evoenergy

Attachment 3: Capital expenditure

Access arrangement information

ACT and Queanbeyan-Palerang gas network access arrangement 2026–31

Submission to the Australian Energy Regulator

June 2025

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1. Introduction

Capital expenditure (capex) reflects the costs associated with replacing, maintaining or expanding our network assets. Evoenergy replaces assets as they age and are no longer performing as required to deliver services and meet our regulatory obligations. We maintain the integrity of our network assets to ensure the quality and reliability of the gas supply. In the past, we have expanded our network with new assets where required.

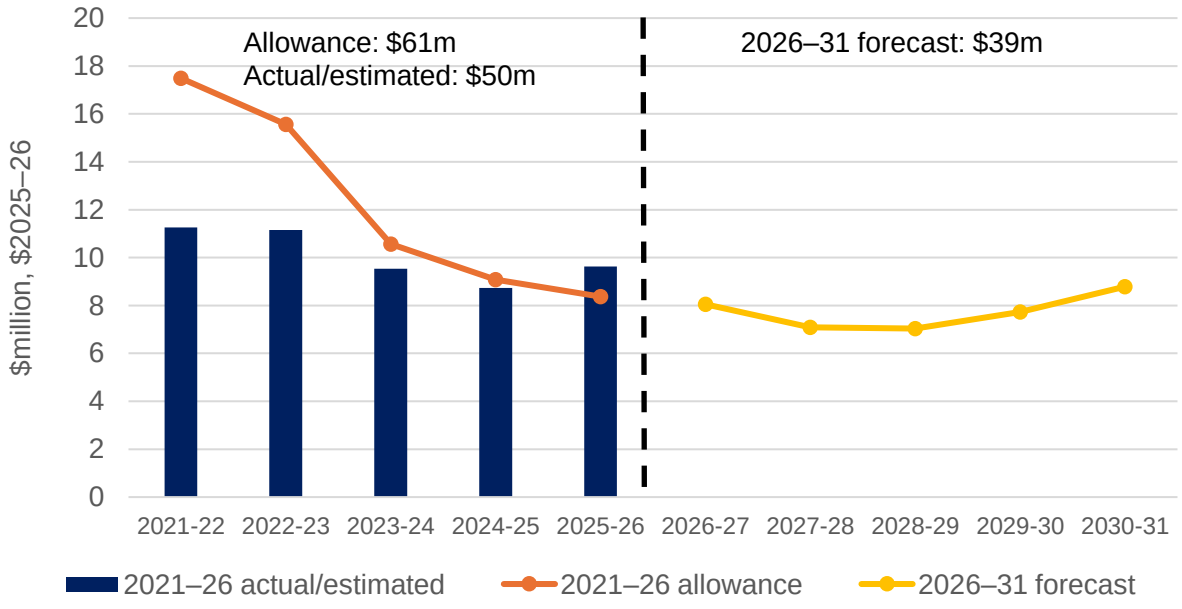
The National Gas Rules (NGR) require an access arrangement proposal to include information on capex for the current access arrangement period and a forecast of capex for each year of the next access arrangement period. This attachment addresses these requirements by providing information on Evoenergy's capex for the 2021–26 access arrangement period, including a comparison against the AER's allowance, and our capex forecast for each year of the 2026–31 access arrangement period. It also includes details on how we developed our forecasts.

Through its Integrated Energy Plan (IEP)[1] the ACT Government has committed to phase out the gas network in the ACT in order to meet its net zero by 2045 target. To support an equitable transition to the Government's net zero objective, Evoenergy is committed to constraining its capex to only what is required to maintain network safety and reliability for the 2026–31 access arrangement period.

The cost of operating the gas distribution network cannot be scaled down in proportion to the number of customers leaving the network. Nevertheless, our priority goal is to minimise capex to avoid unnecessary investment in a contracting network while ensuring our safety and regulatory obligations are met.

Evoenergy's capex forecast for the 2026–31 period is $39 million, which is $12 million or 23 per cent below the expected capex for the current 2021–26 access arrangement period (see Figure 1).

Figure 1 Capex, current access arrangement versus forecast (million, $2025–26)



[1] ACT Government, The Integrated Energy Plan 2024–2030: Our pathway to electrification, June 2024.

Our community and other stakeholders have told us that they are concerned about the immediate and longer-term costs associated with the transition from gas to electricity, particularly the impact on customers remaining on the network. They expect gas network expenditure to be limited to the costs required to ensure the network is safely, securely and reliably maintained and operated.

In the 2026–31 access arrangement period, Evoenergy's forecast capex is limited to the following categories:

- meter renewal: Evoenergy is obligated to replace meters that have reached the end of their useful life[2]
- market expansion: consistent with ACT legislation, Evoenergy is forecasting no new gas connections in the ACT, and therefore there is no capex related to market expansion in the ACT. In contrast, Evoenergy's gas network extends to Queanbeyan and surrounding areas in NSW where Evoenergy is required to connect customers on request.[3] While Evoenergy expects relatively low volumes of new connections in NSW, there is some market expansion capex forecast for our NSW customers
- network renewal: Evoenergy forecasts minimal capex for network renewal. The only significant project planned is an electrical and instrumentation replacement of obsolete components at the Bungendore Package Offtake Station (POTS).

[2] Under the Utilities (Technical Regulation) (Gas Metering Code) Approval 2021 Evoenergy is required to replace meters that are defective, damaged or that no longer meet accuracy requirements specified in the Code.
[3] Evoenergy has an obligation to connect customers under the National Gas Law, unless prevented by jurisdictional legislation such as the ACT's *Climate Change and Greenhouse Gas Act 2010*.

2. Current 2021–26 period performance

Evoenergy's capital program over the current 2021–26 access arrangement period focused on maintaining the safety and reliability of the gas network while delivering cost efficiencies and adapting to the accelerating customer-led transition to electrification. Table 1 compares the total expenditure, disaggregated by expenditure category, to the total forecast capex allowed by the AER for the current 2021–26 access arrangement period.

Table 1 Actual capex by category versus forecast (million, $2025–26)

million, $2025–26	2021–26 allowance	2021–26 actual/estimated	Difference
Market expansion	12.51	21.89	9.37
Capacity development	1.19	0.44	-0.75
Stay in business – network renewal	14.93	10.40	-4.53
Stay in business – meter renewal	29.34	15.38	-13.96
Non-system	0.00	0.39	0.39
Corporate overheads	3.48	3.20	-0.27
Gross capex	61.45	51.70	-9.75
Capital contributions	0.39	1.40	1.01
Net capex	61.07	50.31	-10.76

Note: Reported capex during the 2021–26 access arrangement period includes actual expenditure up to the end of February 2025 and forecast expenditure for the remainder of the period.

