

This event will be recorded and the recording published on AEMO's website



Draft 2025 Gas Infrastructure Options Report

Consultation Webinar
29 May 2025



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 delivered 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



AEMO Competition Law - Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions must:

- Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings must not discuss or agree on the following topics:

- Which customers they will supply or market to
- The price or other terms at which Participants will supply
- Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
- Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
- Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.

AEMO's Competition Law Meeting Protocol is [published online](#). For further information, see the [Competition and Consumer Act](#).

Today's agenda

Time (AEST)	Item	Speaker
3:30 pm	Agenda & welcome	Angela Heck , Principal Stakeholder Advisor
3:33 pm	Introduction	Andrew Turley , Group Manager Forecasting
3:40 pm	Draft 2025 Gas Infrastructure Options Report key proposals and next steps	Alice McLaren , Manager Market Operability
4:00 pm	Q&A	<i>Facilitated by Angela Heck</i>
4:30 pm	Survey & close	Angela Heck

Today's objectives

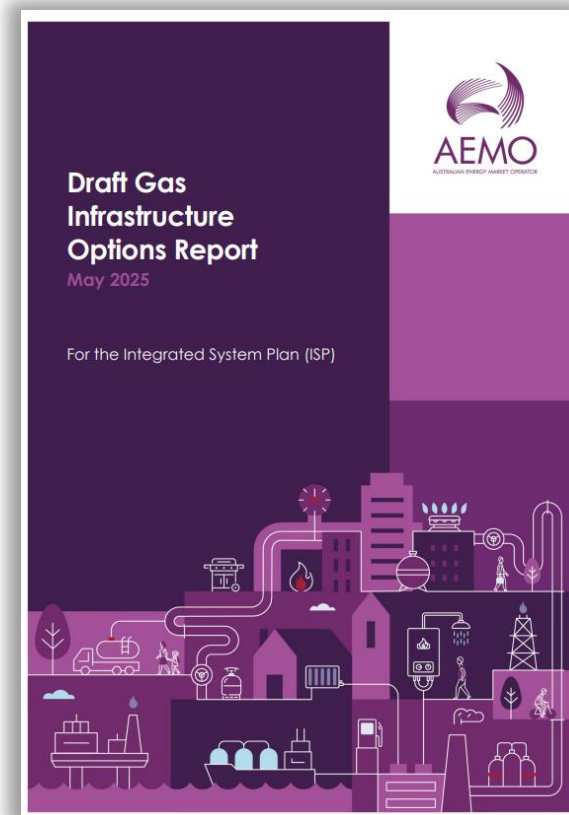


Present the key proposals of the Draft 2025 Gas Infrastructure Options Report to support consultation submissions.

Submissions close 5pm AEST on 23 June 2025.



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



[Read the report and supporting material](#)

How to interact today

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- Please ask questions using Slido www.sli.do #AEMO
- Join with your name, no need to log in
- Ask your own questions or up-vote others' questions
- Provide feedback through our [post-webinar survey](#)

Gas integration into the Integrated System Plan



As required through the Federal Government's 2024
review of the ISP, and subsequent rule changes

Review of the Integrated System Plan

- In April 2024, Australia's Energy Ministers responded to the Federal Government's review of the ISP with actions including:

AEMO should expand its consideration of gas market conditions in the 2026 ISP

- In December 2024, the AEMC published the final determination and rules that supported better integration of gas into the ISP:
 - Changes to the National Electricity Rules (NER) require AEMO to include gas development projections in the ISP
 - Changes to the National Gas Rules (NGR) allow AEMO to use gas information for the ISP function

Gas integration into the ISP

- Integrating **gas development projections** into the ISP allows for more comprehensive analysis underpinning the **optimal development path** for the National Electricity Market
- Gas development projections will incorporate **gas infrastructure options** to represent plausible pathways for gas investments
- Availability and deliverability of fuel for **gas-powered generation (GPG)** in the NEM is reliant on developments in the East Coast Gas Market

