

IASR Report

AEMO publishes the Inputs, Assumptions and Scenarios Report (IASR) as required by the National Electricity Rules. The IASR includes key information and context for the inputs and assumptions used in AEMO's forecasting and planning publications for the National Electricity Market (NEM), such as the Integrated System Plan (ISP).

This explainer describes how AEMO uses scenarios in its planning and forecasting functions.

About AEMO

As Australia's independent system and market operator and system planner, AEMO's purpose is to ensure secure, reliable, and affordable energy and enable the energy transition for the benefit of all Australians.

We do this by operating the electricity and gas systems and markets of today and planning the energy system of the future.

For more information: www.aemo.com.au

What are scenarios?



AEMO plans for the energy system's future needs by using a scenario planning approach which examines a range of possible and plausible 'futures'. Scenario planning is an effective practice to identify and manage risks when

planning in highly uncertain environments, particularly through disruptive transitions. Inputs and assumptions are developed to be internally consistent with the scenarios, which are themselves a construct of key assumptions as parameters.

Scen
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Scenarios describe and analyse future worlds that could materially affect the energy sector. Each scenario describes the environment in which the energy transition occurs

Each scenario describes the environment in which the energy transition occurs using a broad range of parameters. Scenarios do not describe ISP outcomes; they enable robust analysis of future power system needs considering the uncertainties facing the energy transition.



Scenarios are developed in consultation with a variety of stakeholders. The impact of uncertainties may be explored through sensitivity analysis.

For more information: The 2025 IASR Consultation Paper is available on AEMO's website.

Criteria for scenarios and parameters





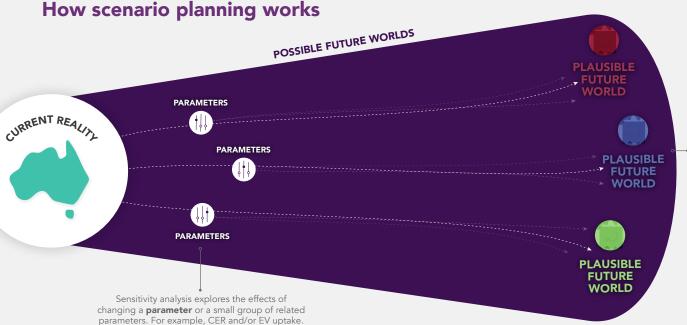
Distinct: Individual scenarios must be distinctive enough to provide value.



Useful: Suited for AEMO's planning and forecasting requirements, such as for the ISP, Gas Statement of Opportunities (GSOO) and Electricity Statement of Opportunities (ESOO).



underpinning assumptions in a scenario must form a cohesive picture.



The scenario set must traverse a range of possible future worlds to allow the risk of under and over investment to be tested in the ISP

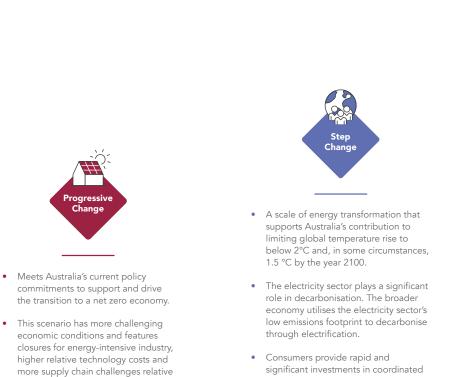
IASR scenarios

The 2025 IASR scenarios will inform the execution of AEMO's forecasting and planning functions, including the 2025 ESOO, 2025 GSOO and 2026 ISP. There are many possible futures for Australia's energy system and AEMO meets Australia's current carbon reduction policies when considering these.

The goal of scenario development is not to determine which future will occur but to develop a discrete set of scenarios that embody and communicate key uncertainties.

Each scenario explores different rates of change affecting the NEM decarbonisation pathway and different dimensions that will influence energy demand and supply.

Relevant government policies that meet the criteria in the National Electricity Rules are incorporated in the preparation of scenarios for AEMO's planning analysis.





transportation sector.



- Reflects very strong decarbonisation activities domestically and globally that are aimed at limiting temperature increase to 1.5°C by 2100, resulting in rapid transformation of Australia's energy sectors, including a strong use of electrification, green hydrogen and biomethane
- The electricity sector plays a very significant role in decarbonisation.
- AEMO is seeking stakeholder feedback on two variants of this scenario: Green Energy Exports and Green Energy Industries. See the Draft IASR for details.

