ENERGY CONSUMERS AUSTRALIA

Submission to DEECA on Victorian embedded network energy pricing reforms

Submission to the Victorian Department of Energy, Environment and Climate Action

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Energy Consumers Australia is the national voice for household and small business energy consumers. We advocate for a fair, affordable, and reliable energy system that meets everyone's needs and leaves no one behind on the journey to net zero.

Feedback on the Consultation Paper for 'Reforming prices for customers in electricity and gas embedded networks'

Energy Consumers Australia (ECA) welcomes the opportunity to provide feedback on the consultation paper on reforming prices for customers in embedded networks.

We strongly support the Victorian Government's clear commitment, announced on 27 May 2026, to mandate lower energy prices for the 174,000 households and 20,000 small businesses living and operating in these private networks. The Government's pledge to deliver indicative electricity savings of up to $250 per year for households and $600 per year for small businesses sets a clear benchmark for the success of these reforms.

To deliver on this promise and genuinely protect the long-term interests of Victorian consumers living in embedded networks, the regulatory framework must evolve to ensure that consumer protections do not depend on where a consumer lives or how their energy is supplied.

Consumers supplied by embedded networks are not able to access competitive energy prices like on-market customers. The current electricity embedded network price cap based on the Victorian Default Offer (VDO) is not adequate to ensure fair price outcomes. Gas embedded network consumers do not have any price cap at all, and consumers of bundled services (like bulk hot water) face opaque and confusing pricing and limited consumer protections. Because embedded networks operate as private monopolies, regulation must do the work that competition normally would. Their efficiency cannot simply be assumed; it has to be delivered in practice through strong consumer protections, including price caps and clear obligations on providers. Without that, consumers are exposed to monopoly pricing.

We recommend the Victorian Government implement reforms to:

- cap prices for consumers in electricity and gas embedded networks at the median of the lowest market offers
- ensure consumer protections, including price caps, apply equally to all consumers in embedded networks regardless of the licensing status of the retailer
- reform regulation of bundled services to ensure energy consumer protections clearly apply.

Finally, as the energy market grows more complex, prescriptive rules alone are no longer sufficient to protect consumers. We recommend the introduction of an overarching, outcomes-based consumer duty to prevent future harms. A consumer duty would place the responsibility on energy providers to proactively deliver fair value and suitable energy plans for all consumers. A consumer duty that covers the provision of energy services broadly and is not limited to only traditional supply of electricity or gas to premises would also assist in ensuring customers of these services have a baseline level of consumer protection and are treated fairly by providers.

Further information is provided in our responses to the questions posed by the consultation paper. If you have any questions, please contact Claire Ohk at Claire.Ohk@energyconsumersaustralia.com.au.

1. Reform the price cap for embedded networks to reflect competitive market prices

Reforms are needed to ensure that consumers in embedded networks have access to fairer pricing outcomes, similar to prices that on-market customers can access. Price regulation is necessary because embedded networks are effectively monopoly providers, and consumers have no choice on offers or energy providers.

To achieve the Government's commitment to lowering prices for embedded network customers, we recommend setting the price cap for household and small business customers in both electricity and gas embedded networks at the median of the lowest market offers (i.e. the median of each active retailer's best offer in the market).

This would be similar to reforms recently introduced in NSW, which adopts a competitive benchmark as a price cap rather than relying on a default offer price cap. The NSW model recommended by the Independent Pricing and Regulatory Tribunal (IPART) sets maximum electricity and gas prices in embedded networks at the median of active retailers' lowest offers for both residential and small business customers across electricity, gas, and bundled services.[1] Adopting this competitive benchmark approach in Victoria would ensure embedded network customers receive a price comparable to engaged market customers.

