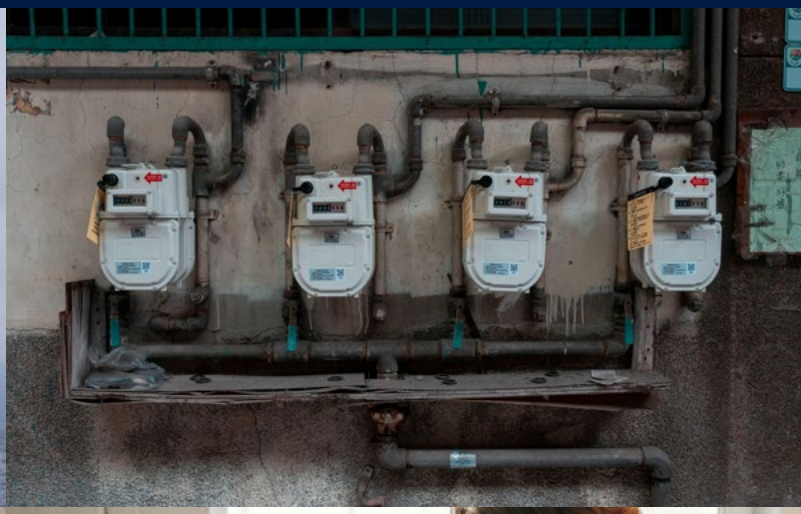
Brotherhood of St. Laurence

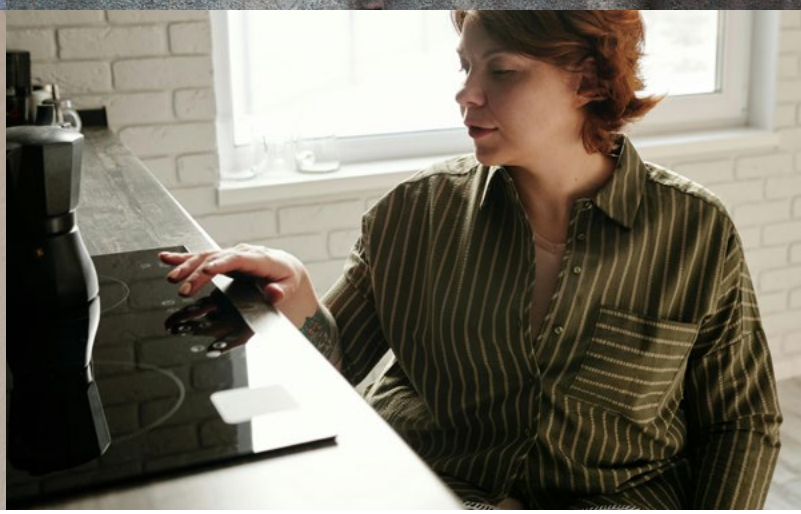
Sunk costs

A framework for avoiding further spending on gas networks

David Bryant and Damian Sullivan

2026





Brotherhood of St Laurence
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The Brotherhood of St. Laurence (BSL) is a social justice organisation working towards an Australia free of poverty. Our purpose is to advance a fair Australia through our leadership on policy reform, our partnerships with communities and the quality of our services. Our approach is informed directly by people experiencing disadvantage and uses evidence drawn from our research, together with insights from our programs and services, to develop practical solutions that work. For more information visit <www.bsl.org.au>.

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Summary

Just over half of Australian households use gas. To meet our commitments to reduce emissions and slow climate change we will need to shift homes to cleaner alternatives – primarily renewable electricity.

Moving from gas to all-electric homes offers big benefits. This is especially true for households facing disadvantage, who can lower their energy bills substantially. However, it also presents significant challenges, which necessitate new policy and regulatory efforts.

Despite the need to stop using gas within 25 years, Australia's gas consumers (mostly households) are spending hundreds of millions of dollars each year on maintaining, operating and, in most jurisdictions, expanding gas networks. Gas infrastructure installed today could last 80 years.

The Brotherhood of St. Laurence (BSL) undertook a research project called Balancing Act to investigate whether some gas network spending could be avoided and diverted to assist households, especially those facing disadvantage, to move away from fossil gas by electrifying their homes.

This report develops a framework to assess proposals to shrink the gas network through electrification, called strategic decommissioning or network pruning.

This report provides context and describes gas network pruning with examples. It then presents BSL's proposed framework, which could be used by policymakers or interested community groups to assess proposals to avoid some gas network spending. Next, this report examines how much of the information needed for this framework is publicly available, and finds that much of the information is not public and access to the information is poor. The report concludes by proposing changes governments can make to avoid further spending on gas networks, and a review to increase transparency and improve planning processes for gas.

The second phase of Balancing Act is a case study of a hypothetical strategic decommissioning proposal, considered through both a cost–benefit analysis and social research focusing on households facing disadvantage.

Recommendations:

Governments should develop and operationalise a process to avoid further gas network spending where it can be avoided through electrification, in line with our implementation considerations described below.

Governments should undertake a review of the availability of gas network information with a view to increasing transparency. Gas network data that should be made publicly available, unless there is a compelling reason not to, includes:

- maps of gas distribution networks
- local area gas network demand
- local area gas network disconnection numbers and dormant accounts
- the costs, locations and dates planned for infrastructure works, and any possible non-network alternatives (e.g. electrification).

State/territory governments should:

- **ban new home gas connections as soon as possible where this has not already occurred**
- **investigate banning new commercial connections where viable**
- **phase out the sale of new gas appliances to existing homes.**

1 Introduction

Gas is common in Australian homes. Over five million are connected to gas networks. However, almost all home usage of the fossil fuel must be phased out before 2050 to reduce greenhouse emissions in line with keeping global warming below 2°C and meeting state and federal emissions targets (Wood, Reeve & Suckling 2023). The National Gas Objective now also requires that energy market bodies give attention to emissions targets when making decisions about gas (AEMC 2022).

Electrification is the way forward for homes

For Australian households, electrification – replacing gas appliances with electric ones and ultimately disconnecting homes from the gas network – is the best way forward (DELWP 2022; Wood, Reeve & Suckling 2023). Electric appliances already cost less to run and produce lower greenhouse emissions than their gas counterparts in most cases. Unlike gas, electricity emissions are expected to fall to zero, or close to zero, in the coming decades (AEMO 2024; Sustainability Victoria 2024). Electric appliances are mature technologies already in use by millions of Australians, unlike alternatives such as hydrogen appliances.

Proposals to reuse gas networks for low-carbon gases – hydrogen or biomethane – are much less likely to be viable or cost-effective for homes, which potentially leaves electrification as the only option. This is explored further in 'context', below.

Gas networks will shrink, presenting equity issues and a need for change

It is likely that Australia's gas networks will shrink and large sections will ultimately be decommissioned, which will present a major challenge. These networks are vast, containing hundreds of thousands of kilometres of pipes – worth billions of dollars and virtually all privatised.

The gas system is not set up for decline: regulations are premised on indefinite operation and network operators are incentivised to expand and increase gas demand. The gas laws mostly do not contain provisions about winding down or decommissioning networks. Many Australian governments are creating policies and programs to move from gas, most ambitiously in the ACT and Victoria. However, significant policy and regulatory gaps remain, for example on questions of whether gas will be phased out place-by-place, by attrition or all at once; of how low-income households will be supported; and of how costs will be allocated. The relative lack of public information about gas networks makes the task harder.

The gas transition is likely to be disorderly and inequitable if we do not make policy and regulatory changes. A 'death spiral' where prices rise, pushing people off gas and creating a feedback loop, is a possibility. If it occurs, those likely to be hit hardest are people facing barriers to electrifying, such as those lacking funds, renters, and people without access to good information or installers. However, an equitable gas transition is possible with the right policy, and electrification could lower bills and improve safety, health and home comfort.

Unlike gas, electricity emissions are expected to fall to zero, or close to zero, in the coming decades.

Can we avoid gas network spending through pruning?

Rather than shrinking gas networks, Australia is still spending hundreds of millions of dollars every year on upgrading, growing and maintaining them – even as some governments seek to move away from gas. This is funded mostly by households. Many of these investments will become stranded assets (obsolete and not paid off before they must stop being used to meet climate targets), with not enough gas users to pay for them.

The question this report considers is whether it is possible to safely avoid some of this spending on gas networks – to shrink, or at least stop the growth of, the size and value of polluting gas infrastructure.

The approach we examine, called pruning or strategic decommissioning, targets electrification to areas with proposed gas network upgrade spending, such as replacing old pipes. Ideally, pruning eliminates the need for the gas upgrade and frees the gas upgrade funds to be used for electrification, while shrinking the cost of the gas network that would otherwise be borne by others in future.

Targeting pruning to areas of low-socioeconomic status, alongside other policies, could assist with some of the equity issues involved in the gas transition. Avoiding expenditure via electrification would also lower emissions and accelerate the transition from gas.

Balancing Act

This report is the first phase of a project by the Brotherhood of St. Laurence (BSL) called Balancing Act, which will investigate the opportunity for gas network pruning to contribute to an equitable and efficient transition away from gas in Australian homes.

This report develops a framework for assessing proposals to avoid further spending on gas networks by electrifying buildings, and scopes the availability of the information needed for the framework.

Balancing Act's second phase is a case study of a hypothetical proposal to avoid proposed network spending in a real location, through both social research focusing on households facing disadvantage and economic/technical analysis.

This project focuses on areas where gas network spending could be avoided as a good first step to move away from gas. However, to reduce emissions at the speed required to meet state and federal emissions targets, a broader effort to equitably decommission gas networks will also be needed.

Targeting pruning to areas of low-socioeconomic status, alongside other policies, could assist with some of the equity issues involved in the gas transition.

2 Approach and structure

Approach

To develop the framework and identify whether the information needed for it is publicly available, BSL has undertaken the following:

- A review of relevant Australian and international literature.
- A review of gas network documents (particularly access arrangements, which are five-yearly planning processes for gas) and other sources of information, such as industry websites, with a focus on Victoria.
- Consultation with experts from government, industry, regulators and consumer advocates.
- Engaging an expert consultant, Energeia, who has reviewed and provided input to this paper.

The review of gas network documents for this report focused on Victoria for two reasons. Firstly, Victoria is a good testbed: it has the highest residential gas consumption in Australia (AHC 2023); it is one of the most advanced Australian jurisdictions on gas substitution policy; and the issue is under active consideration by the state government. Secondly, focusing on one state allows for deeper review of the lengthy documents gas networks publish, which are up to thousands of pages for each stage of the process per network.

This paper complements three others from Balancing Act: Energeia's economic research report, the Life Course Centre's social research report, and BSL's final report.

Structure of this paper

This paper:

1. provides context about the future of gas in Australia
2. explains two approaches to avoid further spending on gas: pruning and avoiding augmentation
3. proposes a framework to identify and assess areas to avoid further gas network spending
4. examines the extent to which the information needed to conduct these assessments is publicly available
5. provides a brief discussion and policy recommendations.

Note on disconnection terminology

When a household leaves the gas network, the process is technically called 'abolishment' if their gas meter is fully removed, and 'disconnection' if it is only temporarily disabled.[1] This report uses 'disconnect' in a general sense to refer to households leaving the gas network either way.

1 Other households remain 'dormant', which means using no gas without disconnecting or abolishing the meter, either paying supply charges or not.

3 Context

This section provides context on the shift away from gas in Australia, focusing on the need for policy to facilitate an equitable, orderly transition.

