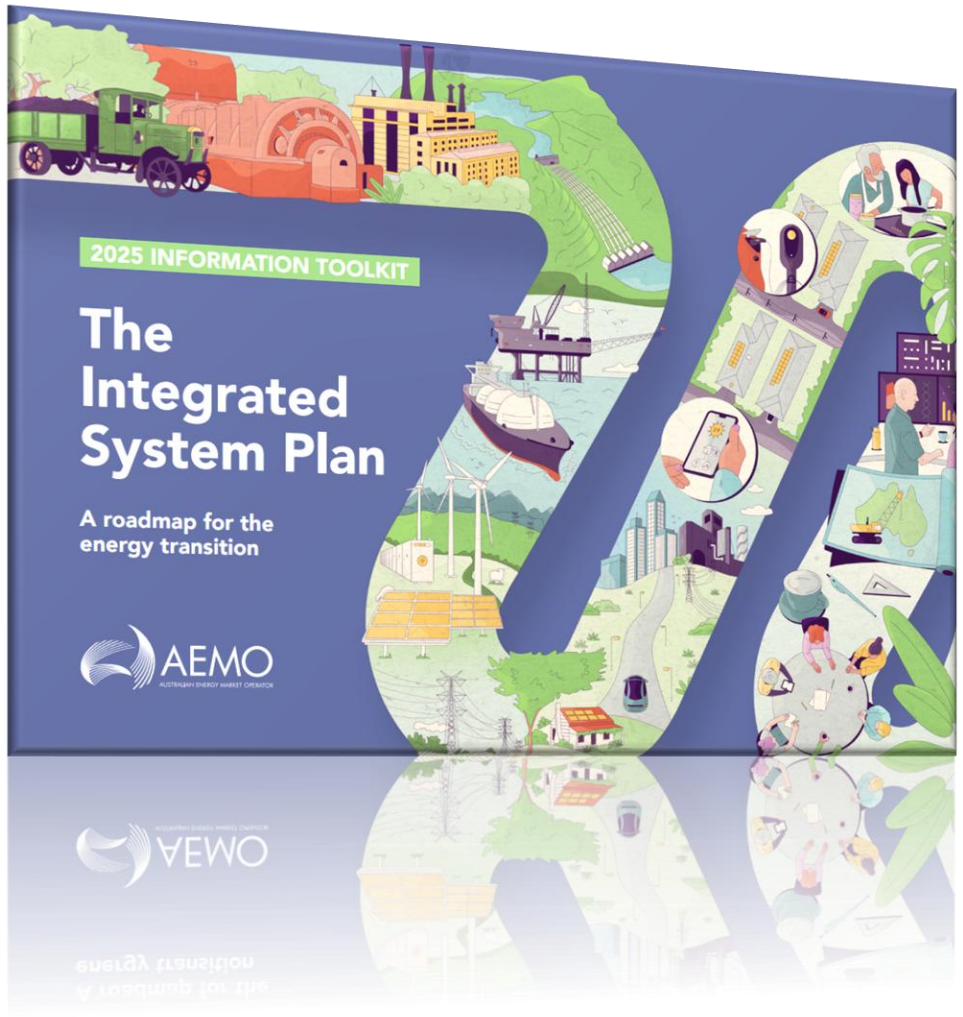
Timing	Item
10 Dec 2025	Draft 2026 ISP published
Today	**Draft ISP Webinar**
13 Feb 2026	Consumer advocate verbal submission
	Written submissions due
25 Jun 2026	2026 ISP publication

The slides and recording from today's webinar will be published on the 2026 ISP engagement webpage. See there the 2026 ISP stakeholder engagement strategy, past engagement and webinar recordings.

Contact the AEMO ISP team with any questions and provide consultation submissions: ISP@aemo.com.au

Join the ISP mailing list to stay up to date with the ISP process.

Integrated System Plan (ISP) toolkit



- AEMO's ISP toolkit published in 2025 aims to support stakeholder understanding and engagement in the ISP's development.
- It helps explain how Australia's energy system is transitioning and how stakeholders can contribute.
- The toolkit is designed for all energy stakeholders, from households to governments.

For more information visit

aemo.com.au