



Welcome to the December 2023 Integrated System Plan (ISP) newsletter, a quarterly update on the 2024 ISP process. As this is the final 2024 ISP update this year, AEMO would like to wish all everyone a safe and happy festive season.

This issue includes updates on:

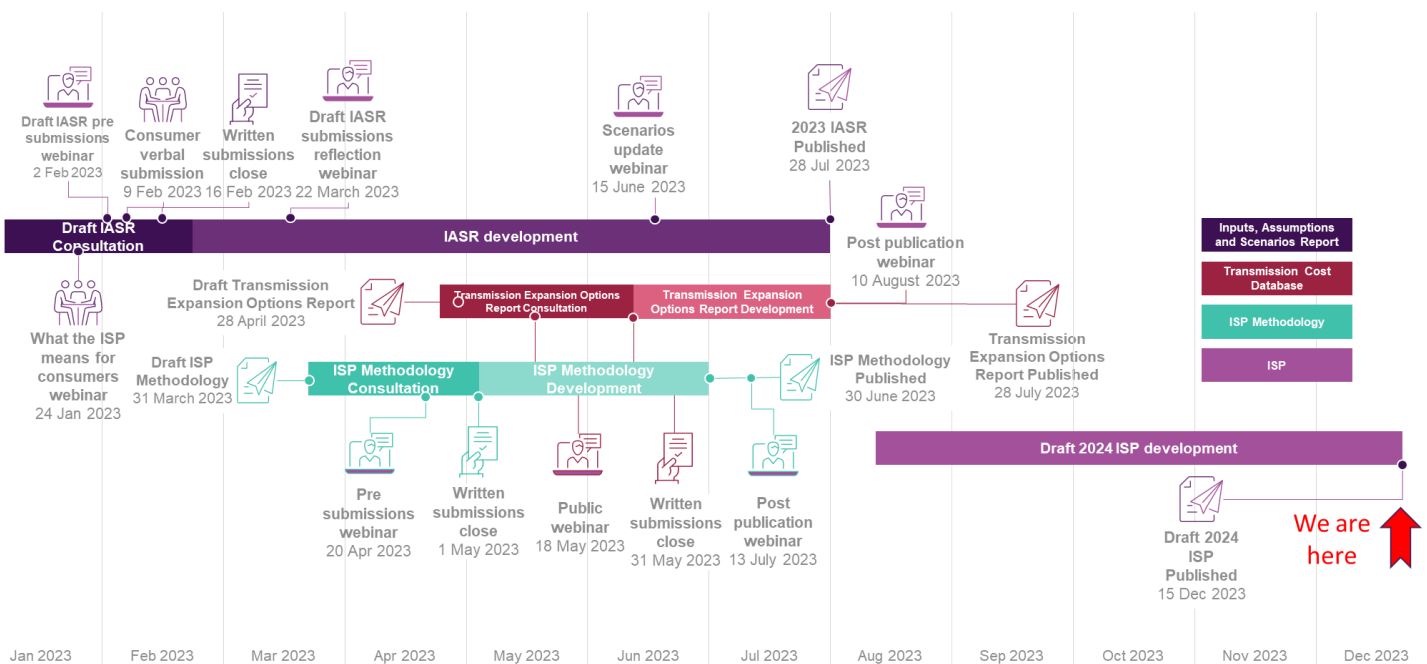
- How to get involved and have your say
- Highlights from the [Draft 2024 ISP publication](#)
- Delphi Panel results
- Social licence sensitivity
- [ISP Consumer Panel](#) update

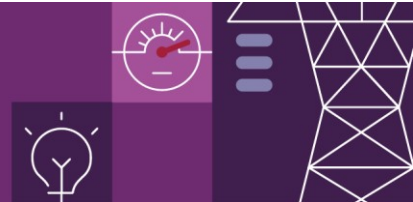


AEMO strives to give all stakeholders as much opportunity as possible to get involved in our planning to ensure the best possible outcome. Stakeholder input is essential to the development of the 2024 ISP. Thank you to all the stakeholders who have taken time to make submissions or attend webinars and forums this year.

AEMO looks forward to stakeholder feedback on the [Draft 2024 ISP consultation](#) open from 15 December 2023 to 16 February 2024. Continue to the “How to get involved” section for more information.

Figure 1 The Draft 2024 ISP development cycle





How to get involved

[Join the ISP mailing list](#) to never miss an update.

- To view a summary of the Draft 2024 ISP [watch](#) the Draft 2024 ISP post-publication webinar held on 20 December 2023.
- [Register here](#) to attend the Draft ISP Consumer Advocate pre-submission webinar on 30 January 2024, 11am-12.30pm AEDT, and ask AEMO questions before consultation submissions are due.
- [Register here](#) to attend the Consumer Advocate verbal comment session on 15 February 2024, 10.30am-12pm AEDT.
- Make a written submission in response to the [Draft 2024 ISP](#) to ISP@AEMO.com.au by 16 February 2024.
- [Register here](#) to attend the post submission inform webinar on 2 April 2024, 11.30am-12.30pm AEDT (date subject to change).