Table 1 shows that Evoenergy has spent around 18 per cent less than the AER's capex allowance for the 2021–26 access arrangement period. Changes in the 2021–26 capital program across key expenditure categories, compared to the AER's allowance, include:

- higher expenditure on market expansion due to a longer than anticipated transition period to the full ban on connections. The ACT Government originally planned to phase out new gas connections in greenfield developments from 2021 and urban infill connections from 2023, but the formal regulation came into effect on 8 December 2023, with a transition period until 1 March 2024.[4] Our market expansion allowance was based on the expectation that all greenfield developments would be removed by 2021 and brownfield developments by 2023. However, the delayed implementation of the ban meant that the

[4] The regulation preventing new gas network connections in the ACT from 8 December 2023 was introduced under the *Climate Change and Greenhouse Gas Reduction Act 2010*.

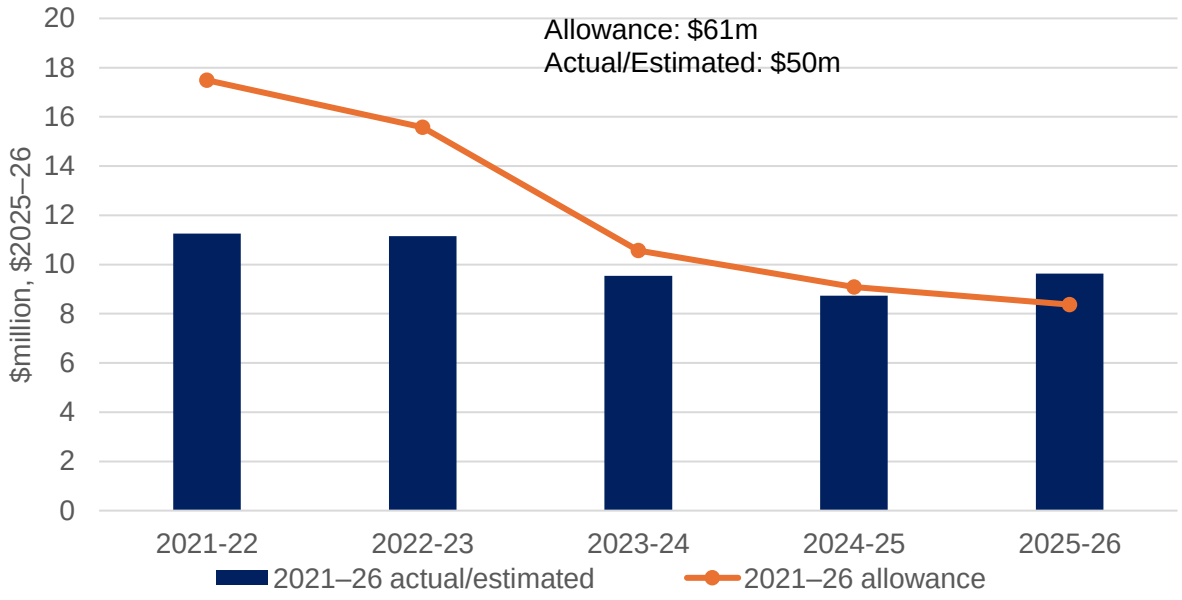
allowance in the AER's final decision was insufficient, as Evoenergy was required to continue connecting new customers in the ACT until 1 March 2024 to meet its obligations under the NGL (National Gas Law)

- lower expenditure on meter renewal due to the extension of meter lives based on statistical sampling. Over the 2021–26 period, we were able to find efficiencies in our planned residential as well as industrial and commercial gas meter replacement programs by extending the life of our metering fleet. Since meter lives have ultimate limits, this efficiency reflects an asset management decision to extend asset lives based on a risk assessment as discussed in section 4.4
- lower expenditure on network renewal due to cancellation of the following major projects:
    - the Watson Pressure Limiting Station was planned to reduce the maximum operating pressure of Canberra's primary main from 6,895 kPa to 4,500 kPa. This was necessary because urban expansion led to high-density sensitive areas, such as childcare centres, being built near the pipeline. The project aimed to ensure compliance with AS 2885.1, which requires that gas pipelines be designed and operated so that the risk is as low as reasonably practicable. The pressure in the primary main is linked to that in the APA Dalton lateral. In recent times, APA has been restricting this pressure to less than 5,800 kPa, reducing the risk. Additionally, further analysis on existing protective measures in the vicinity of the current sensitive areas has been undertaken, which concluded that these measures adequately mitigate the risk without needing a pressure limiting station. As a result, the project has been placed on hold. Evoenergy continues to monitor compliance with allowable stress limits, ensuring the pipeline remains within safety requirements
    - the flow measurement (Phillip, Gungahlin and Fyshwick) project was planned to install gas flow meters at key pressure regulating stations to improve network monitoring, validate demand models, enhance supply security, and detect unaccounted for gas (UAG). These meters were intended to provide real-time data to optimise infrastructure planning and ensure efficient gas distribution, particularly in regions that had been experiencing growing demand, like Gungahlin and Belconnen. The projects were cancelled because the ACT Government's mandate for no gas connections in new suburbs made the installation costs unjustifiable compared to the limited benefit of additional gas flow data
    - the Yarralumla Secondary Relocation project was planned to relocate a section of a 350 mm secondary gas main from private property within the Chinese Embassy in Canberra. Since Evoenergy had no existing easement or permissions to maintain the pipeline within the embassy grounds, the project aimed to relocate approximately 80 metres of the pipeline to a new path outside the property. The project was deferred indefinitely in alignment with the transition away from gas, ensuring it would only proceed if deemed essential.

While certain projects were cancelled or put on hold, we identified new and previously unanticipated priorities that required investment. Consistent with the AER's regulatory framework, we have re-prioritised our capex budget to ensure resources are allocated efficiently to address evolving business needs. For example, the Electrical & Instrumentation (E&I) Compliance Upgrade projects at Phillip and Watson were not included in the AER's allowance

but had to be completed during the 2021–26 access arrangement period. In addition, the Inlet Piping Rectification at Woden, Belconnen and Tuggeranong shopping centres project was deferred from earlier years to the latter part of the 2021–26 access arrangement period due to delays in finalising agreements with the respective shopping centres. As a result, a small overspend in capex is projected for the final year of the current access arrangement period 2021–2026 (Figure 2).

Figure 2 Actual capex by year versus forecast (million, $2025–26)



3. Proposed approach to capital expenditure for the 2026–31 period

Even with reduced demand, some ongoing capex is necessary for asset replacement and regulatory compliance to ensure network integrity while it remains operational. Over the next five years, Evoenergy is committed to limiting network capex to only what is required to safely and reliably manage the gas network and meet legal obligations relating to the supply of gas services as gas demand continues to decline, as set out in section 4 below.

3.1 How we engaged and what we heard from stakeholders

Over the past 18 months, we have engaged extensively with our community on our five-year gas plan, through deliberative forums and additional channels to ensure we heard from a broad range of stakeholders about their values, concerns and priorities. Information on the key consumers and stakeholders we engaged with on our five-year gas plan is provided in Attachment 1: Consumer and stakeholder engagement.