Gas networks are widely expected to decline

A range of organisations, including regulators, governments and gas networks, forecast that gas networks will greatly – maybe terminally – decline over the coming decades. This decline is expected to comprise both falling gas usage and a lower number of gas users – each eating away at networks' revenues.

Decline is largely due to the need to meet climate targets and is accelerated by government policy. Other contributors include technological progress in electric appliances, gas's increasingly poor economics and health concerns (AER 2021; AusNet 2024b; DELWP 2022). For example, even some households with no environmental motivation electrify their heating because reverse-cycle heating is the cheapest option to run and provides cooling.

Renewable gases are unlikely to save networks

Gas networks could theoretically switch to 100 per cent biomethane or hydrogen to lower their emissions, but neither are likely to avert decline (Wood, Reeve & Suckling 2023).

Hydrogen is unlikely to ever compete with electric appliances on cost because producing hydrogen requires significantly more electricity than using electricity directly (Engage Victoria 2023; Rosenow 2022). Switching to hydrogen would also require major modification to gas networks, all new or modified appliances, and the resolution of new safety and environmental issues (Infrastructure Victoria 2022).

Even if networks did switch to hydrogen, Infrastructure Victoria (2022, p. 92) forecasts that thousands of kilometres of gas pipes would still be decommissioned.

Biomethane is chemically identical to gas but produced from organic waste, so it can theoretically be carbon-neutral[2] (Canada Energy Regulator 2023; Wood, Reeve & Suckling 2023). Adopting biomethane would not require new appliances or major work to networks, but Australia is only expected to produce enough biomethane to cover around one-third of our current gas use. As such, there is unlikely to be enough biomethane for homes and it will probably need to be reserved for harder-to-electrify businesses, as is currently planned by the Victorian Government (DEECA 2024a).

Hydrogen and biomethane may be used in homes for appliances like barbecues, but it is unlikely to make sense to maintain/convert a large gas network to support these niche uses. Gas network decline and home electrification are therefore probably inevitable as we pursue climate action.

Producing hydrogen requires significantly more electricity than using electricity directly.

2 Burning biomethane emits the same greenhouse gases as burning gas, but theoretically these greenhouse gases are equal to those absorbed by the plants biomethane is made from, so it can be carbon-neutral. In practice, carbon intensity varies. Biomethane is 'upgraded' from biogas, which contains other chemicals.

Gas rules are no longer fit for purpose

Australian gas laws and regulations were designed for growing, not shrinking, gas networks. The Australian Energy Regulator (AER 2021), among others, has concluded that the current regulatory regime may not be fit for purpose for a wind-down of gas networks.

A key problem is that most gas infrastructure is paid for by gas consumers – primarily households – over its multi-decade expected lifetime (80 years for some pipes (AER 2021)). This was reasonable when the system was expected to 'operate forever' (Payne 2020). However, recent or future gas infrastructure may be stranded. This matters because households are likely to ultimately bear the cost in some form.

Responses by gas networks

Recouping investments sooner

Recognising their uncertain future, many gas network businesses have proposed accelerated depreciation to recover their investment sooner.

Accelerated depreciation pays off infrastructure faster by increasing consumer bills today, while there is a larger pool of customers and higher gas consumption. Accelerated depreciation therefore adds to current cost-of-living pressure, but reduces the cost for future consumers.

Australian gas network businesses are not automatically entitled to recover their entire investment, only to a 'reasonable opportunity' to do so (ECA 2025), so they have an incentive – but not an entitlement – to secure accelerated depreciation and increase their chances of being paid back. The levels of accelerated depreciation proposed by networks are not enough to solve much of the stranding problem, but larger levels would produce unacceptable bill increases (Dynamic Analysis 2024).

Networks have also responded by increasing the fees charged to households to abolish their gas connections to over $1,300 in some states (Stegmann 2024). Gas networks argue these prices merely reflect the cost of the service, although high costs will also discourage households from leaving the gas network – especially those with constrained finances. The market bodies are currently deciding whether abolishment costs should be capped.

A bet each way

At the same time as seeking to shorten their networks' economic lives through accelerated depreciation, many gas networks have lobbied to prolong gas use. BSL (2023) and others have argued this position is inconsistent. For example, some gas networks have sponsored pro-gas media aiming to influence policy processes; argued for consumers to pay for hydrogen and biomethane investments; and bought advertising promoting 'renewable' gases, alleged as greenwashing by the ACCC (2025), despite simultaneously asserting how uncertain their future is.

> ***Will gas networks be in business at all in 2050? ... If we are in business, what will we be transporting? Will it be gas or will it be hydrogen or other renewable gases? ...***
>
> ***We can answer almost none of these questions with any degree of clarity or certainty.***
>
> ***(Australian Gas Networks quoted in ACCC 2025, p. 3)***

Further spending on gas networks increases stranding risk, yet networks have continued large programs of capital expenditure, some of which may be discretionary (ECA 2025). A lack of a framework for alternatives to gas spending may be one cause for this.

Data held by networks

Gas network businesses hold data that could be important for making decisions about how to manage a shrinking network. Data can include how many people in each area have disconnected from gas, how much gas use has fallen, the nature and level of expenditure required, whether certain areas become unprofitable or technically unviable, and even basic information like where gas pipes are located.

Little of this data is made public or shared with government, which potentially hinders policy and regulatory efforts. Chapter 7 of this report investigates the availability of this data.

Role of governments

Australian governments at all levels – local, state/territory and federal – have implemented some measures to promote household electrification, such as subsidy programs, although the level of ambition varies greatly.

The Victorian and ACT governments have gone the furthest, introducing policies including:

- roadmaps or plans to transition from gas (ACT and Victoria)
- bans on new home gas connections (Victoria, plus commercial connections in the ACT)
- bans on purchasing certain home gas appliances (Victoria)
- an end date for the gas network (ACT).

'Choice'

Some governments, including the Commonwealth, have so far opted to allow households 'choice' about gas. However, if governments are to meet their emissions commitments, this choice cannot be available forever. Restricting choices may be unpopular, but it is a key role of governments, and restricting gas follows successful restrictions on products that cause comparable environmental/health harms like asbestos and leaded petrol.

Choice is also a loaded concept. Many gas users do not effectively have a choice about whether to use gas, such as renters and people who cannot afford to electrify. Many renters would benefit from lower bills if landlords were obliged to electrify their properties, as new Victorian rental standards will require over time.

Some governments may restrict pipeline gas but allow choice on bottled gas, as is occurring in Victoria. Switching from pipeline to bottled gas does not lower emissions but does remove the need for a gas network, and can assuage regional concern about poor electricity reliability.

Governments have not decided how to wind down gas

All Australian governments have so far shied away from explicit policy on winding down or decommissioning gas networks, even if this is the logical end point of their other measures. This leaves a lack of guidance or certainty about the future of gas networks.

Roles of market bodies and state regulators

In addition to governments and gas networks, work relevant to gas network decline is split across multiple market bodies[3] and regulators, which creates difficulties coordinating their work.

The Australian Energy Market Commission, Australian Energy Market Operator and others

Changes to the gas rules will be necessary to enable wind-down and, as rule-maker, the Australian Energy Market Commission (AEMC) is currently considering an initial set of these.[4]

The Australian Energy Market Operator (AEMO) also conducts relevant work, as do state/territory regulators.

The Australian Energy Regulator

The AER has pointed to the constraints of its role, which includes enforcing the energy rules and approving or rejecting gas network plans but not making policy or rules.

The National Gas Objective now requires market bodies' decisions to 'have respect to' emissions reduction targets, among other objectives such as safety. However, the AER (2024, p. 62) says it is difficult to contribute to emissions reductions without changes outside its remit, namely a) government policy on decommissioning gas pipelines and b) new safety rules to cover shrinking networks.

3 The energy market bodies are the Australian Energy Regulator (AER), Australian Energy Market Commission (AEMC) and Australian Energy Market Operator (AEMO).

4 See https://www.aemc.gov.au/rule-changes/gas-networks-transition

In short, the AER must enforce the rules, but those rules may not be fit for purpose.

To date, the AER has allowed moderate changes to normal practice. These include allowing networks some accelerated depreciation, although less than networks requested; and capping exit fees at $220 in Victoria, with the cost borne by remaining gas customers, although only as an 'interim measure' (AER 2023).

As an example of how policy can become incoherent when multiple organisations are involved, the AEMC has preliminarily decided to reverse the AER's decision to cap abolishment fees and to return to higher charges.

Equity considerations

Phasing out gas presents current equity issues in the energy system, such as cost allocation and potential new ones, such as a possible gas 'death spiral'. These equity issues increase the importance of finding solutions like avoiding new expenditure.

Fairness can be conceptualised in many ways, including considerations of socioeconomic status, intergenerational equity, geography, choice, climate justice and socialising costs versus imposing them on those deemed responsible. These different concepts of fairness influence different ways of winding down and paying for gas networks, for example deciding whether past, current or future gas users should pay for decommissioning gas networks.

This section briefly outlines some of these key equity issues.

An orderly transition is essential, especially for people who face barriers to getting off gas

A disorderly gas transition, which is likely to occur without significant changes to the current rules, will mean that people who are able to switch from gas will lower their energy costs, while those who cannot switch – or choose not to – will bear the costs of a shrinking gas network. This creates potential inequity, and should be avoided or mitigated with policy.

Factors that influence a household's ability to electrify include money, agency, tenure (renters have limited ability), and access to trustworthy information and installers. These factors overlap, meaning some households face multiple barriers. For example, many renters not only have limited tenure, but also have low incomes and limited time.

The benefits from an orderly transition could be significant. Financial benefits are estimated at US$5 billion per annum in Germany, or US$20 billion of gas network spending avoided over time in California (Harland et al. 2024; Smillie et al. 2023). The costs of an unplanned transition are likely to be high and inequitably distributed. This is due to equity issues as well as the inefficiency of leaving a large, patchwork network that must be maintained and invested in; and the cost of disconnecting each property individually, rather than whole areas at once (Payne 2020).

Bill increases and the 'death spiral'

One potentially inequitable aspect of a disorderly transition is bill increases, or a 'death spiral'.

As gas networks decline, gas users will see their gas bills increase as others disconnect or reduce consumption, because network costs are only split between current gas users and do not necessarily scale down proportionally to the number of customers.[5] Network charges will increase even if gas consumption drops without high rates of disconnections, as some of the network costs are recovered through the usage component of bills. If a high number of households facing disadvantage remain on gas, this could be very inequitable.

The actual size of future bill increases is uncertain. Some estimates are comparable to recent price rises, for example less than 100 per cent increase by 2050 (DTP 2024; ECA 2023a, p. 15). Others are more extreme, including bills over $5,000 pa in one scenario among several presented by gas and electricity network AusNet (2024a, p. 34).

5 For example, if one household at the end of a street retains gas and all others disconnect, the network must still pay operating expenses for the pipe to the end of the street to serve the remaining customer while receiving far less revenue. Likewise, costs related to the regulatory asset base and the cost of capital do not reduce in line with a reduction in the number of customers. This is especially the case if disconnections are not coordinated.

A worst-case scenario where prices became untenable, which prompts mass disconnections and a feedback loop perpetuating higher and higher prices, is often called a 'death spiral', although this is not inevitable.

Policy is needed to enable an equitable, orderly transition

Governments will need to introduce a suite of policies to address these equity problems to manage an orderly transition from gas and ensure vulnerable households are not disadvantaged (AER 2021; Chandrashekeran et al. 2023; Payne 2020; Wood, Reeve & Suckling 2023).