Greater integration to assess impact and risks to electricity investments

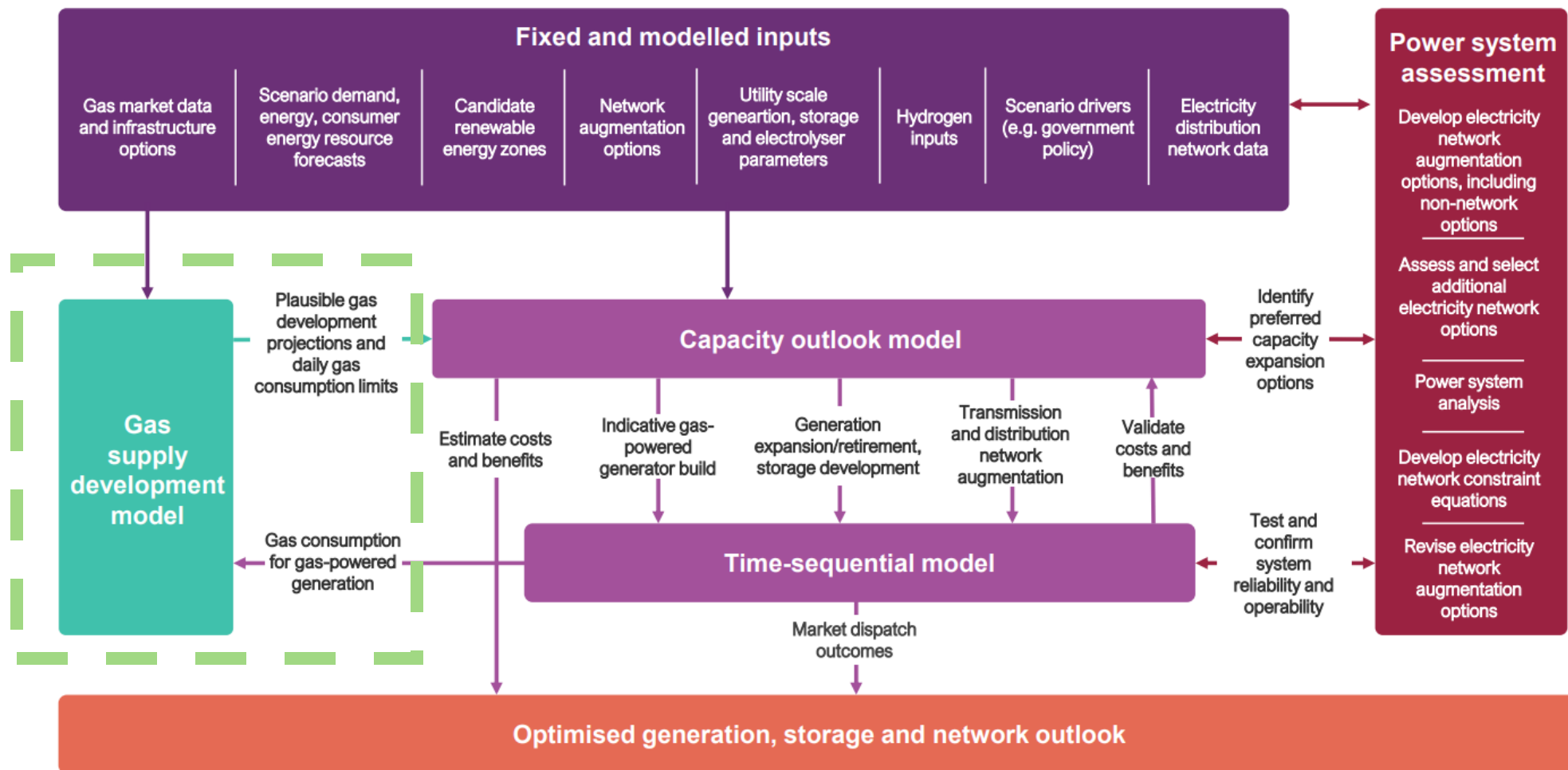
What is the purpose of integration into the ISP:

- Improve information and analysis on gas pricing, capacity and availability in the ISP.
- Strengthen planning for gas-powered electricity generation (GPG).
- Support ISP modelling for the sole purpose of optimising electricity investments.
- Improve consistency of gas information across AEMO's publications.

What is **not** the purpose of gas integration into the ISP

- Co-optimisation of electricity and gas planning.
- Development of a gas Optimal Development Path.
- Determination or signalling which gas developments should be invested in.