Find our 2024 ISP stakeholder engagement strategy and past engagements including webinar recordings on the [2024 ISP Stakeholder Engagement](#) webpage.

If you have any questions for the AEMO ISP team, please email ISP@aemo.com.au.

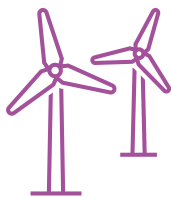
ISP highlights

The Draft 2024 ISP was released on 15 December 2023. The full Draft 2024 ISP report and the overview of the Draft 2024 ISP can be downloaded [here](#).

Key highlights of the Draft 2024 ISP include:

Household and business electricity consumption from the grid is **forecast to nearly double by 2050**.

With coal expected to retire faster than currently announced, the National Electricity Market (NEM) is forecast to

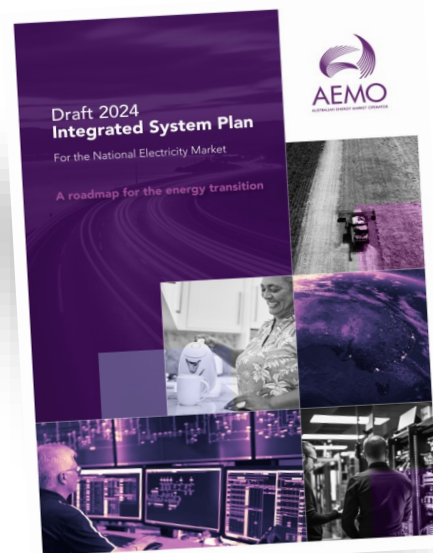


need a **seven-fold increase** in large-scale wind and solar generation by 2050.

Rooftop and other distributed solar is expected to increase four-fold by 2050.

Almost quadruple the firming capacity from sources alternative to coal using utility-scale batteries, pumped hydro and other hydro, coordinated consumer energy resources as 'virtual power plants', and gas-powered generation.

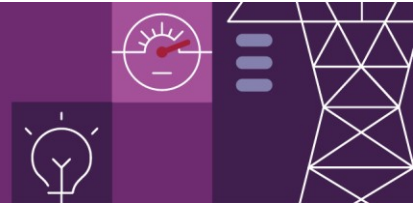
Gas-powered generation to increase from 11GW (now) to 16GW by 2050, while current mid-merit plants will all retire within that period.



It also requires building close to **10,000 km of new transmission lines and upgrades to existing networks by 2050** to connect new generation across the power system.

Delivering the transmission projects identified in this plan is expected to avoid \$17 billion in additional costs to consumers if those projects were not delivered.

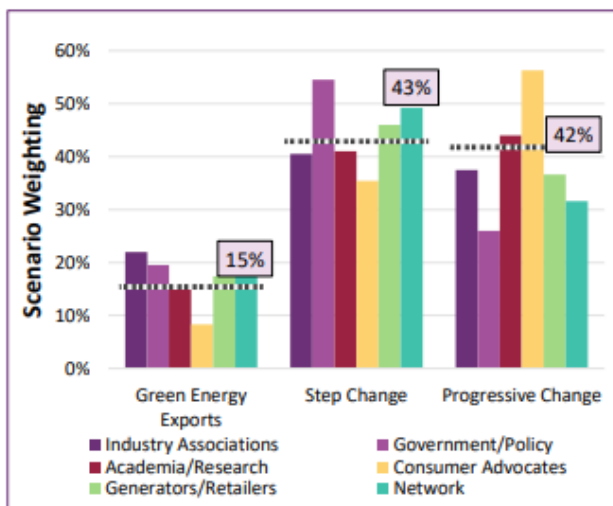
AEMO welcomes feedback from interested stakeholders by **16 February 2024** for consideration prior to finalising the 2024 ISP by 28 June 2024.



Delphi Panel results

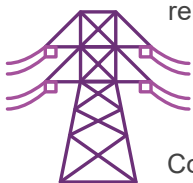
AEMO convened a 2024 ISP Delphi Panel of expert stakeholders on 1 September 2023 to collect and test their view of the relative likelihood of the *Green Energy Exports*, *Step Change* and *Progressive Change* scenarios. AEMO analysed the scenario likelihoods and have decided to use the results to inform the weighted value of the Draft 2024 ISP Optimal Development Path. *Step Change* has been identified as the most likely scenario for the 2024 ISP.

The graph below shows the 2024 Delphi Panel scenario likelihood by group. A full copy of the report is available [online](#).



Social licence sensitivity

In October 2023, AEMO held the first of two workshops to determine if social licence sensitivities can be used in ISP modelling to help explore risks related to lack of community acceptance for transmission infrastructure.



Members of the [Advisory Council on Social Licence](#) (ACSL) and the ISP

Consumer Panel participated in the workshop with a follow up workshop held in November 2023. AEMO provided an update on the design of social licence sensitivities for the Draft 2024 ISP,

sharing information on potential options for modelling and seeking any initial feedback.

There was broad agreement on guiding principles for social licence sensitivities and guidance for AEMO on the parameters to be used to conduct the sensitivities. AEMO acknowledged feedback from members that this is only one approach to consider social licence and the sensitivity and considerations present just one potential future view.