This report focuses on avoiding gas network spending as one potential policy in this broader suite. This is explained in the following section. Avoiding gas network spending is not the sole or primary solution. It will only be applicable to limited parts of the network and should sit alongside many other policies described in the table below. This table is not exhaustive or an endorsement of any particular policy. The approaches are described as examples of action that could be taken.

Table 1: Possible approaches to gas transition

Category	Examples of approaches
Agenda-setting and planning	• Broad plans or roadmaps for electrification and the replacement of residential gas • Coordination of plans for gas and electricity networks so electricity networks can accommodate electrification • Analysis and engagement to ensure proposals equitably share the costs of decommissioning • Developing methods to guide orderly decommissioning
Resourcing	• Directly funded upgrades of government-owned buildings, including public housing • Budget allocation for incentives and programs to assist households to electrify
Delivery	• Delivery of information and incentive programs to households • Workforce strategies, e.g. retraining gas workers, identifying future workforce needs and constraints
Regulation	• A framework to enable alternatives to further gas spending (focus of this report) • Setting the costs to households for home gas abolishment • Requiring gas networks to publish more data to aid the transition • Removing barriers to electrification, e.g. planning changes or removing the obligation for networks to offer gas to households • Introducing mandates against gas use, e.g.: – bans on gas connections in new dwellings or renovations – bans on new gas appliances in existing homes – standards to phase out gas in rented homes • In some cases, supporting the use of biomethane or hydrogen, especially for hard-to-electrify businesses • Requiring assessment of non-network solutions when gas network expenditure is planned • Changing how gas networks are owned or paid for. For example, (re)nationalisation, accelerated depreciation or broadening who pays for gas networks, (e.g. to taxation or electricity users) • Changes to gas rules that promote gas use or inhibit gas wind-down

4 Avoiding further gas network spending

Avoiding new spending on gas networks can help the transition by shrinking – or at least preventing the growth of – networks and their financial value. This will mean less cost to be borne by future households, government or businesses.

Even if we were not decommissioning gas networks, avoiding spending would be prudent in many cases where the investment will never be recovered as users leave gas.

This section describes two different ways to avoid spending on gas networks: pruning and avoiding augmentation.[6]

Gas network pruning

Gas network pruning, also known as strategic decommissioning, involves switching all the buildings in a certain area (e.g. a street or several streets) to a different source of energy (likely electricity in Australian homes), disconnecting them from gas and decommissioning that area of the gas network in a coordinated way.[7]

At present, pruning is most likely to be cost-effective where it can avert planned spending that would otherwise be required to maintain the gas network, such as replacing gas mains. In future, as the need to decommission broad areas becomes more pressing, pruning could also apply to areas without planned spending.

Certain areas are more viable for pruning, particularly streets that branch out rather than those that are enmeshed in a grid, because cutting them off is less likely to affect supply to neighbouring streets that remain on gas.

Balancing Act focuses on pruning predominantly residential areas. This reflects BSL's focus on low-economic-resource households, and that all the equipment needed to electrify a home is already readily available, which is not the case for all businesses. However, it should be possible to prune some areas with businesses, especially those that are similar to homes, such as shops that use domestic gas appliances.

Pruning is most likely to be cost-effective where it can avert planned spending that would otherwise be required to maintain the gas network.

6 There may be ways to avoid other categories of network spending (e.g. gas meter replacement) outside the scope of this report. Gas network growth (i.e. new connections) is also a major expense category but, in our view, this should be limited by state or nation-wide bans on new gas connections. The existing network is a more difficult problem and the focus of this report.

7 'Non-pipeline alternatives' are a related concept in the United States, described below. European work uses a variety of terms. This report focuses on pruning paired with electrification, although in some countries (e.g. Germany and Switzerland), homes can switch to district heating instead (Alter et al. 2024).

Figure 1: Simplified example of pruning

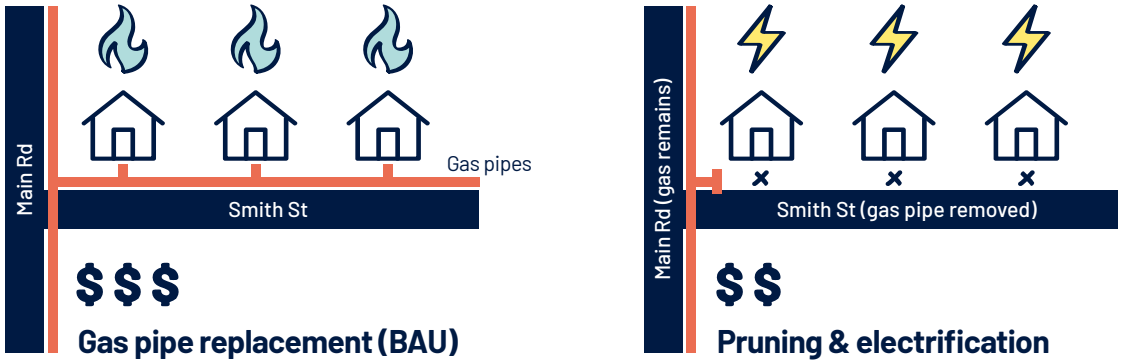


Figure 1 shows a simplified example of pruning, where Smith Street is due for gas pipe maintenance, which presents two options:

1. Proceed with business-as-usual gas pipe replacement expenditure.
2. Pruning: avoid the replacement expenditure by enabling the homes to electrify. This may include using some of the money earmarked for replacement expenditure to instead electrify the homes and decommission the gas pipe on Smith Street.

In this ideal example, pruning avoids the cost of a pipeline replacement, lowers emissions and could help fund households to electrify.

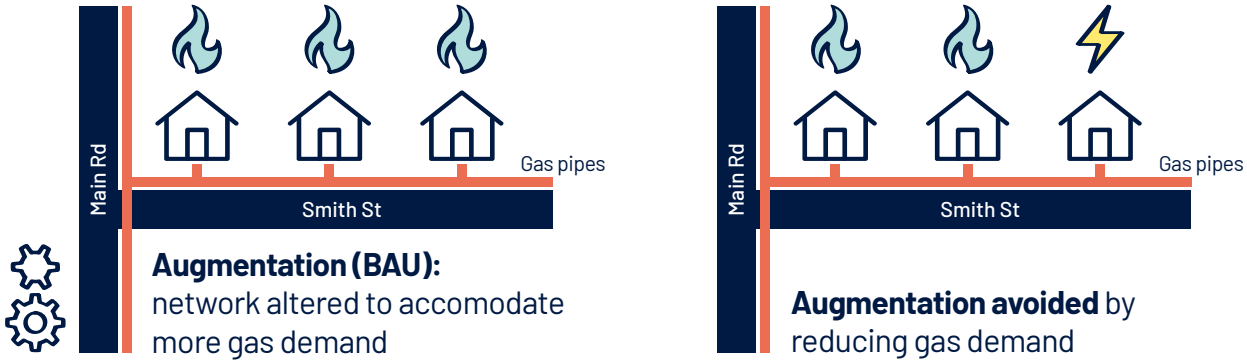
Avoiding augmentation

A complementary approach to pruning is avoiding augmentation.

Augmentation is when areas of gas networks need to be modified, usually due to increasing local gas demand. Networks often propose augmentation for growing towns and suburbs outside major cities as new properties are built and gas demand increases.

Augmentation can sometimes be avoided by lowering gas demand, such as through full or partial electrification of some buildings, usually in a moderate-sized area such as a town. Unlike pruning, there is no need to electrify all buildings, or even to fully electrify any buildings. Augmentation could be avoided by merely replacing selected appliances in selected buildings in the area, making it potentially easier to achieve in practice.

Figure 2: Simplified example of augmentation



However, avoiding augmentation has disadvantages compared to pruning. It may not shrink the gas network, unlike pruning, because no areas will necessarily be decommissioned. Australian networks also generally propose a smaller spend on augmentation than pipe replacement, which creates a smaller opportunity for savings, and it is likely that augmentation opportunities will shrink further as gas demand stops growing.

Opportunities and challenges of pruning and avoiding augmentation

Opportunities

Pruning and avoiding augmentation share a range of benefits:

- They could lower the value of future gas networks, which means less cost for remaining gas users and a lower value of stranded assets – a cost otherwise likely to be borne by households, governments and businesses.
- For local households that electrify, pruning and avoiding augmentation could provide upfront electrification funds, diverted from gas upgrade spending and recovered from gas bills or other sources (see 'who benefits and who pays', below). Many households will otherwise lack these funds, especially those facing disadvantage. Electrification also provides substantially lower ongoing energy bills than gas in most cases (Lombard et al. 2018).
- Pruning should improve the efficiency of the gas transition. Disconnecting homes individually is expensive (over $1,300 per home), while disconnecting a whole area at once could offer savings. Shutting down areas systematically, rather than leaving a large, patchwork network to be maintained, should also save money for whoever bears the cost of decommissioning.
- Pruning and avoiding augmentation both lower greenhouse gas emissions, because efficient electric appliances are already cleaner than gas in most cases, and electricity is on a credible pathway to near zero emissions while gas is not.
- For electricity users, pruning and avoiding augmentation could put downward pressure on electricity prices by increasing utilisation of existing infrastructure.

Challenges

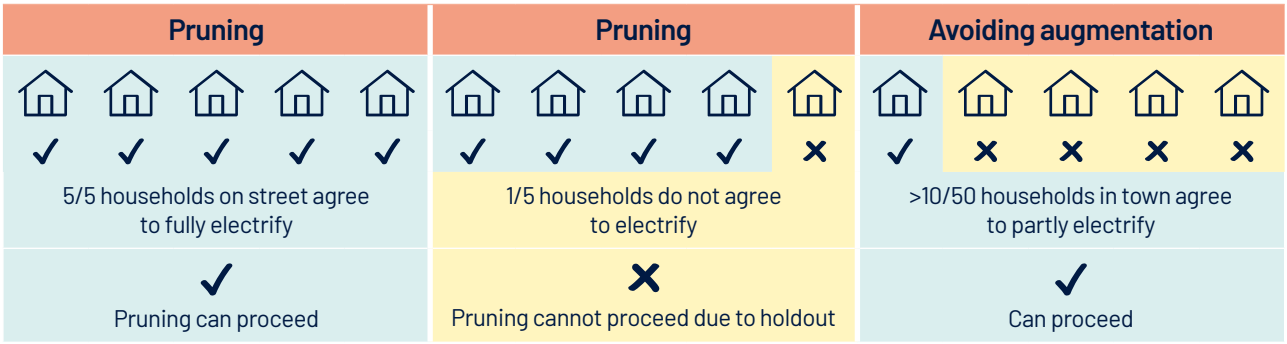
A significant barrier to pruning is that it would require 100 per cent of affected local gas users to agree to electrify in major Australian gas networks under the current rules (illustrated below). This will be difficult to achieve in practice, and even one holdout could prevent a project proceeding. Holdouts could sometimes switch to bottled gas without requiring much change to their home appliances, but legally they would still need to agree to this.

California has lowered the threshold to two-thirds of property owners, which presents one possible way forward (CPUC 2025). This approach recognises that requiring unanimous consent gives individual customers veto power over collective infrastructure decisions, even where continued network operation is inefficient and costly for the majority. Owners' corporations present a parallel, where decisions related to building upgrades can usually proceed with 75 per cent approval (Consumer Affairs Victoria 2026). Even 75 per cent approval can be difficult to attain, and an even lower pruning threshold may be necessary in future, as has been suggested for owners' corporations (EEC 2025).