Gas supply development model identifies gas limitations and gas development projections

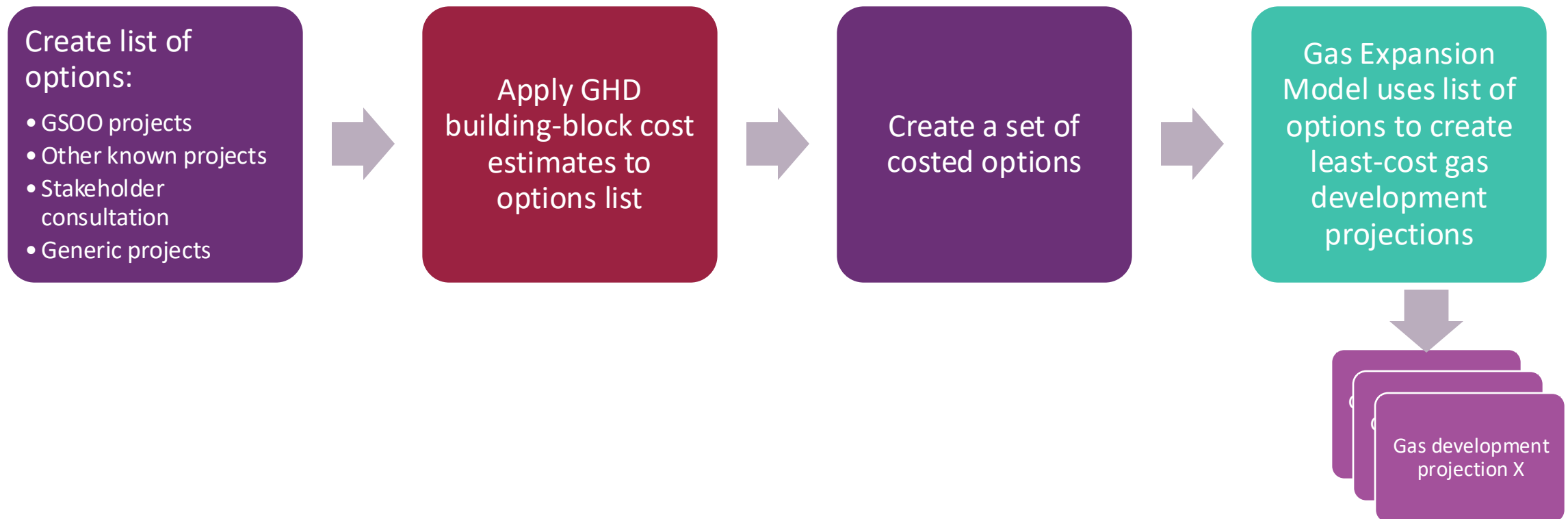


Draft 2025 Gas Infrastructure Options Report



Part of the 2025 Inputs, Assumptions and Scenarios
Report

Gas infrastructure costs for gas integration in the ISP



Assets included in the GHD Gas Infrastructure Cost report

GHD have provided generic costings for:

1. Natural gas pipelines, processing facilities, compression facilities, storage facilities,
2. LNG regasification infrastructure and all associated equipment,
3. Carbon capture and storage related infrastructure,
4. New hydrogen options including trucking, pipelines, and salt cavern storage,
5. Biomethane production,
6. Coal seam gas desalination plants, and
7. Water pipelines related to desalination plants.

Assumptions in the GHD Gas Infrastructure Cost report

- All cost related information is in real Australian Dollars for base estimates
- Gas distribution systems are not included. Estimation for costs in areas of suburbia and high-density populations are not included.
- Consideration of the potential impacts of changing legislation including those related to climate change and carbon emissions, has not been included in this study.
- CAPEX estimates will be provided as order of magnitude estimates (AACE Class 5 as per 18R-97: Cost Estimate Classification System as Applied in Engineering, Procurement and Construction for the Process Industries).
- OPEX considerations are based on typical industry percentages.

Definitions

GSOO

GIOR

Base cost

- Generic cost element eg \$/TJ of production capacity.

Scaling factor

- Factor used to scale the base cost based on size.

Location/
terrain factors

- Factors used to account for high costs constructing in remote areas or difficult terrain.

Building block
cost

- A specific asset eg a compressor.

Project

Gas
infrastructure
component

- A collection of assets eg a length of pipe and a compressor.

Option or
Solution

Gas
infrastructure
option

- A set of linked projects or components that would be delivered together.

Gas
Development
Projection

- A series of Options developed in the gas system across the ISP horizon.