We heard from our deliberative forums[5] and other stakeholders, including the ACT Government in its submission to our RSP,[6] that expenditure on the gas network should be limited to only the costs required to ensure the network is safely, securely, and reliably maintained and operated.

In November 2024, we presented our preliminary forecasts to the community forum. In our presentation and the subsequent publication of our draft five-year gas plan, we emphasised our continued commitment to keep costs down where we can while maintaining a safe and reliable gas supply for customers.[7]

The Energy Regulatory Advisory Panel (ERAP) observed that when preparing meter replacement forecasts, consideration should be given to the economic viability of renewing meters, given the expectation that meters will be redundant by 2045.[8] Our approach to meter replacement is discussed in section 4.3.

Our draft five-year gas plan also sought views on whether Evoenergy should explore options to impose a separate connection charge for new NSW customers (see section 4.2.1).

3.2 How the regulatory framework applies in Evoenergy's context

The Rules criteria governing capex (Rule 79) are summarised as follows:

1. new capex must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services
2. new capex can be justified on the basis of its economic value or its necessity to maintain or improve the safety or integrity of the network, comply with a regulatory

[5] Appendix 1.2: Communication Link, Report of feedback from community forum sessions 1-10, June 2025, pp. 42–43.
[6] ACT Government, Minister Rattenbury – Submission: Evoenergy reference service proposal, August 2024, p. 2, available on the AER website.
[7] See community forum session 7 (14 November 2024) presentation available on Evoenergy's website.
[8] Appendix 1.5: ERAP meeting summaries, June 2025, p. 25.

obligation or maintain capacity to meet demand, or contribute to meeting emissions reduction targets

3. the conforming capex must be for expenditure that is allocated between:

a. reference services

b. other services provided by means of the scheme pipeline

c. other services provided by means of non-scheme parts (if any) of the pipeline.

Our capex forecast reflects our best estimate of the efficient costs required to continue to provide safe and reliable gas pipeline services to consumers, in the context of the ACT Government's policy to reduce greenhouse gas emissions by phasing out the gas network by 2045. Consistent with stakeholder feedback, we have sought to minimise our capex forecasts to the extent possible. We have adopted the AER's preferred approach to forecasting capex and, to the extent possible given the NGR criteria, we have developed our capex forecast consistently with the AER's expectations on capex forecasts, as set out in its Better Resets Handbook.[9]

The AER's expectations for a network's capex proposal are drawn from the Rules, the AER's guidelines and previous decisions,[10] and include:

- top-down testing of the total capex forecast and at the category level
- evidence of prudent and efficient decision-making on key projects and programs
- evidence of alignment with asset and risk management standards
- genuine consumer engagement on capex proposals.

The AER states that it will assess a proposal against these expectations to determine whether to apply a targeted review.

The remainder of this section sets out Evoenergy's approach to forecasting capex against the AER's expectations and provides a summary of our total capex forecast.

[9] AER 2024, Better Resets Handbook: Towards consumer centric network proposals, July 2024.
[10] AER 2024, Better Resets Handbook: Towards consumer centric network proposals, July 2024, p.18.

4. Our capex forecast for the 2026–31 access arrangement period

Our capex forecast for the 2026–31 access arrangement period provides our best estimate of the prudent and efficient costs required to deliver safe and reliable gas pipeline services. It aligns with the ACT Government's policy to reduce greenhouse gas emissions by phasing out the gas network by 2045. Stakeholder feedback has guided us to minimise our capex forecasts wherever possible.

Evoenergy has forecast capex using the following methods:

- connections and metering capex was forecast using volume and unit rate forecasts. These approaches are detailed in Appendix 3.5 and are implemented in Evoenergy's connection capex forecast model (Appendix 3.2), meter replacement capex forecast model (Appendix 3.3), and meter replacement volume forecast model (Appendix 3.6)
- project-based capex was forecast by identifying the required projects given customer, regulatory, and network needs, and assessing the associated cost. The only significant project planned is an electrical and instrumentation replacement of obsolete components at Bungendore POTS
- we entered project-base cost forecasts for individual programs and projects into the AER's standardised capex model:
    - we applied escalation assumptions to project-base cost forecasts. We engaged independent consultants Oxford Economics to assist in developing the electricity, gas, water and wastewater services wage price indices for the ACT and applied them to all projects
    - additionally, we relied on the AER's capex model to calculate capitalised overheads.

Evoenergy's capex forecast has been subject to extensive internal review and approval processes throughout its development as described in section 4.1.2 below.

4.1 Addressing the AER's capex expectations

4.1.1 Top-down testing of the total capex forecast and at the category level

Our forecast capex is lower than current period expenditure, and we have maintained strong service performance metrics. We have actively engaged with stakeholders to ensure transparency in investment decisions and alignment with consumer expectations.

An overall comparison of our capex forecasts against current period performance (at total forecast and category level) is provided in section 5.1. In addition, the incentive reward that we have achieved during the 2026–31 access arrangement period is explained in section 6.

4.1.2 Prudent and efficient decision-making on key projects and programs

As part of its capital planning and governance, Evoenergy uses a Project Management Methodology (PMM) framework for the initiation and approval of all significant investment projects.[11] These governance processes ensure that only projects that are efficient, prudent, and benefit the community and stakeholders are approved.

The PMM framework aims to provide project governance for the project lifecycle and consists of four main phases (Initiate, Plan & Define, Deliver, and Close) and a gated process with criteria required to pass each gate in Evoenergy's 2026–31 capex program.

Our non-recurrent projects are supported by a suite of Options Analysis and Business Cases which articulate the issue or opportunity, the feasible options, the costs and associated risks of each option and the basis for the preferred option.

For our recurrent programs, such as connection and metering, we outline the need for the expenditure, focusing on explaining the rationale for our forecast. Accordingly, our documentation for our connection and metering programs provides evidence that our forecasts are developed on a reasonable basis and represent the best forecast.

Furthermore, Evoenergy's capex forecast has been subject to extensive internal review and approval processes throughout its development. The forecasts produced are reviewed in three stages: firstly, at a project/program level; secondly, at an asset class level; and thirdly, at a total program level. We have also sought to understand and consider customer preferences (which inform prudency and efficiency) in our decision-making process, as discussed in section 3.1.

4.1.3 Alignment with asset and risk management standards

Evoenergy has engaged Jemena Asset Management to provide management and operational services for the gas network. As part of this engagement, Jemena develops in consultation with Evoenergy an Asset Management Plan (AMP) and supporting Asset Class Strategies, utilising Jemena's Asset Management System (AMS).

The Asset Management Plan provides strategic direction for managing ACT gas network assets. It outlines strategy, objectives, expenditure drivers, service levels, and asset performance considerations.

Our Asset Management System is built on the principles of continuous improvement, following the Plan, Do, Check, Act methodology, and is ISO 55001 certified.