Electricity sector's contribution to decarbonisation (NEM states)

How scenarios can change over time

to other scenarios.

of decarbonisation

Pace

AEMO considers stakeholder input, as well as market, policy and regulatory changes when developing the IASR, such as:

- Stakeholder input on impactful developments and considerations for scenarios.
- Policy development since the last IASR, including new and amended policy targets, regarding industrial decarbonisation, fuel-switching, capacity development incentives and support for consumer energy investments, including CER.

Three scenarios at a glance

A look at how AEMO's three scenarios differ across selected parameters.

	Parameter	Progressive change	Step change	Green energy
Ø	National decarbonisation target	At least 43% emissions reduction by 2030, Net Zero by 2050	At least 43% emissions reduction by 2030, Net Zero by 2050	At least 43% emissions reduction by 2030, Net Zero by 2050
\$	Global economic growth and policy coordination	Slower economic growth, lesser coordination	Moderate economic growth, stronger coordination	High economic growth, stronger coordination
	Australian economic and demographic drivers	Lower growth featuring tough economic conditions that lead to closures	Moderate growth	Higher growth
Ð	Electrification	Meeting existing emissions reductions commitments	High electrification	Higher electrification
	Emerging Commercial Loads (such as data centres)	Lower Growth	Moderate Growth	Higher Growth
7	CER investments (batteries, electric vehicles, rooftop solar)	Lower	High	Higher
Ĵ	Coordination of CER	Low coordination	Moderate coordination	High coordination
	Energy efficiency	Moderate	High	Higher
(H_2)	Hydrogen use and availability	Low production for domestic use, no exports	Moderate-low production for domestic use, minimal exports	High production for domestic use, moderate exports in short term, high exports in long term
	Supply chain strength influencing demand forecasts	Low	Moderate	High

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Open for consultation

Know of any impactful developments in the energy sector that could factor into AEMO's scenario planning?

The 2025 Inputs, Assumptions, and Scenarios Report is open for consultation (see right for key dates). Please send your submissions to: Forecasting.Planning@aemo.com.au or join an engagement event. For more information Further details are available in the <u>2026</u> <u>ISP Engagement Plan</u>. Details on relevant consultation forums, presentations and webinars are on AEMO's website. Contact the ISP team at <u>ISP@aemo.com.au</u>. All dates may be subject to change.

Opportunities to have your say in the ISP process

Provide input or feedback on AEMO's inputs, assumptions and scenarios, for example, consumer energy resources, energy efficiency, electrification and other factors that inform the modelling.	Preliminary Scenarios Draft Inputs, Assumptions & Scenarios Report (IASR) Development Draft IASR Consultation Final IASR	 Scenarios consultation - Aug 2024 ISP Timetable - Sep 2024 Stage1 Draft 2025 IASR publication released 11 Dec 2024 and submissions due 11 Feb 2025 Webinar on 23 Jan 2025 Consumer advocate verbal consultation on Draft IASR - 11 Feb 2025 Stage 2 Draft 2025 IASR released Feb 2025 and submissions due Mar 2025. Final IASR published - Jul 2025 				
	Development					
Provide input or feedback on changes to the Methodology that impact the way AEMO models and plans.	ISP Methodology Consultation & Development	 ISP Methodology Issues paper published 23 Oct 2024 Draft ISP Methodology published 13 Mar 2025 Final ISP Methodology published 25 Jun 2025 Publication webinar - Jun/Jul 2025 				
Provide input or feedback on conceptual transmission and distribution network expansion options to be used as inputs to the 2026 ISP.	Network Expansion Options Report	 Draft 2025 Network Expansion Options Report - Apr 2025 Verbal consultations and webinars on Network Expansion Options Report - Apr to May 2025 Final report published - Jul 2025 Publication webinar - Aug 2025 				
Provide input or feedback on the	Draft ISP Development	 Draft 2026 ISP published end of December 2025 				
draft ISP document, including on network projects, non-network options, industry developments, and implications for	Draft ISP Consultation	 Consultation on Draft ISP - December 2025 to February 2026 Verbal consultations and webinars on Draft ISP - December 2025 to February 2026 				
implications for consumers' long- term interests.	Final ISP Development	Final ISP published end of June 2026Publication webinar - July 2026				