Avoiding augmentation only requires a subset of local gas users to agree to partly electrify and therefore avoids this problem.

Pruning and avoiding augmentation both lower greenhouse gas emissions.

Figure 3: Illustrative effect of holdouts on pruning and avoiding augmentation



A possible critique of pruning and avoiding augmentation is that they arbitrarily give more support to households in areas with gas spending planned. We propose targeting both approaches to low-income areas where people need support, which could help counteract the inequity of a disorderly gas transition.

Pruning and avoiding augmentation are not a sole solution. They should occur alongside broader policy/regulatory changes to guide the transition from gas, as discussed in the context section above, which may include changing how gas infrastructure is funded.

Table 2: Comparison of pruning and avoiding augmentation

Approach	Pros	Cons
Pruning: Disconnect every property, usually in a small area, e.g. a street, although larger areas (e.g. towns) are possible	• Shrinks the gas network and avoids adding to its value • Durable – properties will not be able to reconnect to gas • Avoids pipe replacement, which is often the largest opportunity • Could also avoid augmentation by reducing demand	• May be difficult to achieve – requires every property in a small area to agree to entirely electrify or shift to bottled gas
Avoiding augmentation: Lower gas demand, usually in a larger area, e.g. a town	• Avoids adding to the value of gas networks • Relatively easy to achieve – only requires partial electrification of some buildings in a larger area	• Does not shrink the gas network, which still exists and may require other future spending • Not necessarily durable – home owners could buy new gas appliances in future • Most applicable where gas demand is growing, which may not be the case for long

We propose targeting both approaches to low-income areas where people need support, which could help counteract the inequity of a disorderly gas transition.

Scale of augmentation and mains replacement

The table below indicates the scale of expenditure on mains replacement, augmentation and other capital expenditure for major Australian gas networks in their most recent approved access arrangement. Over $3 billion of spending has been approved in these networks over their five-year periods, plus over $400 million in Western Australia and additional spending in other, less regulated networks.

Mains replacement is a large category of over $800 million of spending in major networks, some of which could be avoided or diverted to electrification through pruning .

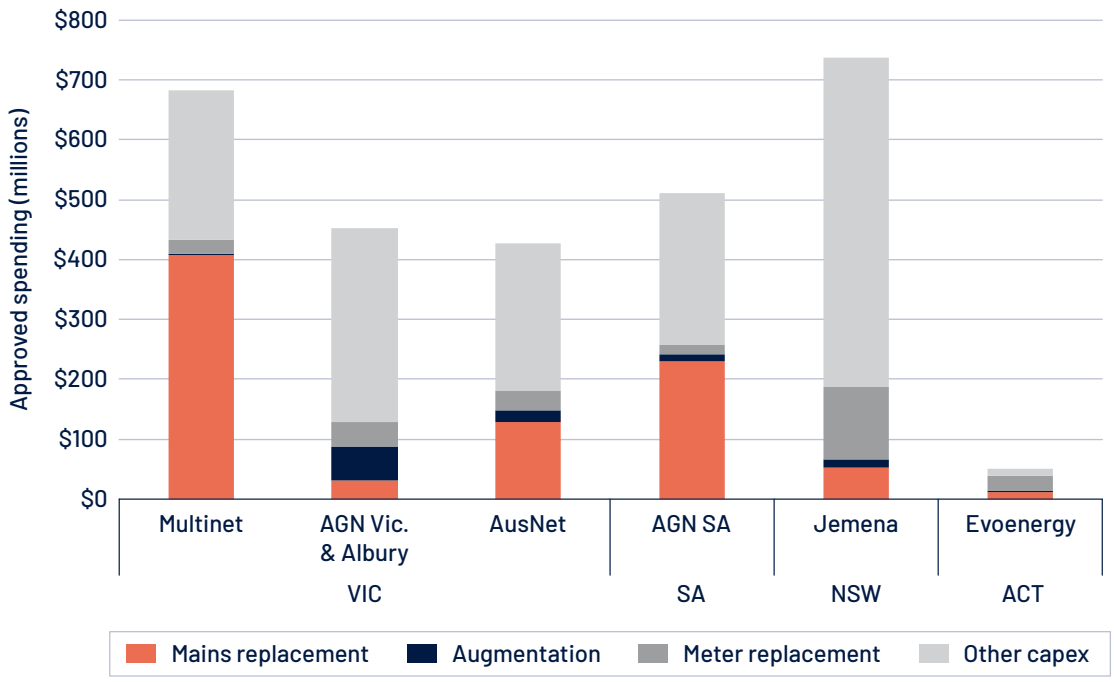
The green shaded columns in the table below indicate categories where pruning may be applicable.

Table 3: Selected capital expenditure costs, last completed access arrangement for major Australian gas networks

State	Years	Network	Total capex	Mains rep.*	Aug.	Meter rep.	Other capex
VIC	2023–28	Multinet	**$683 m**	$408 m	$2 m	$22 m	$251 m
		AGN Vic. & Albury	**$453 m**	$30 m	$58 m	$40 m	$325 m
		AusNet	**$427 m**	$129 m	$19 m	$33 m	$246 m
SA	2021–26	AGN SA	**$512 m**	$230 m	$11 m	$17 m	$254 m
NSW	2025–30	Jemena	**$737 m**	$52 m	$13 m	$121 m	$696 m
ACT	2021–26	Evoenergy	**$51 m**	$12 m	$1 m	$25 m	$13 m
Total			**$3,004 m**	**$845 m**	**$126 m**	**$248 m**	**$1,785 m**

Notes: All prices in millions from most recently approved decision.
* 'Rep.' = replacement; 'Aug.' = augmentation; 'capex' = capital expenditure; AGN = Australian Gas Networks.

Figure 4: Capital expenditure in major Australian gas networks, with coloured categories indicating those where pruning may be applicable (grey categories not applicable)



Who benefits and who pays?

At present in Australia, the costs of running and building gas networks, plus a return on investment, are generally[8] paid for by gas customers via bills – mostly households. Operational costs are paid back in the short term. Capital costs, including replacing pipes, are paid off over the expected lifespan of the equipment, which is up to 80 years.

As noted in the context section, this system of depreciating infrastructure over decades will lead to prices rising and the cost falling inequitably on remaining gas users as people disconnect from gas. Gas networks, particularly new infrastructure, are unlikely to be paid off by the time they stop being used, which will leave them stranded. This stranded cost is also likely to fall on gas users and/or taxpayers. It is therefore in everyone's interest to lower the value of these stranded assets.

Pruning benefits and who incurs them

Pruning presents a solution because electrifying households removes the need for long-lived investments in new gas infrastructure.

Avoiding new gas investments benefits remaining gas users because it lowers the value of infrastructure they pay for on bills. This benefit may be at least partly offset by costs, depending how they are allocated (see below). Gas network businesses also receive the benefit of lower stranding risk, offset by loss of customers.

Pruning also benefits the people whose homes are electrified, because all-electric homes are generally cheaper to run and it saves them paying for electrification. Greenhouse gas savings would be experienced by society in the absence of a carbon tax. These benefits are described further in Table 4.

Pruning costs and how they could be recovered

Pruning also has costs. How they are allocated will depend on decisions by policymakers and regulators, and they should be recovered equitably rather than contributing to the gas transition's problems. We propose an approach in Balancing act (this project's final report).

The main question is how to pay for a) decommissioning gas infrastructure such as pipes, and b) the installation of electric appliances in pruned homes. Both these costs will occur anyway as we move away from gas, but pruning accelerates them.

Both costs could be funded by a number of parties, including gas consumers, taxpayers and electricity consumers, or a combination.

Requiring payments from individuals would be inequitable for the low-income households we suggest targeting, as well as greatly limiting uptake. Requiring partial payment from households could be considered if pruning is targeted to wealthy households.

Another cost is loss of revenue to gas networks from accelerated departure of customers caused by pruning. This cost will likely fall on remaining gas users as gas networks raise rates to compensate. However, if we assume action consistent with meeting net-zero dates, all customers will leave in the next two decades regardless, so the cost associated with pruning should only be the cost of accelerating that departure, not causing it to happen.

Table 4 describes how relevant costs are currently paid for and options for paying for them in a pruning scenario.

8 While most gas infrastructure is funded from bills, there are some exceptions. For example, the Victorian Government part-funded new gas pipelines to previously unserved regions in the 2010s (AGN 2017), and people connecting new homes to gas contribute in some circumstances.

Table 4: Current and potential sources of funding under a pruning scenario

Cost	Currently funded by	Funded by, in a pruning scenario
Gas pipe replacement	All gas customers via bills	N/A – cost eliminated where pruning occurs
Electricity network upgrades necessitated by electrification	All electricity customers via bills	All electricity customers via bills (no change)
Electric appliances	Individuals, with government subsidies in some cases (some subsidies funded by other electricity users)	Options: • Gas networks/consumers • Government/taxpayers • Electricity networks/consumers • Individuals • A combination
Gas decommissioning (street pipes)	Not decided	
Gas decommissioning (pipes on household property)	Individual householders (partly socialised among all gas users in some states)[9]	

Pruning presents a solution because electrifying households removes the need for long-lived investments in new gas infrastructure.

9 In Victoria, the cost of household gas abolishment is currently subsidised for disconnecting households, with the remainder shared among remaining gas users. The AEMC is seeking to reverse this.

5 Review of examples and proposals to avoid gas spending

This section reviews examples of gas network pruning, non-pipeline alternatives and other related ways to avoid network costs, drawing on work from Australia and overseas.

Frameworks for assessing proposals to avoid gas network spending exist in various contexts outside Australia and some limited pruning has occurred in practice. These provide examples and possible templates for Australia.

Non-pipeline alternatives in the United States

In the United States at least eight states have rules to promote or require pruning in certain circumstances, often through non-pipeline alternatives (NPAs).

NPAs require gas utilities[10] that are proposing gas infrastructure spending to consider an alternative that 'defers, reduces, or avoids' the need for this infrastructure (Nelson et al. 2023, p. 4). Allowed alternatives differ by state but include electrification (pruning), energy efficiency (to avoid augmentation) and sometimes alternatives less relevant to Australia like geothermal or biomethane.

Studies in California and Massachusetts show large potential financial and greenhouse savings from NPAs (Gold-Parker et al. 2023; Groundwork Data 2023). See case study on California below for further detail.

NPAs are similar to Australia's regulatory investment tests for electricity distribution and transmission, which require the assessment of non-electricity-network solutions in some cases.

Some US states provide, or are developing, frameworks for how non-gas solutions should be assessed rather than leaving this to the utility's discretion. They include equity considerations such as prioritising disadvantaged areas (Alter et al. 2024).[11] These frameworks have informed the framework we present in the following chapter.

NPAs are developing quickly, with much of the work still in progress or only finished recently as of December 2025.

How NPAs in the United States are implemented

NPAs in the United States provide useful examples of how to operationalise pruning. Some implementation considerations:

- **Requirement to assess versus requirement to proceed:** Some states only require utilities to assess alternatives, while others require them to complete a certain number of alternative projects (BDC 2025).
- **Who chooses:** In California, the regulator will choose the sites that proceed to pruning (CPUC 2025). In others, such as Maryland, the utility will pick the sites and decide whether they proceed.