In addition to ISO 55001, our safety, environmental, quality, and risk management systems comply with industry best practices. We maintain accreditations for:

- AS/NZS 4801 – Occupational Health and Safety Management Systems
- ISO 14001:2015 – Environmental Management Systems
- ISO 9001:2015 – Quality Management Systems
- AS/NZS ISO 31000:2009 – Risk Management Standard.

[11] Appendix 3.4:Network asset management plan, June 2025, p. 19.

Our suite of documentation outlines the relevant standards and regulatory obligations that underpin our investment program.

4.1.4 Genuine consumer engagement on capex proposals

See section 3.1 for discussion on stakeholder engagement and feedback on our capex for the period 2026–31.

4.2 Market expansion capex

Market expansion capex traditionally covered new mains along streets, services to homes and businesses, as well as connecting new meters to measure how much gas is used. Historically, it has been the largest component of Evoenergy's capex program.

Following the ACT Government's ban on gas connections for new customers after 1 March 2024, Evoenergy has set the connections capex in the ACT to zero. As a result, no market expansion capex is forecast in the ACT for the 2026–31 period.

However, Evoenergy's gas network extends to Queanbeyan and surrounding areas in NSW, where we are required to connect customers upon request. While new connections in NSW are expected to be relatively low, we forecast some market expansion capex in NSW. Table 2 compares the total forecast market expansion capex by connection type to the total capex expected to be incurred in the current 2021–26 access arrangement period.

Table 2 Forecast market expansion capex (including overheads and cost escalation)

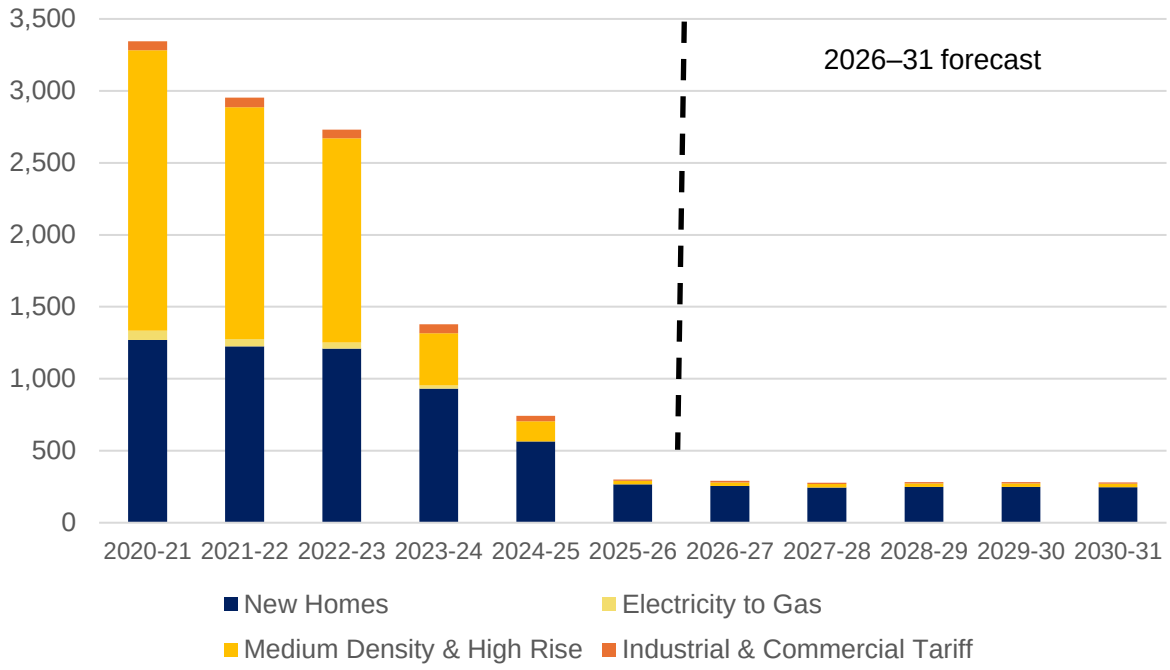
million, $2025–26	2021–26 allowance	2021–26 actual/estimate	2026–31 forecast
Electricity to gas[12]	0.54	0.5	0
New homes	5.26	11.32	4.93
New medium density / high rise	1.80	5.64	0.31
Industrial and commercial tariff	4.90	3.52	0.92
Industrial and commercial contract	0.00	0.91	0
Total gross	12.51	21.89	6.16
Capital contributions	0.39	1.40	0.60
Total net	12.13	20.49	5.56

[12] Connections to existing homes are sometimes referred to as "electricity to gas" connections, whereby households replace electric appliances with gas equivalents and require connection to the gas distribution network.

Evoenergy engaged the Centre for International Economics (CIE) to forecast demand for gas across our network for the forecast 2026–31 access arrangement period. As part of this forecast, it developed a forecast number of new connections by each customer segment that allows us to forecast the new connections capex.[13]

The CIE has forecast that Evoenergy will connect approximately 1,400 new customers in NSW over the 2026–31 access arrangement period. Figure 3 shows the sharp decline in actual and forecast connections following the ACT Government's ban on new gas connections.

Figure 3 Actual and forecast connection numbers by connection type



We calculate the total connections capex forecast for the 2026–31 access arrangement period as follows:

- first, we require a forecast number of new connections in NSW. As discussed above, we use CIE's forecast for the expected number of connections during the 2026–31 access arrangement period
- second, we determine the historical asset mix per connection. We calculate the average quantity of assets commissioned per connection (e.g. mains, services, meters) based on data over the past four years, i.e. 2020–21 to 2023–24
- third, we apply historical unit rates to the asset mix. We use the average historical cost per metre of mains, per service, and per meter installed (from 2020–21 to 2023–24). We multiply these unit rates by the typical asset mix per connection to calculate the average cost per connection
- finally, we multiply the average cost per connection by the number of forecast connections. This gives us the total capex forecast for new connections in NSW.

[13] Appendix 2.1: Centre for International Economics, Gas demand forecast report, June 2025.

Appendix 3.5 to this attachment on our connection and meter forecasting methodology sets out the unit rates for each customer category and how these are derived from historical costs and volumes.

4.2.1 Connection charges for NSW customers

Evoenergy has explored the possibility of charging a separate connection fee for new connections in NSW in order to further reduce capex. The NGR (Rule 119M) currently only allow a connection charge to be imposed if the capex required to connect the customer exceeds the revenue generated from them over the expected life of the connection.

We recognise that some stakeholders have expressed a preference for Evoenergy to impose charges for new customers connecting to Evoenergy's network.[14] However, given the Rules criteria for connection charges and the relatively small volume of forecast new connections in NSW (approximately 1,400), Evoenergy considers that the application and impact of charging a connection fee in NSW would be limited. Therefore, we do not propose to introduce a separate connection fee for new connections in NSW at this time.