The current price cap for electricity embedded networks is too high

The VDO is conceptually unfit as a maximum price cap for electricity to customers in embedded networks. A safety net designed for a competitive market cannot adequately protect consumers in a captive monopoly where consumers do not have a choice of offers or energy providers, and cost structures are different to those in the competitive market. Because genuine retail competition inside embedded networks is structurally impeded by technical barriers and a lack of energy-only offers, consumers cannot switch providers when faced with high prices or poor service. Consequently, price regulation should aim to ensure customers in embedded networks can achieve similar price outcomes to customers in the competitive market, rather than simply applying a default offer price cap.

The VDO is a 'bottom-up' calculation designed to reflect the efficient costs of a standard retailer operating in the open market. It includes allowances for a range of costs that may not be relevant for embedded networks, which face fundamentally different cost structures, including:

- customer acquisition and retention costs, which are not faced by embedded network retailers as consumers do not have a choice of retailer
- network cost structures, which make up roughly 38 percent of the VDO cost stack,[2] differ between on-market retailers and embedded network operators. Embedded network operators purchase energy at a single parent meter on a commercial network tariff, allowing them to spread a single fixed supply charge across hundreds of residents.[3] Applying the VDO price cap to embedded networks means residents can be in effect charged as if they each had individual network connections, instead of reflecting network cost efficiencies.[4]

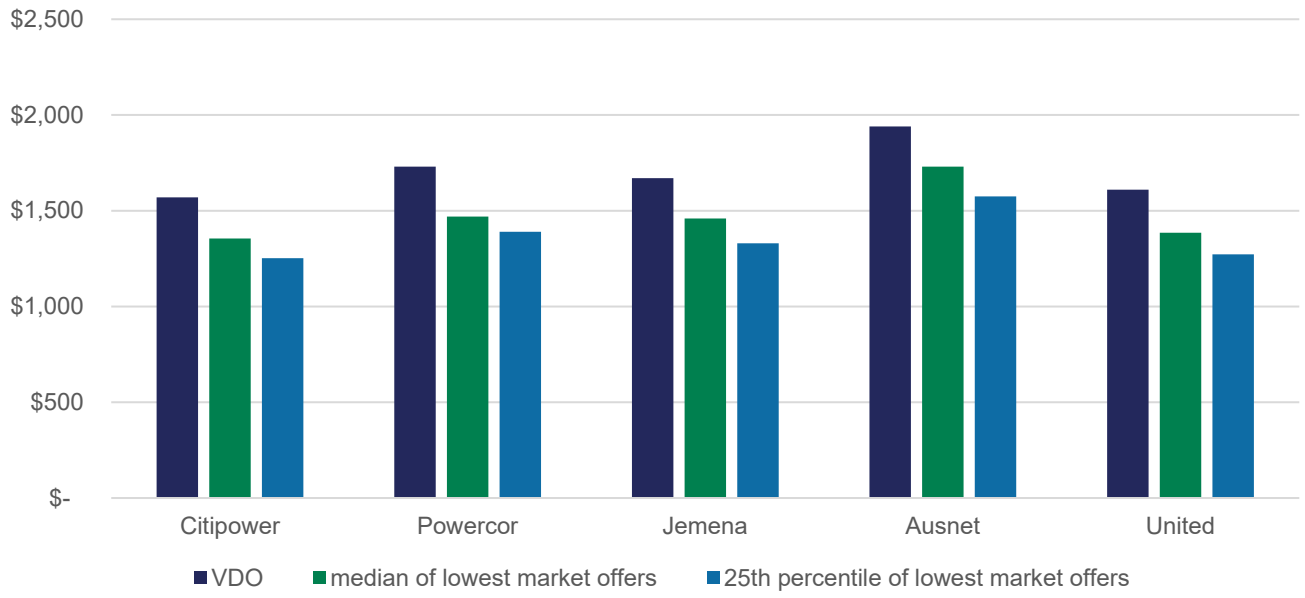
This structural advantage in network cost pricing is substantial. Even when accounting for network tariff variations designed specifically to adjust for embedded networks, such as those proposed by Ausgrid, the cost per dwelling remains drastically lower. IPART's analysis found that for a large residential site