10 Gas utilities, in American parlance, are companies usually responsible for gas distribution and retail, and sometimes also for electricity. These roles are mostly separate in Australia, presenting challenges (e.g. Australian gas distributors have an indirect relationship with their customers and do not benefit from increased electricity use as combined gas-electricity utilities do).

11 One of New York's utilities has also published its own benefit–cost analysis handbook (New York State Electric & Gas Corporation and Rochester Gas and Electric 2025).

- **Who does the work:** In New York, utilities solicit bids from third parties to complete NPA work. In some other states, the utility does the work itself (Nelson et al. 2023).
- **Information publishing requirements:** Some states require utilities to publish information to allow stakeholders to identify potential sites for pruning. California's public maps provide a good example.[12]
- **Thresholds:** Most states have set cost thresholds for spending on each gas project, above which NPAs must be assessed. For example, in Rhode Island the threshold is US$500,000 (Sullivan & Murphy 2024). Colorado instead requires a certain number of projects based on a utility's size (Nelson et al. 2023).
- **Adjacent planning requirements:** Alongside NPAs, some states require broader plans for the gas network, for example to be consistent with emissions targets. New York requires utilities to submit a scenario with no new gas infrastructure (BDC 2025).
- **Obligation to serve:** California has lowered the requisite percentage of local property owners who need to agree for an NPA to proceed, from 100 per cent to two-thirds (CPUC 2025).

Case study: California

Significant work on pruning has been undertaken in California following a recommendation from the California Energy Commission (Aas et al. 2020). A consortium developed a framework for pruning, conducted a cost–benefit analysis and made recommendations for policy.

In all 11 sites assessed, the benefits of pruning exceeded the costs (Gold-Parker et al. 2023). The consortium estimate that pruning could apply to around 3 per cent of the network, resulting in US$20 billion of avoided spending, or US$32,000 per customer (Smillie et al. 2023).

The consortium noted a tension between prioritising the most cost-effective sites versus disadvantaged areas, and established guidelines for selecting sites (CEC 2024). They also noted that pruning is likely to become cost-effective in more sites as time passes and electrification rates increase, because the costs of pruning will reduce as more homes have left the gas network and are already electrified (Gold-Parker et al. 2023). A similar framework was created by staff of California's regulator (CPUC staff 2022), with slightly different parameters.

California has recently passed a law, SB1221, that:

- requires gas networks to publish annual maps with opportunities to prune areas, focusing on disadvantaged areas[13]
- allows gas networks to initiate pruning pilots, including lowering the threshold of households who need to agree to 67 per cent (from 100 per cent)
- requires networks to submit an annual progress report on these pilots (CPUC 2025).

12 See https://www.cpuc.ca.gov/industries-and-topics/natural-gas/SB-1221-implementation

13

Other frameworks for strategic decommissioning

Danish utility Evida has developed a framework for decommissioning areas based on a series of factors, including an area's profitability as customers leave. Other factors include the presence of biomethane lines or district heating, although these are less relevant in Australia. Evida estimates that at least 14 per cent of areas are already unprofitable, and suggests providing customers with two years' notice of disconnection (Evida 2023).[14] This is a slightly different concept to pruning – areas that are still profitable could be pruned – but it shares the aim of trying to shrink the network and avoid spending.

Various academic projects have developed computer models to optimise gas decommissioning decisions at a high level, although these generally do not consider the transition at a household level (Lechowicz et al. 2023; Zwickl-Bernhard et al. 2023).

Local initiatives

Various local groups across Australia have developed campaigns or pilots to electrify homes in their local area, including Electrify Boroondara and Electrify 2515 (run by Rewiring Australia, offering subsidies to 500 homes).

While no reference is made to pruning, if Electrify 2515 goes to plan, there may be opportunities to reduce abolishment costs through street-by-street decommissioning, rather than individual household abolishment.

Real-world gas decommissioning examples

Real-world examples of local gas decommissioning are nascent, but provide useful insights described below.

Within the United States

One of California's utilities has switched around 100 households from gas as part of a program to avoid network spending (Nelson et al. 2023, p. 9) and the state has legislated to enable more pilots (see above).

New York's utility has switched around 20 households via non-pipeline alternatives, although soliciting customer interest has been challenging (Alter et al. 2024). Colorado's utility recommended $10 million of non-pipeline alternatives in 2023 (Nelson et al. 2023).

Non-pipeline alternative processes are in their early stages in several other US states, including Illinois, Massachusetts and Oregon (BDC 2025).

Switzerland

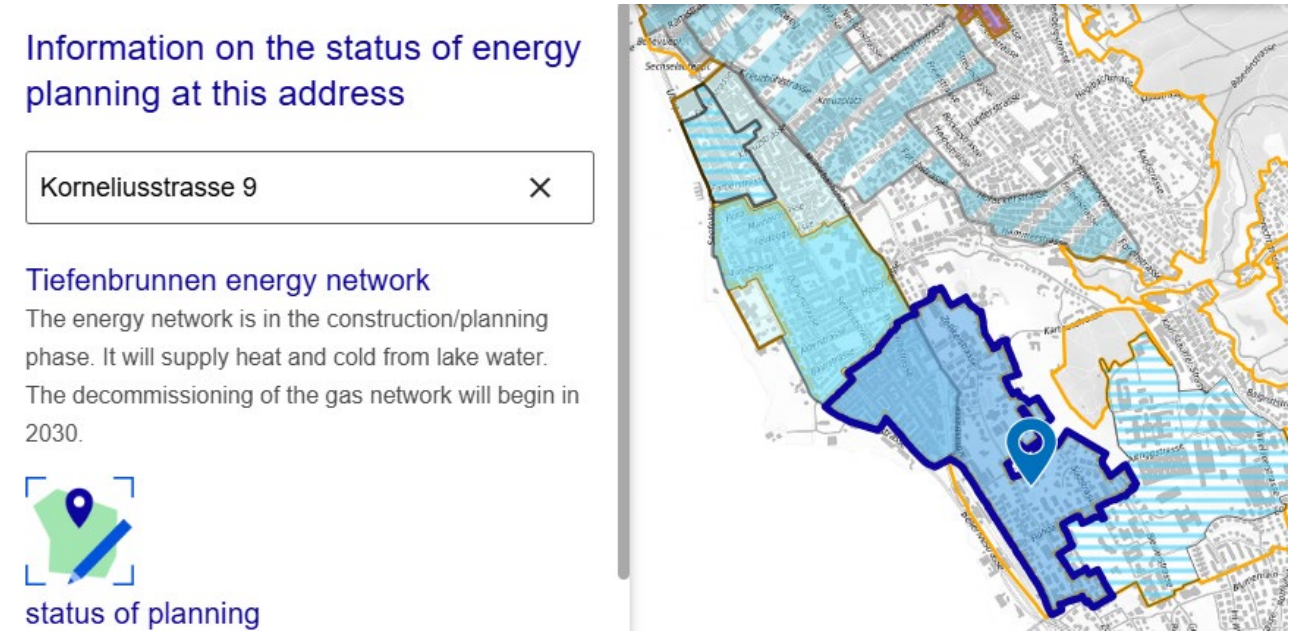
Zurich has completed neighbourhood-scale decommissioning of parts of its gas network, while two other Swiss cities are pursuing plans (Alter et al. 2024). Zurich provided 10 years' notice to households and compensated them based on the remaining life of their gas appliances, as well as providing a public map of areas set for decommissioning with the timing identified in advance once scheduled.[15] European households often switch to district heating[16] rather than electrifying their home – in the screenshot below, a district heating/cooling network is intended to be built before the gas is decommissioned.

14 We accessed a machine translation of the original Danish report. The translation may contain inaccuracies.

15 https://www.stadt-zuerich.ch/energis/frontend/#/gebaeude (in German).

16 Rather than each home having its own heating appliances, district heating involves connecting homes to a network that provides shared heating, usually via piped hot water. District heating is relatively common in Europe and China but very rare in Australia.

Figure 5: Screenshot from EnerGIS (Energy Map of Zurich), with highlighted area earmarked for gas decommissioning in 2030 (EnerGIS 2024). Machine-translated from German.



Esperance, Western Australia

Esperance, a town in rural Western Australia, was disconnected from the state's gas grid in 2023, following a planned period of switching local properties to electricity or bottled gas with large subsidies and guidance administered by the state-owned energy retailer (Horizon Power 2023).

Esperance's gas network was stranded less than 20 years after it was installed. The local gas provider withdrew supply when the network became financially unviable after the local gas power station was replaced with a plant that used gas delivered by truck, rather than the existing pipeline (ABC 2022). It is unclear if any spending on the pipeline was proposed or avoided by switching to trucks.

A similar withdrawal of supply would be less likely in larger ('scheme') networks under the current Australian rules, even where areas become unprofitable, due to existing regulations requiring ongoing service. Small ('non-scheme') gas networks, like Esperance's, are less regulated than major networks, which are prohibited from disconnecting users except where the user volunteers. Small, 'lightly' regulated gas networks exist in every state/territory except the ACT.[17]

Of participating Esperance households, 75 per cent chose full electrification, while others remained on bottled gas (LPG) or changed to a mix of electric/LPG appliances.[18] Households saved an average of 38 per cent on their energy bills (Horizon Power 2023).

17 See listing of pipelines: https://www.aemc.gov.au/energy-system/gas/gas-pipeline-register

18 This provides a useful benchmark for possible appliance choice and savings across Australia. However, it may also reflect regional preferences and specifics of the climate, housing stock, etc.

Ten Victorian towns

In 2025, it was announced that in 2026 gas supply would cease to 10 Victorian towns served by Solstice Energy due to high costs (Mercer 2024). As with Esperance, it is unclear if any gas network upgrades were planned. Unusually, each town had its own isolated gas grid, with gas trucked in and then piped around town, which may have been particularly expensive to run.

Residents have been given around one year's notice and offered partial subsidies to switch to bottled gas or electrify.

These towns present another example of an expensive, rapidly stranded gas investment: the infrastructure was installed in 2015 for $85 million (ABC 2015), or roughly $74,000 per household.

These towns present another example of an expensive, rapidly stranded gas investment: the infrastructure was installed in 2015 for $85 million, or roughly $74,000 per household.

Australian retailers and distributors

AusNet, which runs both an electricity and a gas network in separate areas of Victoria, is running a pilot called Electri-fair-cation. The pilot aims to fully electrify homes in an area of low-socioeconomic status at no cost to residents, focusing on 'clusters' in certain streets (AusNet 2024c).[19] This is similar to pruning, although the project is in AusNet's electricity, not gas, network and will not decommission the streets' gas pipes. Rather, the project aims to 'understand opportunities and challenges of electrification for our vulnerable households' and collect data on 'customer and network impacts'.[20]

Energy retailers were involved in the United States and Esperance examples above and may have a role in future efforts to avoid gas spending elsewhere. Some retailers may have a business case for getting their customers off gas: one Australian retailer is offering to pay its customers' gas abolition fees,[21] partly to drive demand for their renewables. Others offer tools and advice about electrification.[22]

19 BSL sits on the reference group for this project and provides advice in an unpaid capacity.

20 See https://www.ausnetservices.com.au/news/ausnet-trial-to-look-at-impact-of-electrification-on-vulnerable-households

21 https://www.momentumenergy.com.au/energy-solutions/electrification

22 For example https://www.agl.com.au/residential/energy/electrify-now; https://www.originenergy.com.au/origin-home/take-control-of-future-savings/

6 Framework for avoiding further spending on gas networks

In Australia, there is currently no framework for comparing proposed gas network upgrades with cleaner alternatives such as electrification. The National Gas Objective now requires energy market bodies to make decisions 'with respect to' lowering emissions (AEMC 2026) but, without a framework, there is no way to consider low-emissions alternatives to proposed gas upgrades.