We understand that Energy Consumers Australia (ECA) has proposed a change to the Rules that would require networks to impose connection charges for new customers. In the event the proposed rule is made by the Australian Energy Market Commission (AEMC) ahead of our revised proposal submission, we will adjust our approach accordingly.

4.3 Stay-in-business: metering

An essential part of the service Evoenergy provides is metering each customer's gas consumption. Our meters measure the gas volume delivered to customers. This information ensures retailers accurately charge customers for both the use of our network and the cost of the supplied gas. Under the *Utilities (Technical Regulation) Act 2014* and associated technical codes, Evoenergy has a regulatory obligation to supply metering equipment to customers (including ensuring that meters are accurate, tested, meet applicable standards, repaired and replacement of defective meters).[15]

Evoenergy's gas metering program is designed to maintain the performance of our fleet of gas meters, to ensure that we:

- replace meters prior to failure to avoid estimated bills and customer frustration
- meet our obligations to provide at least two actual meter reads every 12 months[16]
- accurately bill customers to ensure network and gas usage charges are fair.

Our hot water meters help measure gas consumption in buildings with centralised hot water systems by tracking individual water usage. While we do not operate these systems, we do measure the amount of hot water used in each apartment. A master gas meter records the total gas used by the centralised hot water boiler to heat water for the building, and individual hot water meters track the specific consumption of each apartment. Using this data, gas consumption is allocated based on the proportion of hot water used, ensuring fair and accurate billing.

[14] Appendix 1.5: ERAP meeting summaries, June 2025, p. 13.
[15] Utilities (Technical Regulation) (Gas Metering Code) Approval 2021.
[16] Retail Market Procedures (NSW and ACT), clause 3.6.6(a), p. 49.

Evoenergy forecasts to replace the following during 2026–31:

- planned residential gas meter replacement: 11,939 meters
- planned residential hot water meters: 6,335 meters
- industrial and commercial meters: 773 rotary and diaphragm meters.

We also have a defective meter replacement program when an issue is reported by a customer or identified by our technician during a scheduled meter reading. For these meters, we do not forecast volumes, but rather we have relied on an average of total historical costs.

Table 3 compares the total forecast metering capex by sector to the total metering capex expected to be incurred in the current 2021–26 access arrangement period.

Table 3 Forecast metering capex (including overheads and cost escalation)

million, $2025–26	2021–26 allowance	2021–26 actual/estimate	2026–31 forecast
Residential gas and hot water	22.95	12.53	21.13
Industrial and commercial	6.39	2.85	7.45
Total	29.34	15.38	28.59

Figures may not sum due to rounding.

Over the current 2021–26 access arrangement period, we have been able to find efficiencies in our planned residential as well as industrial and commercial gas meter replacement programs by extending the life of our metering fleet. These savings were enabled by our proactive monitoring of asset performance and meter testing program. As a result, we have delivered material reductions in capex, a lower regulatory asset base and, in turn, lower customer bills.

We calculate the total metering capex forecast for the 2026–31 period as follows:

- we forecast the cost of planned meter replacements by using the actual average cost per unit from the past four years. We then applied this unit rate to the expected number of replacements, based on the age and performance of the meters
- we forecast defective meter costs by treating them as recurrent expenses, using an average of total historical costs as the basis of the 2026–31 funding requirement.

We have primarily relied on revealed costs for forecasting, except in cases where this approach is not suitable. For example, we applied a stand-alone unit rate for Meter Data Logger (MDL) and Metretek device replacements, as historical data did not accurately reflect current conditions. However, these costs represent only a small proportion of our overall metering capex.

4.4 Residential gas and hot water meters

In line with regulatory obligations, our planned residential meter replacement programs ensure gas and hot water meters are replaced at the end of their service life. The program also includes statistical sampling testing of a sample of gas meters in accordance with Australian Standard AS4944. If the sample meters are found to be accurate, the entire lot is considered fit for purpose

for another five years, depending on the test results. However, if the sample meters fail the statistical sampling test, the entire population is deemed not qualified for in-service life extension at the end of its life and is scheduled for replacement.

Evoenergy provides residential hot water meters for high-rise buildings with centralised hot water systems. Under existing arrangements, the meters measure each apartment's hot water consumption, which is then used to bill residents for the gas used by the centralised system.

Hot water meters communicate with MDL and Metreteks devices by sending pulses to indicate consumption. However, this system requires each meter to be powered, and most of our existing meters rely on battery power. Although replacing only the battery is feasible, it is more cost-effective to replace the entire meter once the battery reaches the end of its lifespan.

Beyond battery-related replacements, meters are also replaced in accordance with the manufacturer's recommended design life, as outlined in our meter volume forecasting model. These programs are not driven by customer demand, and device prices fluctuate as technology evolves. Therefore, we have developed unit rate estimates on a case-by-case basis through analysis of the works involved.

Table 4 compares the proposed level of capex for residential meters (and associated equipment such as MDLs) with the AER's allowance and historical actuals.

Table 4 Residential meter capex (including overheads and cost escalation)

million, $2025–26	2021–26 allowance	2021–26 actual/estimate	2026–31 forecast
Total residential meter capex	22.95	12.53	21.13

Given the large annual volume of meter replacements, historical unit costs provide a reliable basis for forecasting the expected expenditure during the 2026–31 access arrangement period. The capex forecast consists of two key components:

- unit rates derived from historical data, calculated by summing direct costs over the past four years and dividing by total replacement volumes
- projected expenditures, determined by applying these historical unit rates to the expected replacement volumes from our meter replacement volume forecast model.

Additionally, a small portion of program capex allocated for quality assurance testing has been estimated using an annual average capex approach.

Our residential meter capex has increased due to the age profile of our fleet of gas meters. We explain our residential gas meter capex in more detail in the following section.

4.4.1 Residential gas meters

During the 2021–26 access arrangement period, our residential gas meters exceeded performance expectations. We had expected to find our meters to be inaccurate at 25 years of age, as summarised in Box 1. However, some meters have passed their 30-year life extension test.

Box 1 Gas meter testing program

Our gas meter testing program is designed to maintain accuracy. Residential gas meters are statistically sampled prior to 15 years of service in accordance with the requirements of Australian Standard AS4944.

A sample of residential gas meters is removed from service and tested two years prior to reaching 15 years of service. These tests determine whether the lot as a whole continues to record consumption accurately and whether a meter's life can be extended beyond its initial in-service life. If this sample of meters is found to be inaccurate, the entire lot is scheduled for replacement. If it is accurate, then the life is extended by five years.

The initial in-service life of newly manufactured meters is assumed to be 15 years, and meter accuracy is assumed to deteriorate through periodic testing as follows:

- the first test is conducted at 15 years of age and results in a five-year extension
- the second test is conducted at 20 years of age and results in a five-year extension
- it is assumed that meters will fail the third test with the meter family removed at the end of year 25.