NER Definition

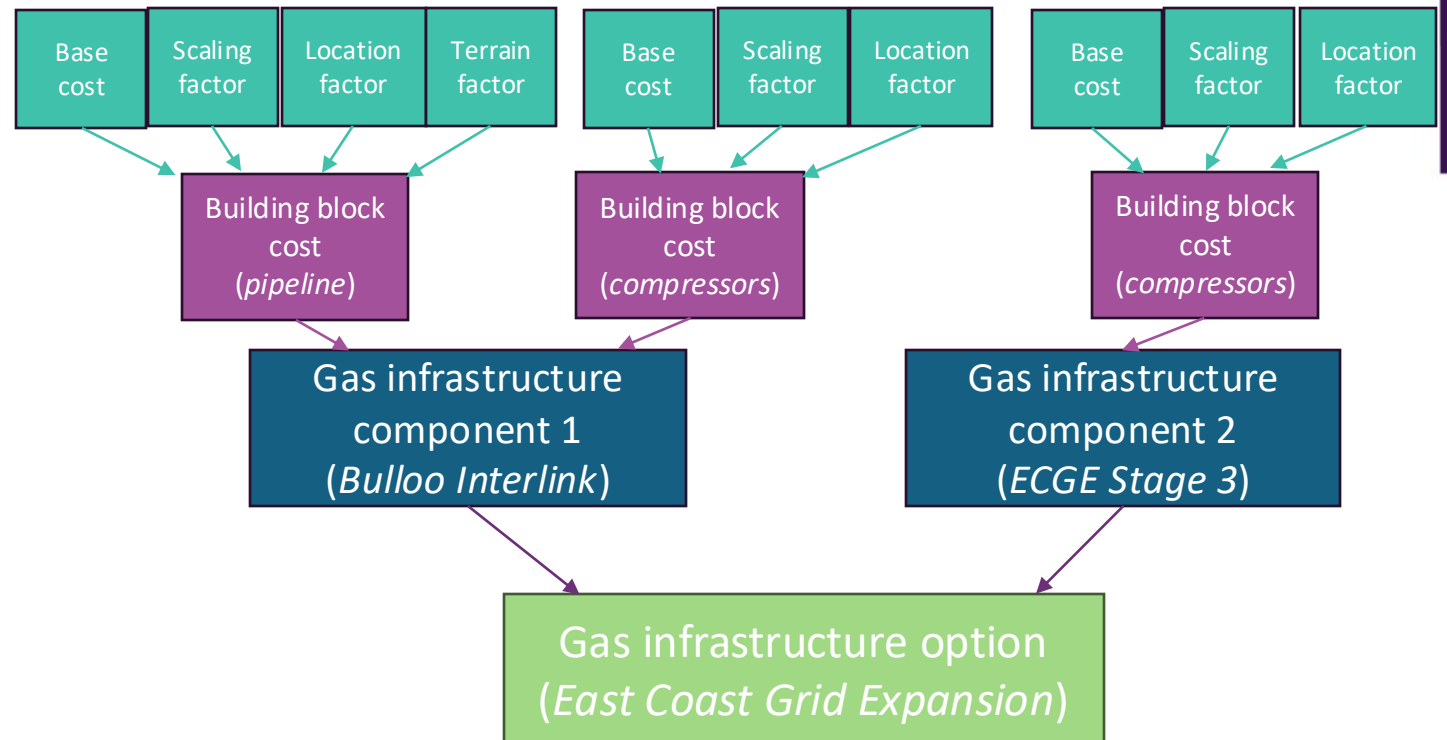
gas development projections means projections of developments in the covered gas industry used by [AEMO](#) in the development of an [Integrated System Plan](#) and which may include a projection over the relevant period of:

- (a) demand for and available supplies of one or more covered gases;
- (b) prices for one or more covered gases;
- (c) capacity and utilisation of covered gas industry facilities,