[1] NSW Government response to IPART's recommendations from Future of Embedded Networks review (2025), 7
[2] Essential Services Commission, Victorian Default Offer 2026-27, 16
[3] Victorian Government, Reforming prices for customers in electricity and gas embedded networks: Consultation paper (2026), 5
[4] IPART, Final Report - Embedded Networks (2024), 46

(e.g., 315 customers), the total network charge per dwelling was between 46 percent and 50 percent lower than the equivalent standard residential network charge.[5]

Analysis of current offers available on Victorian Energy Compare (June 2026) illustrates the difference between the VDO and more competitive market offers. For a household consumer with 'average' energy use, the potential savings from moving from a flat-rate VDO to the median of the lowest market offers is $210 to $260 per year, depending on the distribution zone. Savings would be higher for high-consumption customers. Customers in embedded networks have no way of realising these savings.

Figure 1 – Comparison of VDO prices vs lowest market offer benchmarks (residential flat tariffs)



Source: Victorian Energy Compare data, accessed 26 June 2026. Based on consumption of ~4,088kWh p.a. Data for lowest market offers is for residential flat tariff offers without conditional discounts and excludes VDO and non-flat tariffs.

Importantly, moving the price cap to this lower benchmark is not intended to guarantee the absolute lowest market offers. We recognise some of the lowest prices may be unsustainably low, loss-leading offers that may not be suitable as the basis for a regulated price cap. However, on-market customers can still switch to such offers, unlike embedded network customers. For illustrative purposes, the 25th percentile of lowest market offers represents an even greater saving compared to the VDO, at around $318 to $365.

Customers in gas embedded networks should be protected by a price cap

There is currently no price cap for customers in gas embedded networks. We recommend a price cap is introduced based on the same benchmark as for electricity customers (i.e. median of the lowest market offers). Notably, this price cap can be implemented even in the absence of a VDO for gas as it is based on market offers.

Gas embedded network customers currently remain exposed to unconstrained and unregulated pricing. While the Gas Embedded Networks General Exemption Order (GEN GEO) was updated in 2025 to introduce transparency requirements, including caps on network abolition fees, it also requires clear, upfront disclosure of how any unmetered gas charges and centralised hot water service charges are

[5] Ibid.

calculated and billed, as well as any other ongoing fees or charges customers must pay for the supply of gas.

Similarly to electricity, the network charges for gas are theoretically more cost efficient for embedded network consumers. For instance, a standalone Victorian residential customer in Central zone (using AusNet Tariff V) the annual network cost to consume 12.68GJ of gas is approximately $273.[6] This cost is driven heavily by the individual fixed daily supply charge of $0.58, which totals $213 annually, before network usage charges are applied. However embedded networks alter this cost structure. Rather than maintaining 40 individual residential connections, an apartment building is connected to the gas distribution network via a single commercial 'parent' meter. This creates two economies of scale for the embedded network operator:

1. While the parent meter will likely attract a higher commercial fixed charge, spreading this single charge across 40,100 or 300 apartment units drastically reduces the per-consumer fixed cost contribution.

2. By pooling the building's total gas demand at a single commercial meter, the operator exhausts the initial, more expensive volumetric usage blocks almost instantly. The vast majority of the building's gas is therefore purchased at highly discounted, bulk commercial rates.