AEMO thanks the Advisory Council on Social Licence and the ISP Consumer Panel for their guidance and feedback in its shaping and application. While the outcome of AEMO’s social licence sensitivity analysis did not change the Optimal Development Path, it did have a notable impact on the economy-wide net market benefits that could be realised overall, as outlined in the ISP’s [Social Licence appendix](#). This is the first time this modelling has been done and AEMO welcomes feedback on how social licence can be incorporated in the ISP in the future.

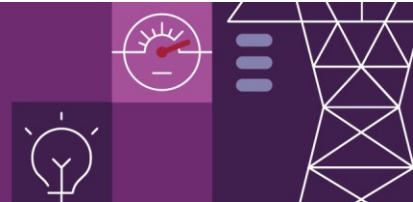
ISP Consumer Panel update

Over recent months the 2024 ISP Consumer Panel has been active on two main fronts:

1. *Providing input to AEMO to influence the Draft 2024 ISP for 2024, released on 15 December 2023.*
2. *Considering the broader role of the ISP and opportunities for improvement / reform.*

The current phase of the ISP process can be best summarised as ‘modelling’ where the data from the IASR (Inputs, Assumptions and Scenarios Report) is converted into the ISP, specifically the Optimal Development Path, through extensive modelling – one of the most comprehensive modelling processes undertaken in Australia. The Draft 2024 ISP was published on 15 December 2023 with responses due by 16 February 2024. Information and feedback sessions are planned, further information is available in the ‘how to get involved’ section of this newsletter.





Influencing the Draft 2024 ISP

One of the challenges for the fourth ISP (2024 ISP) is to better reflect the challenges of taking into account consumer risk preferences for long term, high capital cost investments and to be more proactive in reflecting the importance of social licence.

Consumer risk preferences

The first ISP Consumer Panel, for the 2022 ISP, made a key recommendation that AEMO better reflect consumer risk preferences. This has been a significant commitment for AEMO who engaged a consultant to work on a project that would explore consumer risk preferences and develop an appropriate metric(s) that



would be able to take risk preferences into ISP modelling. The Panel has been directly involved with each step of the project, actively debating and exploring options and potential application. An update on this project

will be released as part of the [Draft 2024 ISP](#) and the Panel believes that more work will need to be undertaken for the 2026 ISP, utilising lessons learned from the work undertaken this year.

Social licence sensitivity

An Advisory Council on Social Licence was established late in 2022 and has met periodically during 2023, with the Panel joining in for discussion related to ISP aspects of social licence. The main recent focus regarding social licence has been undertaking two 'sensitivities' related to social licence in the ISP modelling.

Sensitivity analysis tests the impact on a dependent variable of different values of specified independent variables. The IASR describes the independent variables and the ISP's optimal development path can be thought of as the dependent variable – the ISP. To explore social licence impacts in the modelling approach undertaken for the ISP, both time delays and cost increases, as a result of social licence considerations, are being tested in the modelling.

Results from this work are included in the Draft 2024 ISP.

Delphi Panel and ISP engagement

The ISP Consumer Panel has provided advice to AEMO about the Delphi Panel that was conducted to provide weightings for the likelihood of each of the three scenarios, which in turn is used in modelling to develop the Optimal Development Path.

The Panel also provided feedback about the AEMO ISP engagement program.

Reviewing the ISP

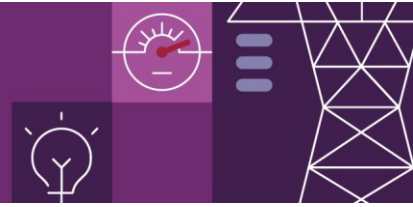
The Commonwealth Government, through the Department of Climate Change, Energy, the Environment and Water has been undertaking a review of the ISP with Minister Bowen asking how the ISP can be "supercharged" and also about whether gas should be included in the ISP "by publishing a gas infrastructure development pathway as part of the ISP."

The review also considers generation and storage, demand consideration including impact of consumer energy resources (CER) and distribution network planning.

The Panel has met with Commonwealth officials on three occasions and has provided written comments to both the initial discussion paper and a Directions Paper that was released in mid-November. The Panel understand that the review report and final recommendations will be released in early 2024.

In responding to this process, the Panel have observed the changing context for the ISP over the nearly four ISPs that have been produced, including the growing role of jurisdictional policies and announcements in impacting national energy planning. The major challenge remains the desire to accelerate decarbonisation of Australia's energy markets at a cost that consumers (and as taxpayers) can manage.





The Panel's recurring focus is on consumer affordability, and an equitable transition to net zero.

ISP Consumer Panel members are keen to hear from community and consumer groups with an interest in the ISP and receive thoughts about any aspect of the ISP from consumers. To contact us email:

ISP@aemo.com.au

All AEMO engagement activities being undertaken as part of the current development of the ISP are listed on the AEMO website: [2024](#)

[ISP Stakeholder Engagement](#). This forward calendar of activities is updated regularly.



If you have any questions for the AEMO ISP team, please email ISP@aemo.com.au.