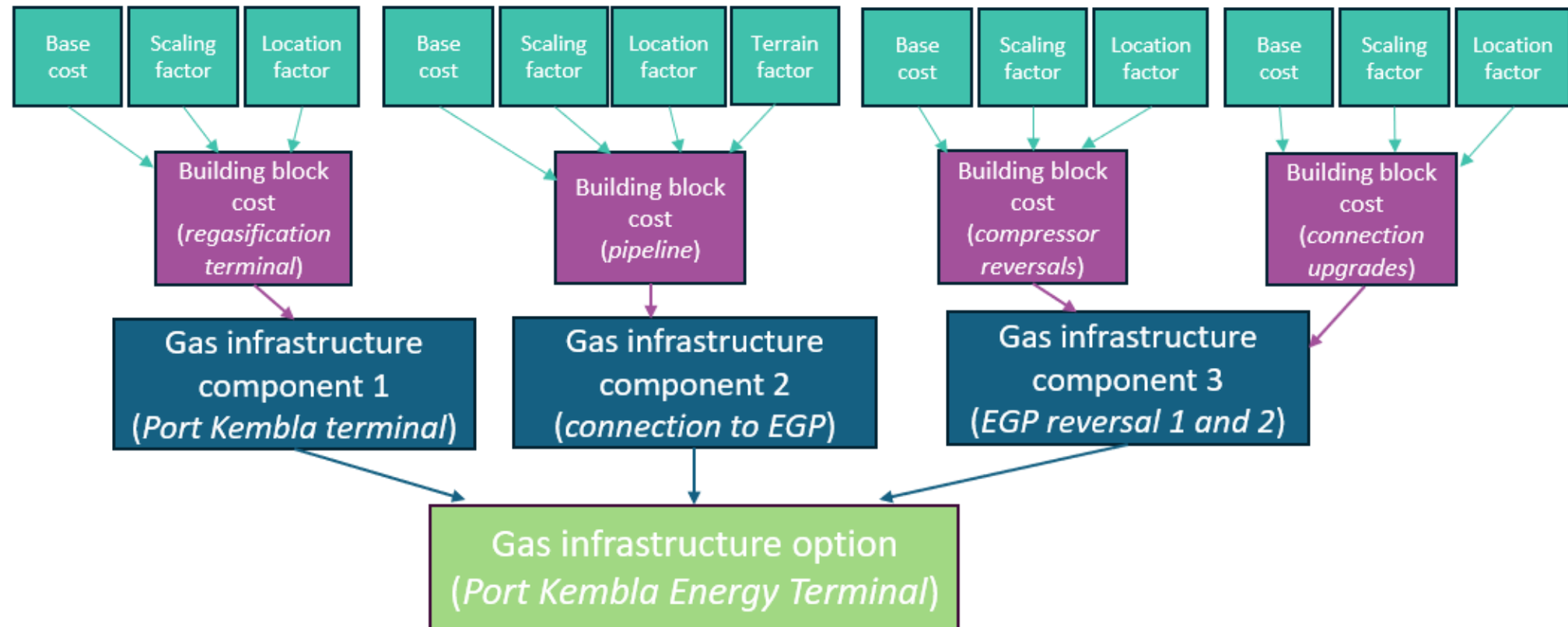
and in this definition, each of the following terms has the meaning given in the *NGL*: covered gas, covered gas industry and covered gas industry facility.

Gas infrastructure option cost estimation for a pipeline example

- GHD generic cost components applied to each building block of a component.
- The cost of an option is the total cost of all components making up the option.
- Four types of options: pipeline, storage, production and regasification.