While there may be limited information available regarding Victorian gas embedded network pricing, analysis by the NSW IPART has modelled these structural advantages finding that the cost of supplying gas is around $75 to $170 lower than a non-embedded gas network customer.[7]

Price caps must work for the consumers in embedded networks

The case for a market-linked price cap is even stronger when considered in light of who embedded network customers are and how they use energy. Our survey shows that embedded network customers in Victoria are more likely to be renters than on-market customers,[8] which matters because renters are less able to reduce bills through property upgrades, energy efficiency investments or solar installation. They are also more likely to want a basic, transactional relationship with the energy system rather than an active one.[9] This demographic intersection has acute policy implications. Findings from our July 2025 report, *Understanding and Measuring Energy Hardship in Australia*, establish that renters are disproportionately more likely to be vulnerable to, or actively experiencing energy hardship across all baseline indicators.[10]This cohort faces structural disadvantages, leaving them with very little individual agency to insulate themselves from rising prices.[11] This means embedded network customers are less able to respond to high prices in the ways that on-market customers can. They are also less able to compare offers, switch providers, or benefit from a normal competitive market. Reflecting this deficit of agency, our survey found that 40% of embedded network customers were not at all confident or not very confident that they were on a competitively priced plan, compared with just 24% of on-market customers in Victoria.[12]

Embedded networks are not only a residential issue. They also affect some small businesses, particularly in multi-tenant sites such as shopping centres. While more than two-thirds of small businesses choose their own electricity retailer in Australia, 23 percent say the retailer is selected by a premises management company.[13] For these 20,000 small businesses in Victoria, being in an embedded

[6] Ausnet, Annual tariff variation 2026-27
[7] IPART, Final Report - Embedded Networks (2024), 60
[8] Appendix, Figure 3.
[9] Appendix, Figure 4.
[10] ECA, Understanding and Measuring Energy Hardship in Australia: Consumer Energy Report Card (2025), 12.
[11] Ibid.
[12] Ibid, Figure 5.
[13] Forthcoming ECA Small Business survey

network introduces unique operational and financial strains. Small commercial tenants, such as cafes, local hairdressers, newsagencies, and dry cleaners, face many of the similar structural barriers as residential renters but with higher financial stakes. Because their energy is tied directly to keeping their doors open, they have to absorb whatever rate the network operator passes down. Crucially, this commercial vulnerability is amplified by the deeply personal nature of independent small business ownership, where an operator's well-being is intrinsically tied to the financial survival of their enterprise.[14] Small business owners are already facing intense pressure in the current operating climate.[15] Unregulated or opaque pricing structures within monopoly embedded networks can exacerbate these existing pressures by introducing unpredictable operating costs where business owners have no choice of alternative supplier.

Taken together, these findings show that embedded-network price caps must reflect the reality that many customers and small businesses have limited choice and little bargaining power. For that reason, a market-linked price cap is essential to protect consumers from unfair outcomes.

2. Ensure parity of outcomes for consumers in embedded networks served by licensed and non-licensed energy providers

The fundamental principle of this reform should be that consumer protections should not depend on where a consumer lives, or how their energy is supplied, including the legal licensing structure of their energy provider. Currently, Victoria's framework creates a fragmented system where consumer outcomes across electricity, gas, and bundled services vary based on whether an entity is licensed or exempt. To resolve these inconsistencies, we recommend regulatory changes that guarantee uniform protections, including price caps, for all embedded network customers regardless of their supplier's licensing status.

In electricity, the original General Exemption Order (GEO) was designed to regulate the incidental sale of energy by entities whose core business was not energy, such as caravan parks, retirement villages and owners corporations.[16] To operate as a fully licensed retailer under the *Electricity Industry Act 2000*, a business must undergo ESC assessment to prove they are a "fit and proper person" with the technical and financial capacity to serve consumers.[17] In contrast, GEO exemptions are largely automatic or self-registered. Yet, as the Government tightened the rules on exempt sellers, specifically by imposing the VDO maximum price cap and renewable energy generation conditions for new builds, the regulatory framework has not kept up with developments in the market. The Government acknowledges that major embedded network operators have now obtained retail licences, or been acquired by licensed entities, shifting over 90 percent of residential embedded network customers to licensed retailers.[18]

Because obligations on licensed retailers are imposed primarily through their licence conditions and the Energy Retail Code of Practice (ERCoP), they are not subject to the targeted protections designed for embedded networks under the GEO. While licensed retailers must offer the VDO as a basic 'standing offer', they are not bound by the GEO's absolute maximum price cap. This allows them to shift captive embedded network residents onto 'market offers' with no price ceiling.[19] The Government explicitly