This section proposes a framework for comparing proposed gas network capital expenditure with alternatives, comprising three steps: a set of criteria for prioritising sites, economic analysis and consideration of community acceptance.

This framework should be used for expenditure on the existing network, not new connections. For new connections, households should be banned from connecting, and any new commercial/industrial customers should pay for the infrastructure associated with their connection.

We outline how this framework could be implemented in Chapter 8: Proposals.

Step 1: Identify priority areas

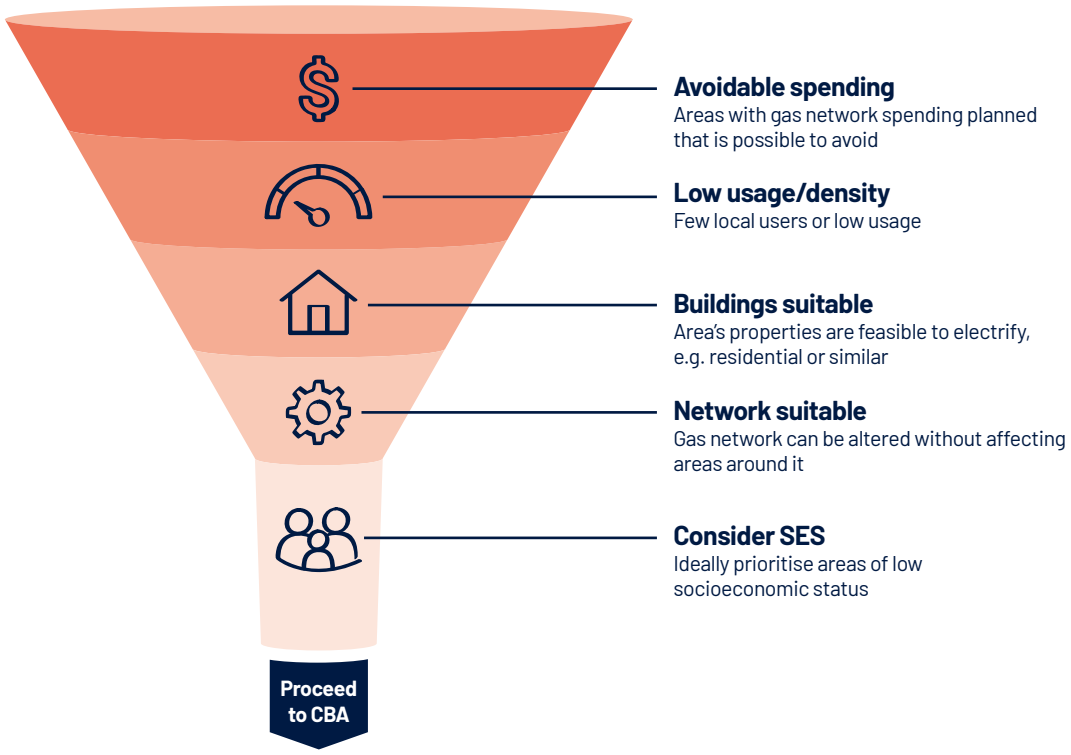
Sites that might be suitable for avoiding gas network expenditure could be selected using the criteria described below. (See Chapter 7 for details of the availability of this information).

Prioritisation criteria

Our proposed criteria for prioritising sites to be assessed for pruning or avoiding augmentation are as follows:

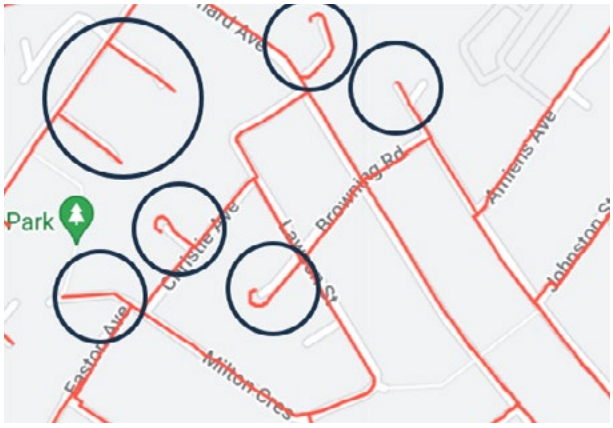
1. **Avoidable gas network spending planned:** Areas earmarked for network upgrades provide the potential to avoid further expenditure on gas infrastructure. Thus, they are likely to provide the best value in the short term. Upgrades must be sufficiently far in the future that they can be stopped and an alternative developed. E3 et al. (2023) suggest two years' lead time is appropriate. Areas without spending planned could also be considered – see 'areas without expenditure planned', below.
2. **Low usage or density:** Areas with lower gas usage and/or fewer users per kilometre are likely to provide better value and less disruption. This may be due to falling demand, such as in Esperance, or sparse gas uptake to begin with.
3. **Buildings are suitable:** Buildings in the area need to be suitable to be electrified. Homes are generally easier to electrify than businesses, although some businesses are also feasible, and some homes are difficult. This step is simpler for avoiding augmentation, which can potentially be achieved through only partial electrification of some buildings in a given area.

Figure 6: Proposed site prioritisation criteria



4. **Gas network suitability:** not all network expenditure can be avoided without creating technical or safety problems. Decommissioning some streets, such as those in the middle of a city grid, may cause supply problems to streets around them that remain on gas. For example, in the map to the right, the circled streets may be easier to prune because they are 'terminal branches' (their pipes stick out from the network rather than being enmeshed in it)(CEC 2024). This step would need to be undertaken by qualified professionals such as gas network engineers, although identifying terminal branches can roughly assist. In some cases, the gas network could potentially be modified to accommodate the electrification project.

Figure 7: Illustrative map of suburban gas pipelines (red) with terminal branches circled (adapted from Solstice Energy 2024)



5. **Consider socioeconomic status (SES):** Prioritising areas with higher levels of disadvantage or social exclusion is ideal because residents have a greater need for support. Outcomes will also be more equitable if more people experiencing disadvantage are assisted off gas sooner, rather than later when costs have increased due to other people leaving the network. Consideration could also be given to higher levels of support in lower socioeconomic areas, such as full funding of upgrades.

Step 2: Run cost–benefit and distributional analyses

Cost–benefit analysis

Once suitable sites have been identified and prioritised, they can proceed to a cost–benefit analysis to determine which are the most cost-effective to electrify or reduce gas usage.

In future, in order to meet emissions goals or equity objectives, it may be desirable to proceed even if costs outweigh benefits. In any case, the economics should improve in future as more households disconnect, which will lower costs because more households will already be all-electric, leaving fewer to pay for through pruning. However, as time goes on and as more replacement is completed, there may be limited replacement expenditure remaining.

Considerations for a cost–benefit analysis are listed below. Note that not all criteria will apply to all cases. The criteria used by Energeia for our economic analysis differ slightly to those listed below due to the specifics of the area assessed.

Many of the costs listed below (e.g. decommissioning gas infrastructure) will also occur under business-as-usual – not just a pruning proposal – if we are to meet net zero by 2050 (2045 in Victoria).

We suggest using an analysis period of 20 years to roughly correspond with the lifespan of a new appliance, and in keeping with the recent Victorian regulatory impact statement on building electrification, which used 10 and 20-year periods (DTP 2024).

Table 5: Suggested inclusions for cost–benefit analysis of electrification vs proposed gas network upgrade

Cost or benefit	Item	Cost/benefit likely borne by
Cost	Gas decommissioning and/or abandonment costs, which are affected by factors including: • type of decommissioning needed, e.g. whether pipes need to be excavated • building/population density • any planned earthworks that can be shared (assuming excavation is necessary) • any ability to reuse pipes for another purpose • existing local rate of disconnections	Not decided, but likely default is gas network, ultimately recovered from their customers
Cost	Required electricity network spend to cope with increased electricity load (if any)	Electricity network, ultimately recovered from their customers

Cost or benefit	Item	Cost/benefit likely borne by
Cost	Increased wholesale electricity market purchases (if any, offset by home solar/battery use). Household electrification and gas disconnection cost, including: • appliance purchase and installation • rewiring (if needed) • switchboard upgrades (if needed) • supply upgrades (if needed) • gas abolishment/disconnection • gas plumbing work, e.g. capping pipes (if needed)	• Affected households • Partially covered by government (e.g. through subsidy programs and energy bills concessions)
Cost	Any household support on top of funds diverted from gas expenditure[23]	Government
Cost	Increased electricity grid emissions, offset by home solar/battery use	Society
Benefit	Avoided gas network upgrade spend (mains replacement and/or augmentation), which is influenced by factors including: • extent/duration for which spending is avoided • building/population density • remaining life of, or need for replacement of, existing infrastructure • contribution to orderly gas transition • Avoided gas network operating and maintenance expenditure • Avoided new connections (optional, depending on policy setting)[24]	Gas network, ultimately recovered from their customers
Benefit	Potential increased utilisation of network assets lowering per-unit prices (high load factor – may not be significant at site level)	Electricity network, ultimately recovered from their customers
Benefit	Reduced gas wholesale market purchases. Other household benefits, such as amenity increase of new appliances	• Affected households • Government (through reduced concession costs)
Benefit	Greenhouse gas mitigation benefits (social cost of carbon), including: • avoided gas combustion • avoided methane leaks from gas pipes and appliances • health benefits, e.g. from reduced gas exposure, households gaining cooling • Contribution to orderly gas transition (e.g. difference between decommissioning cost of individual homes vs larger areas)	Society
Benefit	Benefits of local air pollution decrease, e.g. reduced methane leaks (Groundwork Data 2023)	People in local area

23 This could either be a) use of existing supports (e.g. energy efficiency programs) or b) additional support provided to fund upgrades if money diverted from gas upgrades does not fully cover household costs.

24 No benefit in jurisdictions that have already banned new connections, such as Victoria and the ACT.

Distributional and qualitative analysis

Cost–benefit analyses do not capture all relevant factors.

A distributional analysis should also be conducted to quantify which groups incur costs and benefits (e.g. households vs businesses) and account for transfers outside the cost–benefit analysis, such as energy savings and upgrade costs (or avoided future gas upgrade costs) to households. The analysis should particularly examine the effects on households facing disadvantage. Distributional analysis was outside the scope of this project, but is a future opportunity.

Qualitative analysis should also consider other factors outside the cost–benefit analysis, such as pruning reducing risk for networks, contribution to decarbonisation plans, improvements to home comfort, etc.

Step 3: Manage household and street-level acceptance

In the current Australian regulatory framework, many projects to avoid gas network expenditure through electrification will require acceptance from all the households involved, because, generally, in major networks households must volunteer to be disconnected from gas. Developing strategies for best-practice engagement with communities will be an important part of decommissioning efforts.

The level of acceptance required will differ between:

1. avoided mains replacement projects, which require every property owner in the area to agree to fully electrify (or switch to bottled gas)
2. avoided augmentation projects, which do not require group agreement because they only need partial electrification of some properties.

Before avoided expenditure projects can begin, community engagement should be undertaken to ascertain local priorities, and identify which local households are willing to participate and the level of incentive they would require to do so. Ideally, this would be conducted independently of gas networks, which have a vested interest and whose consumer engagement BSL has previously critiqued.