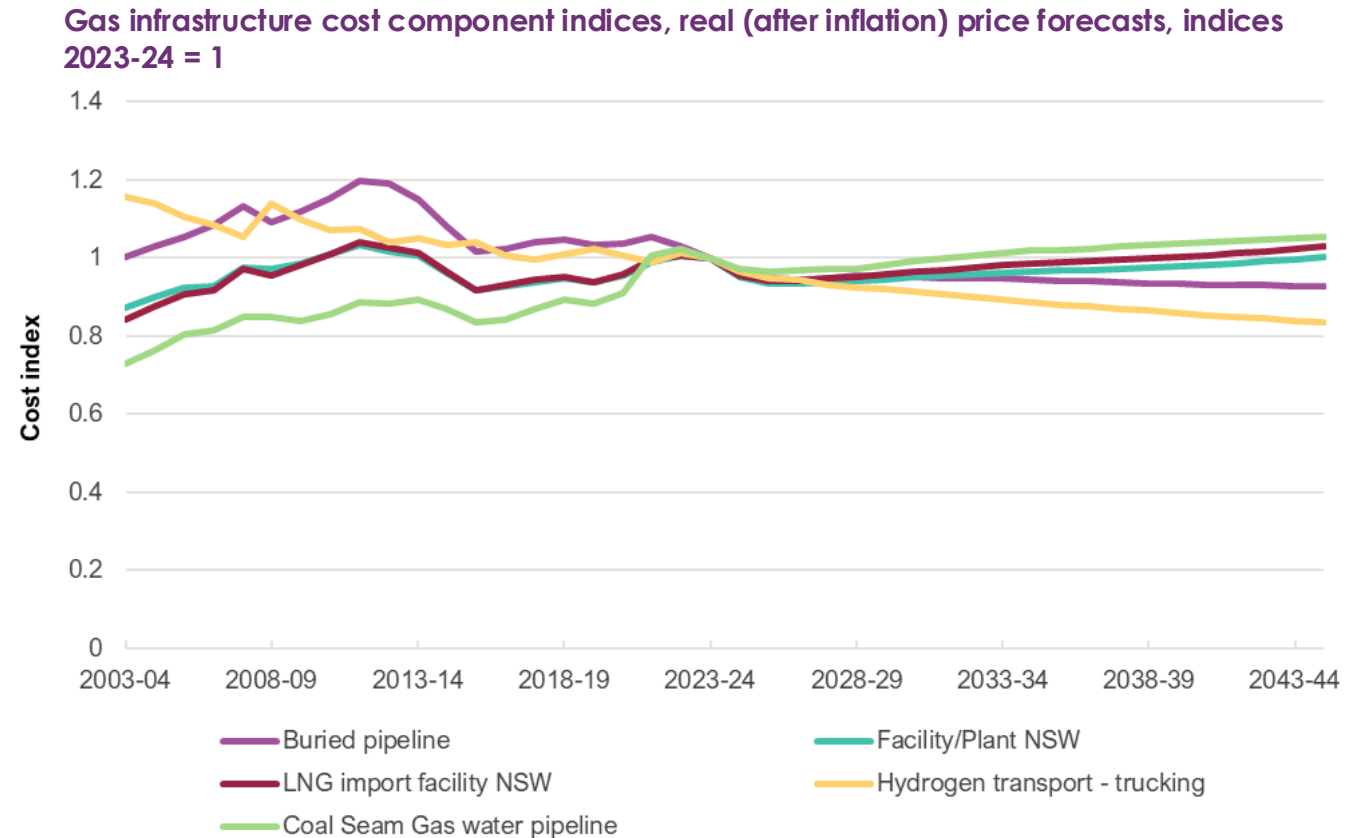


Gas infrastructure option cost estimation for a regasification terminal example



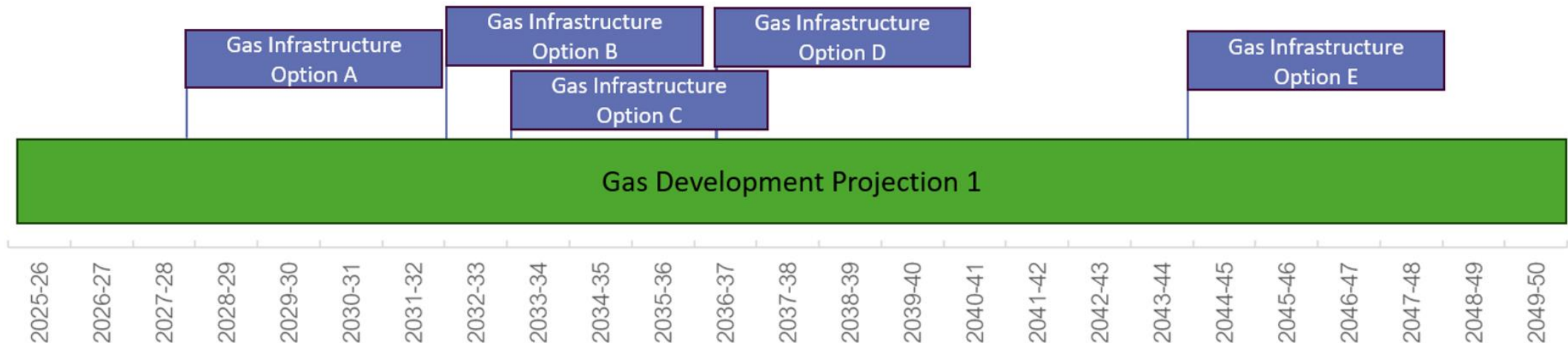
Cost escalation factors capture changes in cost across the ISP horizon

- GHD have also included cost component indices for each year in the ISP horizon to capture cost changes.
- Component forecasts are grouped into categories.
- Forecast escalations consider projections for imported steel, plastic piping, equipment, diesel, labour and exchange rates.