During the 2021–26 access arrangement review, the AER's consultant, Zincara, assessed Evoenergy's assumption that meters would be replaced after 25 years as prudent.[17]

We consistently seek to deliver efficient, prudent programs in line with good industry practice to achieve the lowest sustainable cost of providing services. Historically, meters were replaced at 25 years, as high testing costs and declining accuracy at each successive test made testing uneconomical. During 2021–26, we reassessed this approach, finding some meters accurate at 30 years, which led us to explore options for meter life extensions without compromising on safety and reliability. We found that many meters are now operating well beyond their design lifespan, and further extension is no longer viable due to declining pass rates in statistical testing and the presence of defective units that we have observed.

Table 5 demonstrates failure rates in statistical tests. While many meters have passed their 15-, 20- and 25-year tests, this performance has not been uniform. The observed failure rates of 15 per cent, six per cent, and 17 per cent at 15-, 20-, and 25-year tests indicate that even at these earlier stages, accuracy defects are present and growing. Notably, at 30 years, one of the two tested lots failed, resulting in a 50 per cent failure rate – a significant jump compared to previous years. While the number of lots tested at 30 years is small, this sharp increase aligns with the expectation that accuracy declines as meters age.

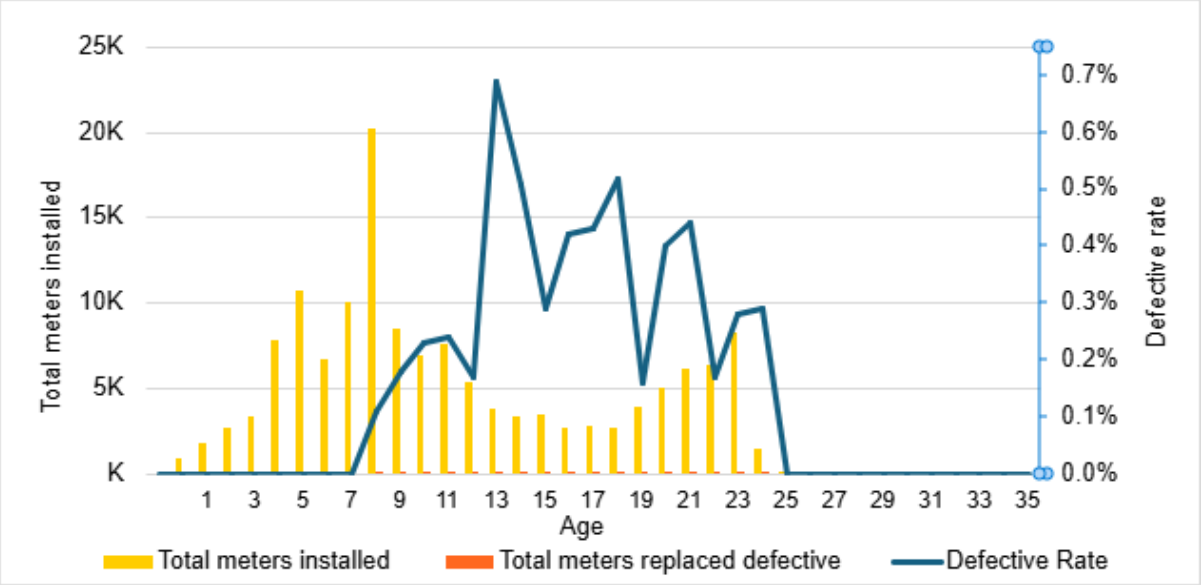
[17] Zincara, AER Access Arrangement 2020 Evoenergy Capital Expenditure, 7 November 2020, pp. 51–52.

Table 5 Statistical sampling test results by number of lots

Meter market type	Lot age	Total lots tested	Lots passed	Lots failed	Failure rate
Residential (≤8m^3/hr)	15(LE1)	20	17	3	15.00%
	20(LE2)	17	16	1	5.88%
	25(LE3)	12	10	2	16.67%
	30(LE4)	2	1	1	50.00%

Figure 4 shows defective meter rate as the percentage of meters found to be faulty at each meter age group since installation (i.e. certification age). Although defect rates vary, the presence of defects in older meters shows their vulnerability to wear and tear, which may eventually cause more failures. This poses an asset management risk, as delaying intervention until meters reach 35 years could result in higher failure rates, potentially disrupting customer services.

Figure 4 2024 residential gas meter failure rates



For the 2026–31 access arrangement period, we carefully reviewed meter performance data and rigorously tested previous assumptions. Residential meter volume forecasts are based on the age profile of our gas meter fleet. Our meter volumes forecasting model considers meters reaching 30 years of service within the 2026–31 period, making these lots scheduled for statistical accuracy testing. Based on historical performance, it is assumed that half of these meters will pass the accuracy test and remain in service until they reach 35 years, while the other half will fail the test and be replaced at 30 years. This approach results in an average service life of 32.5 years for residential meters, as demonstrated in Table 6.

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Table 6 Residential metering forecasting assumptions

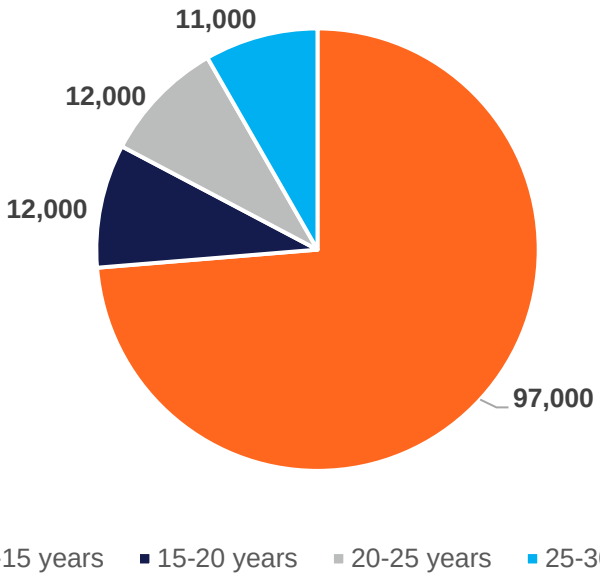
Meter age	2021 proposal	AER 2021–26 final decision	2026–31 proposal
15	100% pass – 5 years	100% pass – 5 years	100% pass – 5 years
20	100% pass – 5 years	100% pass – 5 years	100% pass – 5 years
25	No test	No test	100% pass – 5 years
30			50% pass – 5 years
35			No test
Expected life	25 years	25 years	32.5 years

Our model assumes an average service life of 32.5 years for residential meters and does not account for potential early replacements due to life extension test failures. As demonstrated in Table 5, some meter lots have failed these tests, indicating that earlier replacements are possible. Consequently, our forecast is conservative.