In some cases, communities may self-organise to advocate for electrification and pruning. However, to do so they would need access to the relevant information (see below).

Areas without expenditure planned

Areas with proposed gas network spending present a good starting point and chance to avoid spending, which is why they are the focus of this project. However, in time, decommissioning will need to occur in many more areas for Australia to reach net zero.

Accordingly, consideration should be given to whether this framework could be altered to identify areas to remove from the gas network even if no upgrade spending is planned there.

Additional site selection criteria to consider:

- Proportion of users who have already disconnected from gas.
- 'Dormant' connections, where gas is still connected but not used.
- Decline in gas volume used.
- Technical viability of the gas network with low use.
- Whether the network needs to be kept for biomethane, if this is used for businesses.
- Profitability.
- Coordination with geographic sequencing of decommissioning by government.

For example, if most people in a given area had already disconnected from gas, gas risked becoming unviable or unsafe due to low flow, and the area was mostly residential, the area would be a good candidate for removal from the gas network.

When assessing areas with no spending planned, a cost–benefit assessment may be less relevant or conducted differently because the task is not a comparison to a business-as-usual upgrade cost, but rather a contribution to the unavoidable need to get off gas.

The economics of decommissioning areas with no spending planned are likely to improve over time as more households electrify, especially where gas appliance bans are in place.

Before avoided expenditure projects can begin, community engagement should be undertaken to ascertain local priorities, and identify which local households are willing to participate and the level of incentive they would require to do so.

7 Access to data and information

This section looks at the extent to which the information needed to assess the costs and benefits of proposals to avoid further spending on gas networks in Australia is publicly available.

Information needed for framework

Through the literature review and consultations, we identified information needed to assess proposals to avoid further spending on gas networks. Our full assessment of the availability is presented in the Appendix.

The initial list of information needed for implementation of the framework includes:

- Maps of the gas network to identify areas suitable for pruning. Ideally basic maps of the gas network would be complemented by detailed electronic maps with technical details, including load and gas flow through a geographic information system.
- For a proposed gas network upgrade (replacement or augmentation):
  - Location.
  - Proposed expenditure.
  - Rationale for spending.
  - Amount of money that could be safely avoided/deferred.
  - Whether proposed gas network expenditure is likely to be recovered from that section of the network.
  - Information on major asset class replacements.
  - Customer class allocation.
- For the proposed alternative to a gas network upgrade:
  - Cost of alternative solution (for example, electrification).
  - Cost of gas decommissioning.
  - Hydraulic modelling (specialist testing of pipe pressure by engineers) to determine if the alternative could be undertaken without adversely affecting other gas users.
- Characteristics of the local gas network, including density of the buildings connected to the gas network and premise types (residential, commercial, industrial).
- Trends in local area gas usage and premises disconnecting from gas.
- Characteristics of the local electricity network, including any network constraints in the area and the cost of any upgrades that would be necessitated by electrification ($/kVA/year).

Other considerations

While the Appendix lists key technical considerations held mostly by gas distributors, a range of other factors should be considered in assessments of avoiding network upgrades. These include:

- socioeconomic factors, such as measures of disadvantage
- local acceptance
- presence of a 'community champion' (E3, Gridworks Organization, & East Bay Community Energy 2023)
- any planned earthworks, which could lower the cost of excavating gas pipes if they can be shared (Groundwork Data 2023).

Findings on information availability

Much useful information is not made public

While some of the information needed to assess a proposal to avoid spending on the gas network is publicly available, much of it is not. More information would need to be made public to enable assessment, and it is likely that a government or a regulator would need to compel or incentivise gas businesses to reveal it.

At a basic level, in Victoria, maps of gas distribution pipes are not readily available. These maps could help identify where avoiding spending may be possible, such as streets that can be disconnected without adversely affecting those around them. Electricity networks publish similar information for avoidable expenditure. Western Australia and Tasmania's gas operators publish extensive maps, and the public can access detailed maps of gas pipes in small areas where they intend to do earthwork via Before You Dig. This suggests it would be possible for gas distributors to publish maps of their pipe network in other states.

Gas network businesses publish extensive five-yearly plans (as part of gas access arrangements), which contain some of the information needed to assess spending, such as the approximate locations of some proposed upgrades. However, they also redact or do not include important information, such as the costs, specific locations or rationales for spending. Where this information is not available, even the first step of identifying a potential location to avoid spending may be prohibitively difficult. Networks usually justify redactions as protecting commercial-in-confidence information, and the validity of these objections should be assessed against the potential benefits of being able to use the information to reduce costs.

Specifics of the information provided vary by type of upgrade and by network. For example, in Victoria, some networks publish the suburbs where mains replacement is occurring, while others do not. More detail is provided in the Appendix.

Some costs can be approximated, although others are difficult because companies redact even general figures. It is possible that gas networks could provide ranges without compromising the confidentiality of their exact figures. At the time of writing (January 2026) the Victorian Government and the AEMC are considering policy or rule changes related to gas network data.

Some information would need to be developed

While some information is kept from the public, other information does not exist and would need to be created, mostly by the gas distributor.

For example, electrifying a street would require the distributor to perform hydraulic modelling to determine whether removing the street from the network would negatively affect neighbouring streets' gas supply. Gas distributors do not presently offer a service to model this, so there are barriers to ascertaining whether a proposal to prune a street is viable.

Accessibility of public information is generally poor

Data on gas networks is complex and difficult to interpret for non-professionals. Some relevant information is provided in the access arrangements, but it is spread across hundreds of documents/spreadsheets and perhaps thousands of pages, largely redacted and only published once every five years.

If, for example, a local community group wished to oppose the construction of new gas infrastructure in their area, they would struggle to access or interpret the information without specialised professional help.

8 Proposals

As Australia transitions from gas, avoiding further spending on gas networks could be a win-win, diverting funds from polluting, soon-to-be-redundant gas investments towards households who need assistance to electrify. This would lower bills and fulfil the National Gas Objective's requirement to consider emissions reduction.

This section discusses why and how to avoid spending on gas networks in Australia.

Avoiding spending could make the gas transition more equitable

Pruning and avoiding augmentation could make the gas transition fairer if implemented correctly. A disorderly gas transition is likely to leave a large financial burden of stranded gas investments falling disproportionately on households who cannot afford to get off gas. Pruning and avoiding augmentation are two tools, among many others that are needed, that can help mitigate this situation.

Pruning can contribute to equity because it offers a dual opportunity to:

1. **avoid installing assets that will be stranded in future**
2. **change the distribution of stranded cost away from people facing disadvantage**, if pruning is targeted to people facing disadvantage.

A potential critique of pruning is that it contributes to the death spiral by taking people off gas. This is true, but if Australia is to reach net zero the need to wind down gas networks is unavoidable and, in the current system, every wind-down approach faces this same issue. Also, assets installed now may never be paid for even if they are not decommissioned. Pruning can at least reduce the number of people experiencing disadvantage who are stuck on gas. Pruning could also be paired with broader reforms to the way gas networks are paid for to reduce the burden on this group.

Avoiding augmentation has the same equity benefit in reducing costs and may not contribute to the death spiral because it does not necessarily disconnect any gas users (only reduce usage). However, it has less potential because it is a smaller category of spending and is most applicable to gas networks that are growing.

What is needed to avoid gas spending in Australia?

It may be possible to undertake pruning at a small scale, such as a pilot, without significant change. This would be a good start.

However, policy and regulatory changes would be needed to avoid gas network spending at a large scale. These changes would need to come from a variety of sources, including state/territory governments to set policy, the AEMC to change rules and the AER to interpret these rules, among others.

Australia needs policies to wind down gas networks

Governments, most likely at a state/territory level, need to develop policy to guide the equitable wind-down of gas networks, including specific measures on decommissioning. It is crucial that government policy address potential inequities facing households who face barriers to switching.

The energy market bodies are unlikely to make big regulatory changes until decommissioning policy exists. Gas networks also respond to government policy, and would presently face many regulatory barriers to decommissioning even if they wanted to pursue it.

Regulatory changes are also needed

Australian gas regulations would need to change to enable pruning or avoiding augmentation, including:

- aspects of the 'propose-respond' system, whereby gas businesses submit five-year plans for their networks with great discretion and provide limited justification for decisions, while the regulator faces information asymmetry and has limited ability to scrutinise the plans (ECA 2025). The regulator also does not decide on individual projects, which could be a barrier to pruning
- the lack of a framework to compare gas spending with alternatives (such as the framework proposed in this report)
- state and federal rules about the obligation to serve customers, creating an effective requirement for 100 per cent of local gas users to opt in to any decommissioning proposal in major (scheme) networks
- incentives for gas networks to continue capital spending and increasing gas demand, and a lack of incentives to do the opposite
- a lack of guidance about how decommissioning or electrification costs can be paid for, for example whether they are allowed capital or operating expenditure, and whether they will be paid for exclusively from the gas system or also from electricity users, tax or another source.
- a lack of fit-for-purpose rules about redundant assets.[25]

At the time of writing some of these issues are being considered by the AEMC.

Implementation of pruning

At a high level, there are several possible ways to implement pruning:

- An ongoing requirement for gas networks to compare proposed gas spending with non-gas alternatives, such as electrification. Distributors could be obliged to proceed under certain circumstances (see below). This is similar to US non-pipeline alternatives and non-network solutions in Australian electricity planning. This could occur as part of access arrangements or separately.
- A review of the whole gas network to identify pruning opportunities, undertaken by governments or regulators. Although gas networks could theoretically undertake a review, we would recommend against this as they may not have incentives to shrink their own networks.
- A requirement for networks to publish non-pipeline opportunities for which third parties could tender.
- A combination of the above (for example, California has required networks to assess their networks but the regulator will choose areas for decommissioning).

BSL recommends the following specific implementation considerations:

- **Equity:** Equity considerations should be at the heart of pruning. This should involve targeting pruning to lower socioeconomic areas and ensuring cost recovery is fair.
- **Funding:** Funding for electrification upgrades in pruning should come from avoided gas spending, providing full funding at least for low-income households. Ideally this will not increase the overall cost above the proposed business-as-usual gas upgrade. Government should fund any gap. Consideration could be given to other sources of funding, such as tax or electricity customers, to limit the impact on gas bills.

25 The current rule (National Gas Rule 85) requires assets to not 'contribute in any way to the delivery of pipeline services' before they can be considered redundant and removed from the asset base, which would be a high bar for pruning.

- **Requirement to proceed, not just assess:** There should be a requirement to proceed with non-gas alternatives under certain circumstances, rather than just an obligation to do the assessment as in some US states. These requirements to proceed could be set in line with policy objectives, for example applying in low-income communities, areas selected for early decommissioning, or if the benefit–cost ratio was above a certain level.
- **Simplified assessment:** Allow for a simplified assessment (for example, following a certain formula) rather than a full, expensive cost–benefit analysis of every project.
- **Cost thresholds:** Choose a relatively low threshold (for the value of proposed gas spending) above which assessment of alternatives is required.
- **Obligation to serve:** Loosen the obligation to serve for pruning proposals, meaning less than 100 per cent of local property owners are required to opt in, because attaining full agreement may be prohibitively difficult in practice. This should be predicated on households receiving appropriate support to electrify.
- **New connections:** The framework proposed in this report should not be used to avoid new connections, as has occurred in the United States. New connections should instead be banned for households and for businesses with viable electric alternatives to gas (see below). Bans are likely to cost less and be more effective than using the framework for new homes, which may amount to paying households not to connect gas.