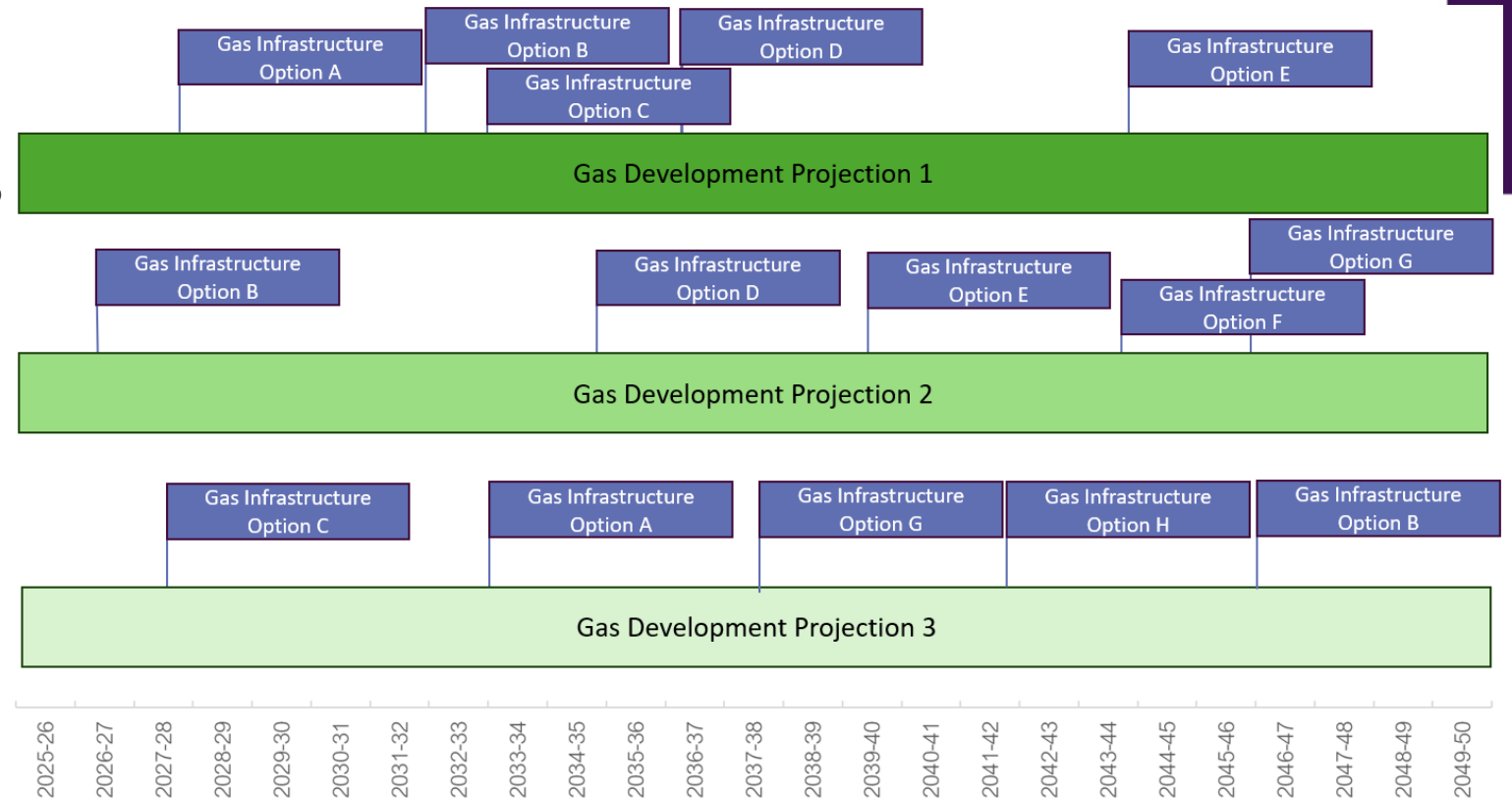
Construction of a conceptual gas development projection

- The starting point for each projection is the options from each of the 2025 GSOO southern supply solutions - options A, B and C.
- All subsequent options are developed by the gas expansion model as required based on available supply, location, and cost - options D and E.