In addition, we note that any further extension to the average asset life for meter replacements would result in additional replacements being required in the subsequent access arrangement period. Given the planned shutdown of the ACT gas network by 2045, we believe a strategic consideration to support a smoother transition and reduce long-term risks is required. The ACT's gas phase-out policy is unique, distinguishing Evoenergy's circumstances from other jurisdictions. Given the expected decline in customer numbers, it is more prudent to replace aged meters earlier in the transition. This approach ensures continued service reliability and prevents a situation where large-scale replacements become concentrated in later years.

Figure 5 shows that while most meters are relatively new, a considerable number will reach a lifespan beyond 30 years within the next decade. In particular, meters in the 20- to 25-year category (12,000 meters) and 25- to 30-year category (11,000 meters) are already in the later stages of their service life and will soon require replacement. If replacements are postponed, the volume of ageing meters will continue to rise, creating both operational and financial challenges due to increased failure rates and the cost burden shifting to a shrinking customer base.

Figure 5 Age profile of our meter fleet as of 2025



Broadly speaking, meters installed between 1995 and 1999, which are between 25 and 30 years old, will require replacement in the 2026–31 period, while meters from 2000–2004, currently 20 to 25 years old, will reach replacement age in 2031–36. If replacements from 2026–31 are pushed into 2031–36, meters expected to be replaced at 32.5 years may instead be 35+ years old before action is taken, increasing the risk of accuracy issues and mechanical failures.

Additionally, as customers continue to leave the gas network due to electrification, the overall customer base will decline. This means the cost of meter replacements will be spread across a smaller number of remaining customers, increasing the financial burden on those who remain connected to the gas network.

While some customers whose meters are scheduled for replacement may disconnect from the network before reaching the end of their meter life, Evoenergy is required to replace existing meters that are unable to comply with regulatory requirements, even if a meter is temporarily disconnected (most disconnections are temporary and not permanent (abolishment)). Given this, we expect meter replacement capex needs to remain relatively stable over 2026–31 to ensure compliance.

Under our current licensing requirements, we are obligated to comply with the *Utilities (Technical Regulation) Act 2014* (Gas Metering Code) for meter testing and replacement. However, we will continue to engage with the Technical Regulator regarding provisions that would allow meters due for replacement, but temporarily disconnected for an extended period, to remain in place rather than being replaced. If this change is implemented ahead of our revised proposal submission, we will adjust our approach accordingly.

4.5 Industrial and commercial meters

We have a variety of gas meters for our industrial and commercial customers who use larger than average volumes of gas. Each customer is supplied with a meter that is appropriately-sized for how much gas they use.

Our model assumes that the large industrial and commercial diaphragm meters need to be replaced at 25 years of age due to their higher consumption rates. Even minor accuracy variations in these meters can lead to significant financial impacts, making precise measurement essential. Additionally, these meters are often refurbished to maintain reliability and extend their service life. In contrast, for small industrial and commercial diaphragm meters, our modelling assumption is the same as residential gas meters, i.e. an average service life of 32.5 years.

All other large industrial and commercial meters (>25m^3/hr) will be replaced following the meter's calibration certificate validity for accuracy. The vendors provide calibration certificates that indicate how long a meter is expected to maintain accurate measurements. Once the certificate expires, the meter is no longer guaranteed to provide reliable readings, so it must be replaced to ensure continued accuracy and compliance with regulatory standards.

Table 7 compares the proposed level of capex for industrial and commercial meters with the AER's allowance and historical actuals.

Table 7 Commercial and industrial meter capex (including overheads and cost escalation)

million, $2025–26	2021–26 allowance	2021–26 actual/estimate	2026–31 forecast
Commercial and industrial meter capex	6.39	2.85	7.45

4.6 Defective meters

An important part of both the residential and the commercial and industrial meter replacement programs is the defective and meter upgrade/downgrade programs, which include the replacement of defective meters, regulators, and associated equipment, as well as adjustments to meter capacity to align with customer usage requirements.

To forecast capex for these programs, we apply the average of revealed annual costs incurred over the last four years. We have observed that this approach can underestimate the costs associated with residential defective gas and hot water meters due to extended meter service lives, which contribute to rising failure rates. Given that meters continue to operate beyond their original service expectations, we anticipate that defective replacement rates will remain elevated.

The defective meter capex included in the forecast is provided in Table 4 and Table 7 above, with a more detailed split available from our meter replacement capex forecast model.

4.7 Network renewal Bungendore POTS project

The only significant project planned is an electrical and instrumentation replacement of obsolete components at the Bungendore POTS. The Bungendore POTS is a high-pressure gas facility that supplies gas to Bungendore. Currently, it has two major issues:

- ageing equipment: many of the electrical and monitoring systems are outdated, making it difficult to find spare parts or perform maintenance. These components are no longer supported by manufacturers and asset failures could disrupt operations

- low gas temperature risks: the facility's water bath heater has been out of service since 2020, and the alternative heating method has not maintained the required gas temperature. This puts mechanical equipment and pipelines at risk.

Three options have been assessed to address the issues and risks, ensuring the most effective solution is selected to maintain the safe operation, compliance and reliability of the asset. Without a proper solution, the risk level is rated as "Significant", which is higher than our acceptable limit under Evoenergy's Risk Management Manual.

The project is currently at Gate 1 of the PMM Stage Gate Process and Requirements.[18] Multiple options have been considered to determine the most effective approach for upgrading the electrical and instrumentation systems:

- Option 1: maintain status quo
- Option 2: targeted electrical and instrument equipment replacement and additional catalytic heaters installation
- Option 3: complete electrical and instrument equipment replacement and additional catalytic heaters installation.

Following rigorous assessment, Option 3 is the recommended option. This option addresses the issue of outdated equipment and keeping temperatures at safe levels. Under Option 3, additional catalytic heaters will be installed, and the existing electrical and instrument equipment will be replaced. This will ensure that the Bungendore POTS meets current standards, improve reliability, and reduce the risk of equipment failure by bringing operations back within safe temperature limits.

Construction of the recommended approach is expected to commence in 2025–26, with approximately 25 per cent of the total expenditure occurring that year. The remaining costs will be incurred during the 2026–31 access arrangement period, with the total project cost estimated at $1.7 million in real 2025–26 dollar terms.

Further information is provided in Appendix 3.7: Bungendore POTS facilities obsolescence options analysis.

[18] Appendix 3.7: Bungendore POTS facilities obsolescence options analysis, June 2025.

5. Capex forecast for 2026–31 access arrangement period

Based on the methodologies set out above, Evoenergy's proposed net capex forecast for the 2026–31 access arrangement period is $38.7 million (real, $2025–26). Table 8 provides the annual breakdown of this forecast by each of the capex elements.