Recommendation:

Governments should develop and operationalise a process to avoid further gas network spending where it can be avoided through electrification, in line with our implementation considerations described above.

More data should be made available

The lack of publicly available data highlights a need for greater transparency as Australia transitions to a net-zero energy system.

More data on gas networks should be made public to enable governments and communities to have more say in their future. Customers pay for these assets, and there would be huge financial and environmental benefits to shrinking the gas network in a coordinated way – but this will be very difficult without more data. More data would also help answer the question of how widely pruning can be used: some areas will be more able to be pruned than others due to their network characteristics (including how many streets 'stick out' from the network and could be disconnected), but this is difficult to discern without better maps and other information.

California has passed legislation to require more regular publication of gas network data (CalMatters 2024). In a welcome move, the Victorian Government (DEECA 2024b) also plans to require networks to provide more information about local consumption, and the AEMC is considering some related requirements.

Where there are obstacles to releasing data, solutions should be investigated. For example, while it may be desirable to redact the costs of specific works to protect competition in future tenders, price ranges could be released.

Recommendation:

Governments should undertake a review of the availability of gas network information with a view to increasing transparency. Unless there is a compelling reason not to, gas network data that should be made publicly available includes:

- maps of gas distribution networks
- local area gas network demand
- local area gas network disconnection numbers and dormant accounts
- the costs, locations and dates planned for infrastructure works, and any possible non-network alternatives (such as electrification).

Complementary issues

Gas network planning is insufficient

The public would benefit from better gas network planning processes. Despite gas networks being nationally significant infrastructure with major effects on energy bills and greenhouse gas emissions, their planning processes are relatively opaque. At the time of writing, the AEMC is considering gas planning processes.

As shown in Table 6 (adapted from ECA 2023b), electricity network planning is subject to additional processes that gas is not. Electricity distributors, for example, publish annual planning reports with maps and public details on planned investment, while gas networks do not. Electricity distributors must also test certain proposed investments against alternatives (such as via the regulatory investment tests for distribution and transmission), unlike their gas counterparts.

Table 6: Comparison of electricity and gas planning processes (adapted from ECA 2023b)

Author	Electricity planning processes	Gas planning equivalents
AEMO	Integrated System Plan	–
	System Security Planning	–
	Electricity Statement of Opportunities	Gas Statement of Opportunities (and WA version)
Networks	Distribution Annual Planning Reviews	–
	Transmission Annual Planning Reviews	Victoria only: Victorian Gas Planning Report[26]
	Regulatory investment test	–
	AER expenditure reviews	AER expenditure reviews

The more developed planning processes for electricity networks, while not perfect, provide far greater transparency of information including future spending than gas networks. The planning processes also provide opportunities for non-network solutions, and specify requirements around community engagement (which could be carried out by parties other than the gas network businesses given their incentives to prolong gas use).

Recommendation:

State or federal governments should initiate a review of gas network planning processes to make them fit for purpose for a declining gas network. They should consider scenarios for a gas network death spiral and for non-network solutions to replacement expenditure.

Stop growing gas networks

Allowing gas networks to continue to grow is incompatible with Australia's climate commitments and undermines efforts to meet them. Each additional dollar spent on gas networks makes the problems described in this report harder to solve. Gas infrastructure installed today may last 80 years but only be used for 20, and households are likely to ultimately bear the costs, which will exacerbate energy hardship.

To stop networks growing, new gas connections to homes should be banned immediately, as they have been in Victoria and ACT. Bans on commercial and industrial connections should be implemented where viable electric alternatives are available. Sales of household gas appliances should also be phased out and substituted with a requirement to replace gas appliances with electric ones at time of replacement, as Victoria has partly implemented.

26 This report is written by AEMO as the operator of the Victorian Transmission System.

While it would be possible to apply this document's framework to new connections (as occurs in the US), simply banning new connections is vastly preferable. Otherwise, the outcome can be perverse: paying people to not connect to gas.

Recommendation:

State/territory governments should ban new home gas connections as soon as possible where this has not already occurred.

State/territory governments should investigate banning new commercial connections where viable.

State/territory governments should phase out the sale of new gas appliances to existing homes.

Gas infrastructure installed today may last 80 years but only be used for 20, and households are likely to ultimately bear the costs, which will exacerbate energy hardship.

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Appendix: Data availability table

The table below details our findings on the availability of data necessary or desirable for assessing gas network pruning proposals. See Section 7: Access to data and information for further detail.

Table 7 provides details on the data required for the framework, whether it is essential, who holds the data and if it is publicly available. Acronyms used in the table are listed below it.

Table 7: Findings on gas network information availability

Category	Item	Explanation	Essential for framework	Data holder	Availability & granularity	Availability notes
Maps of gas network	Gas distribution maps	Maps of gas distribution pipes can help roughly identify areas that could be disconnected from the network without adversely affecting areas around them (e.g. cutting off their supply or creating pressure problems)	✓ Yes	Gas DB, BYDA	Only partly available in Vic. Available in Tas. and WA	Victorian gas DBs, unlike those in WA and Tasmania, do not generally publish maps of their entire networks. Low-resolution maps of limited areas are occasionally available in documents, and one DB (AusNet) provides PDF maps of Melbourne and two other towns. BYDA provides maps of gas pipes for small areas around a designated property where the user proposes to undertake earthwork. Using BYDA to assess decommissioning projects falls outside its intended usage and may violate its terms of use
	Gas transmission maps	Transmission maps could assist to roughly identify suitable areas, although they are of limited use because most customers (especially homes) are connected to distribution, not transmission, pipes	✗ No	Gas trans. operator, AEMO, AEMC	Available nationally	AEMO and the AEMC maintain publicly available maps of gas transmission pipelines

Category	Item	Explanation	Essential for framework	Data holder	Availability & granularity	Availability notes
Location-specific proposed gas network expenditure	Proposed mains replacement and/or augmentation expenditure: a) Locations b) Cost c) Date planned d) Rationale e) Amount that could be safely avoided/deferred f) Current value of the asset	Key parameters for identifying areas where expenditure could potentially be avoided through electrification	✓ Yes	Gas DB (full data) AER (receive unredacted documents from DBs)	● Not consistently available	Generally, there is insufficient publicly available information to compare a proposed upgrade with a non-network alternative. Some location-specific information is available in network documents, but it is usually incomplete in public versions. Some is redacted (commercial-in-confidence) or not broken out. Specifics vary by network and expenditure type. Augmentation generally has more information available than mains replacement. All Victorian networks provide at least suburb-level locations for augmentation but not mains. Where data is available, ease of access is poor and would be prohibitive for many
	Is proposed gas network expenditure likely to be recovered from that section of the network?	If expected future gas demand is low enough that a gas network operator will not recover the cost of expenditure from the customers on that section of the network, the expenditure is not prudent and decommissioning should occur instead (Boardroom Energy 2022)	✗ No	Gas DB	● Unavailable	

Category	Item	Explanation	Essential for framework	Data holder	Availability & granularity	Availability notes
Cost of an alternative proposal	Gas decommissioning cost for a given proposal	The cost of decommissioning gas infrastructure for a given area is a key component of a cost–benefit analysis	✓ Yes	Gas DB	● Would need to be estimated for purpose	This data is unlikely to exist in most cases because gas networks do not routinely consider decommissioning areas as an alternative to expenditure. It would therefore need be assessed for a given proposal, likely by the gas DB
	Cost of alternative solution, e.g. electrification	Cost of the work that could be undertaken instead of gas network upgrade. At the household level, it would include many components, such as: a) appliance purchase and installation b) rewiring (if needed) c) switchboard upgrades (if needed) d) supply upgrades (if needed) e) gas meter removal / disconnection f) gas plumbing work, e.g. capping pipes (if needed) At the electricity network level, it would include factors such as costs of any upgrades necessitated by increased electricity load	✓ Yes	Some data published by electricity DBs	● Would need to be estimated for purpose	Not held by any particular party; could be estimated. Some components may be published by electricity DBs (especially in DAPRs) or privately held

Category	Item	Explanation	Essential for framework	Data holder	Availability & granularity	Availability notes
Characteristics of local gas network	Breakdown of premises types (residential, commercial, industrial, etc.)	Premises types (and ideally what each uses gas for) may feature in decisions about decommissioning, e.g. it may be more viable to prioritise residential-only areas	✓ Yes	Gas DB, mapping services, council	Unavailable from gas DBs; can be estimated	It is possible to estimate the types and density of premises in an area (e.g. using public maps and council zoning data), although this is not definitive because it does not indicate which properties are connected to gas (which gas DBs do not publish)
	Density of properties on gas network	Areas of the gas network with a lower density of properties per km are likely to be more cost-effective to decommission, all other things being equal	✗ No			
	Rates of local abolishment or demand decline	It may be more economical to remove areas of the network that are declining. High rates of abolishment are also a likely indicator of social acceptability	✗ No	Gas DB	Available at postcode level in Victoria	
	Hydraulic modelling	Hydraulic modelling can determine whether an area of the gas network can be decommissioned without affecting surrounding areas	✓ Yes	Gas DB	Unavailable	
Characteristics of local electricity network	Proposed impact on peak demand costs: a) affected asset(s) b) asset headroom c) long-run marginal cost	A group of households that switch from gas to electric appliances may have an impact on lower-level electricity assets (e.g. LV transformers and LV feeders), meaning that the electricity assets serving these customers must be understood to ensure that it is not being constrained as a result	✓ Yes	Electricity DB	Partially available from electricity distributors	Publicly available from most electricity distributors at the feeder and zone sub-level, but not at the low-voltage transformer level
Price forecasts	Gas wholesale price forecast: a) electricity wholesale price forecast b) CO2 equivalent price	Critical factors in calculating costs and benefits	✓ Yes	AEMO ESOO, GSOO and ISP	Publicly available	

Category	Item	Explanation	Essential for framework	Data holder	Availability & granularity	Availability notes
Government costs	Cost of electrification incentives	The amount that can be claimed from government incentives to electrify appliances	✓ Yes	Government websites	● Publicly available	
Household characteristics	The characteristics of the population within an area including: a) dwelling type b) tenure type c) household income	The different types of households that exist within the designated area	✓ Yes	ABS	● Available, but potentially not at a small enough scale	Generally accessible at suburb level but not household level, which could be insufficient
Electricity consumption customer characteristics	The characteristics explaining how customers consume electricity: a) appliance mix b) annual consumption c) load profiles d) sub-load profiles e) CER characteristics	Characteristics used to estimate change in consumption, load profiles and maximum demand	✓ Yes	Electricity DBs, surveys, etc.	● Can be calculated / estimated based on publicly available data	The most granular level this information can be estimated at is the state level

Notes:

● = available; ● = limited availability; ● = unavailable

Acronyms used in the table: ABS: Australian Bureau of Statistics; AEMC: Australian Energy Market Commission; AEMO: Australian Energy Market Operator; BYDA: Before You Dig Australia; DB: distributor,(i.e. gas network business/operator); ESOO & GSOO: Electricity/Gas Statements of Opportunities; DAPR: [electricity] distribution annual planning report.

Sunk costs

A framework for avoiding further spending on gas networks

David Bryant and Damian Sullivan
2026

Acknowledgement of Country

The Brotherhood of St. Laurence acknowledges the Traditional Custodians of the land and waterways on which our organisation operates. We pay our respects to Aboriginal and Torres Strait Islander Elders past and present.

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