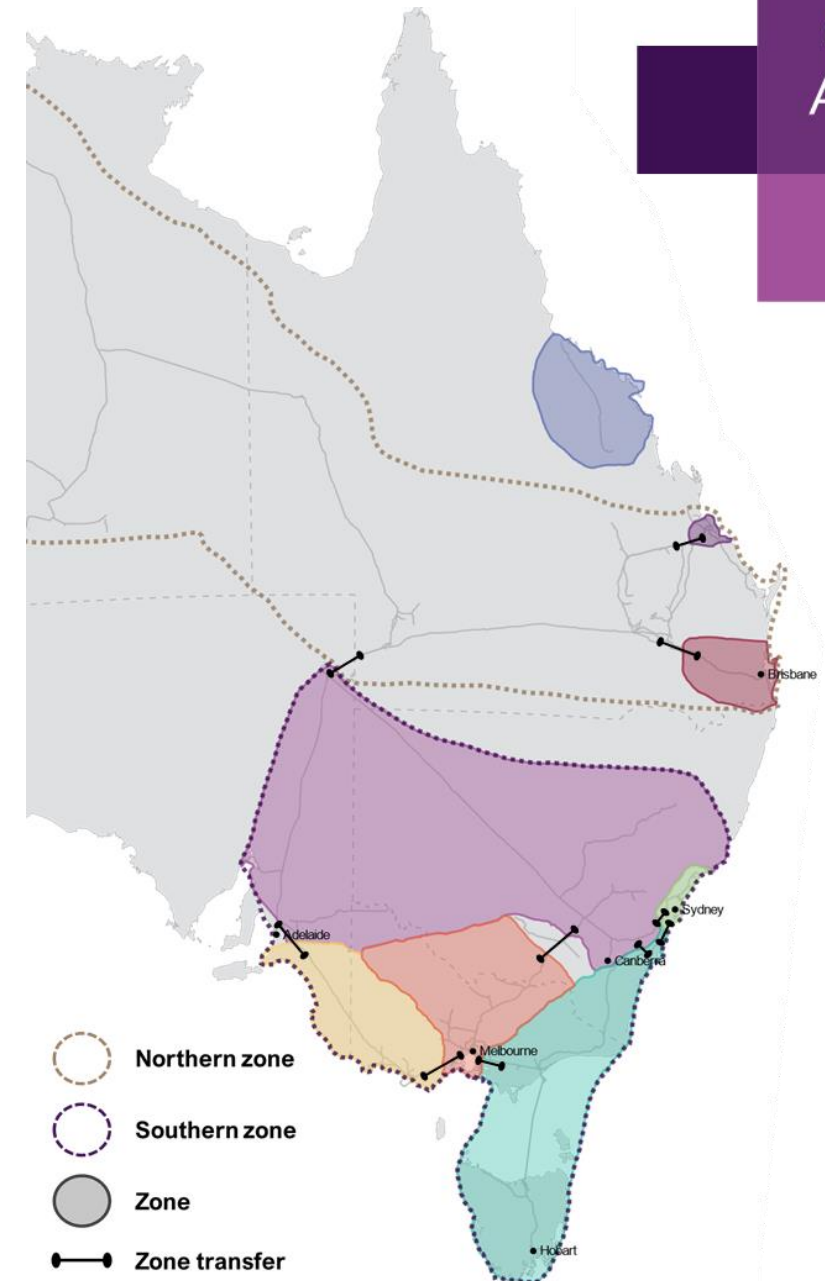
Conceptual gas development projections using different combinations of gas infrastructure options

- Multiple gas development projections are expected to be developed using the gas infrastructure options.
- AEMO may also consider:
 - A GDP that does not fill all supply gaps across the ISP horizon
 - A GDP that does not build any gas infrastructure options.
 - A GDP that does not have any initial predetermined option, and all infrastructure options are modelled on a least-cost basis.



Gas supply and pipeline zones

- The east cost gas market has been divided into gas supply or pipeline zones which reflect supply, storage and pipeline capacity constraints for all GPG in a given zone.
- The daily gas fuel limit for GPG is calculated as the total supply capacity minus forecast residential, commercial and industrial gas demand.
- All zonal limitations assume residential, commercial and industrial gas demand is met first.



Questions and comments

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- [Consultation submissions](mailto:ISP@aemo.com.au) to ISP@aemo.com.au are open until 5pm AEST on 23 June 2025
- Please leave feedback on today's webinar at <https://nam.dcv.ms/WDERgTSIQJ>



For more information visit

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