Table 8 2026–31 capex forecast (million, $2025–26)

million, $2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	Total
Market expansion	1.24	1.20	1.23	1.25	1.25	6.16
Capacity development	0.00	0.00	0.00	0.00	0.00	0.00
Stay-in-business: network renewal	1.24	0.11	0.05	0.05	0.05	1.51
Stay-in-business: meter renewal	5.03	5.37	5.36	5.87	6.96	28.59
Non-system	0.00	0.00	0.00	0.11	0.00	0.11
Corporate overheads	0.66	0.52	0.51	0.58	0.65	2.92
Gross capex	8.17	7.20	7.16	7.85	8.91	39.29
Capital contributions	0.12	0.12	0.12	0.12	0.12	0.60
Net capex	8.05	7.08	7.04	7.72	8.79	38.68

5.1 Comparison of 2026–31 forecast to 2021–26 performance

We have tested each category and total capex against historical levels of spend, as shown in Table 9. Most of our program is forecast based on revealed expenditure (i.e. connections and metering) using historical average spend or historical unit rates.

Table 9 also shows a comparison of forecast spend against historical actuals for each expenditure category. Future expenditure reflects shifts in spending patterns across multiple categories, influenced by the ACT Government's ban on new gas connections and strategic adjustments in asset management. Specifically:

- market expansion category does not include any connections in the ACT, focusing on NSW only

- stay-in-business: metering was lower during the period 2021–26 due to efficiencies in our planned residential as well as industrial and commercial gas meter replacement programs. However, capex requirements for the next period have increased due to the age profile of our fleet of gas meters
- stay-in-business: network renewal is expected to require minimal capex, with the only major project being the replacement of damaged electrical and instrumentation components at the Bungendore POTS.

Overall, our gross capex forecast of $39.3 million represents a 24 per cent reduction from the previous period's actual spend. Capital contributions are forecast to decrease, reflecting lower connection activity. The resulting net capex of $38.7 million reflects our commitment to achieving the lowest sustainable cost of providing the network services.

Table 9 Top-down and category level testing of our capex (million, $2025–26)

million, $2025–26	2021–26 allowance	2021–26 actual/estimated	2026–31 forecast
Market expansion	12.51	21.89	6.16
Capacity development	1.19	0.44	0.00
Stay-in-business: network renewal	14.93	10.40	1.51
Stay-in-business: meter renewal	29.34	15.38	28.59
Non-system	0.00	0.39	0.11
Corporate overheads	3.48	3.20	2.92
Gross capex	61.45	51.70	39.29
Capital contributions	0.39	1.40	0.60
Net capex	61.07	50.31	38.68

6. Capital expenditure sharing scheme

For the 2021–26 access arrangement period, Evoenergy introduced the Capital Expenditure Sharing Scheme (CESS) in consultation with stakeholders, including consumer representatives and the AER's Consumer Challenge Panel. This scheme provides a continuous incentive to identify and implement efficiencies in capex while ensuring service quality is maintained. The savings we achieve are shared with our customers, with 70 per cent allocated to customers and 30 per cent retained by Evoenergy.

The period 2021–26 was the first time we operated under CESS. During this time, we successfully met our performance targets while underspending our capex allowances. As a result, we anticipate additional revenue of $4.92 million over the period 2025–26. The contingent payment index will be recalculated in the revised proposal to reflect actual performance for 2024–25 and updated capex data for 2024–25 and 2025–26.

6.1 Current access arrangement CESS performance

We assessed our actual service performance over the period 2021–26 against the targets outlined in our access arrangement 2021–26. Based on this evaluation, we calculated the contingent payment index for the current period, as summarised in Table 10.

We have achieved our overall service performance targets with a contingent payment index of 110.69, above the required threshold of 100. It indicates that we are entitled to receive 100 per cent of the CESS reward for our efficient capex underspent in the period.

Table 10 Contingent Payment Index 2021–26

Service performance measures	Unit	Target	Actual/ estimate	Index	Weight	Contribution to index
Unplanned SAIFI	Outages per 1000 customers	0.68	0.97	56.75	30%	17.03
Unplanned SAIDI	Customer hours off supply hours per 1000 customers	2.57	0.98	161.92	30%	48.58
Mains and services leaks	Leaks per km of main	0.05	0.05	92.24	20%	18.45
Meter leaks	Leaks per 1000 customers	11.76	7.87	133.11	20%	26.62
Contingent payment index						110.67

The AER will adjust the CESS payments if capex projects are deferred from the period 2021–26 to the next, as set out in paragraph 4.10 of our access arrangement 2021–26. Before a CESS adjustment can be applied to account for deferred capex, the following three criteria must be met:

- the deferred capex during the period 2021–26 is considered material
- the estimated underspend in capex for the period 2021–26 is also material
- the total approved forecast capex for the period 2026–31 is significantly higher than it would have been if a material amount of capex had not been deferred from the period 2021–26.

We confirm that we have not deferred any capex projects from the period 2021–26 to the next.

6.2 Our proposed approach to the CESS in the 2026–31 period

Due to the ACT Government's decision to phase out the gas network in the ACT by 2045, we consider CESS is no longer appropriate going forward and propose to remove it.

Our proposed capex program is the minimum necessary to maintain network safety and reliability. However, reflecting our community feedback to spend no more than needed, should we identify any opportunities to efficiently reduce capex during the 2026–31 period, the resulting benefits should flow to customers in a greater share than under current arrangements.

Under the current CESS, Evoenergy retains 30 per cent of any underspend as a reward, with the remaining 70 per cent benefiting customers. However, if we do not apply the CESS in the 2026–31 period, customers will receive a greater share of the benefit. While some reward would still flow to Evoenergy through standard regulatory mechanisms (i.e. financing benefit), this approach ensures that more of the efficiency gains are returned to customers.

We do not consider that the removal of the CESS will weaken incentives for Evoenergy to minimise costs. Evoenergy already has market- and government policy-driven incentives to minimise investment and achieve capex efficiencies. Any overspend on our capex allowance would increase Evoenergy’s stranded asset risk.

For these reasons, we propose to remove the CESS from our 2026–31 access arrangement. Consequently, we have not included updated CESS targets for the 2026–31 access arrangement period.

Glossary of terms and acronyms

Term or acronym	Definition
access arrangement	Evoenergy's access arrangement
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AMP	Asset management plan
AMS	Asset management system
Capex	Capital expenditure
CESS	Capital Expenditure Sharing Scheme
CIE	Centre for International Economics
Draft five-year gas plan	Evoenergy's publication of an initial position on its access arrangement proposal shaped by consumer and stakeholder engagement, for public consultation. The draft five-year gas plan was released on 3 March 2025 and is available on Evoenergy's website.
E&I	Electrical and Instrumentation
ERAP	Energy Regulatory Advisory Panel
Five-year gas plan	Evoenergy's gas plan for the 2026–31 access arrangement period.
IEP	ACT Government's Integrated Energy Plan
kPa	Kilopascal – unit of pressure
MDL	Meter Data Logger

Term or acronym	Definition
NGL	National Gas Law
NGR	National Gas Rules
NSW	New South Wales
PMM	Project Management Methodology
POTS	Package Offtake Station
RSP	Reference Service Proposal
The Rules or Rules	National Gas Rules