[14] Australian Chamber of Commerce and Industry (ACCI), Submission on the ATO Vulnerability Framework (2025), 5.
[15] Ibid., drawing on the 2024 ACCI National Business WHS Survey data, which highlights the widespread impacts of commercial stress, noting that 34% of small business owners surveyed had been diagnosed with a mental health condition in the preceding 12 months.
[16] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 7
[17] Guideline: Applications for electricity and gas industry licences
[18] Victorian Government, Reforming prices for customers in electricity and gas embedded networks: Consultation paper (2026), 15.
[19] Victorian Default Offer price review 2025–26 | Essential Services Commission

acknowledges this, noting that the prices licensed retailers can charge electricity embedded network customers are not currently capped.[20]

The failure to establish parity also harms consumers in the opposite direction. While the GEO technically binds exempt sellers to parts of the ERCoP, customers of exempt sellers are structurally excluded from protections mandated by the *Electricity Industry Act 2000* and the broader ERCoP.[21] For instance, exempt sellers are not required to implement safe family violence policies, lack the statutory obligation to establish and submit formal financial hardship policies to the ESC, and are not prohibited from charging late payment fees.[22] Furthermore, they do not face the same tariff transparency requirements, such as publishing their pricing on Victorian Energy Compare.[23] This leaves consumers in exempt networks with a significantly weaker, secondary tier of protections and transparency compared to on-market consumers.

For gas and bundled services, the current regulatory framework is even less clear. For instance, in gas, the Gas Embedded Networks GEO was recently introduced but only covers the distribution of gas (the physical pipes within the building).[24] There is no general exemption for selling retail gas in a Victorian embedded network, so sellers of gas in embedded networks have to become a licensed retailer, or engage one.[25] However, many developers and operators try to argue they are not "selling" gas because it is unmetered and bundled into rent or owners corporation fees.[26]

Bundled services, such as centralised bulk hot water, cooktop gas, and centralised heating or cooling are all regulated differently. For gas bulk hot water, retailers are legally required to convert volumetric consumption (litres used) into gas energy units. For electric bulk hot water systems, retailers calculate usage via a conversion factor capped at a maximum of 89 kWh per kilolitre.[27] These calculations must be explicitly itemised on bills as cents per litre, the conversion factor used, and the total litres consumed. Despite these rules, exempt sellers are not bound by them, and certain licensed retailers have bypassed compliance by arguing that they sell “serviced hot water” rather than energy. They also have claimed that consumer protections in the ERCoP, such as the 4-month limit on back-billing, did not apply to their hot water customers.[28]

We encourage the Victorian government to establish a unified framework that extends robust pricing and consumer protections to all bundled essential services to ensure the parity of outcomes for consumers on embedded networks. Captive consumers view utility services as basic essentials; they cannot and should not be expected to navigate these complexities and to trust that they’re paying a fair price for the energy they have used. To resolve this, the Government should consider the NSW IPART’s approach to extend binding price caps, EWOV access, and billing transparency rules to all embedded network services, including bulk hot water, unmetered gas cooktops, and centralised heating and cooling systems.

3. Improve regulation and transparency of bundled services

Bundled services like bulk hot water, cooktop gas, and centralised heating and cooling create a distinct consumer protection problem because the prices charged are often difficult to interpret, compare, or verify. Currently, there is a lack of clarity regarding whether or how these services are covered under

[20] Victorian Government, Reforming prices for customers in electricity and gas embedded networks: Consultation paper (2026), 12
[21] Embedded electricity networks: Exempt providers’ obligations in Victoria
[22] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 85
[23] Ibid. 85-86
[24] Victorian Government, Reforming prices for customers in electricity and gas embedded networks: Consultation paper (2026), 6
[25] Changes for gas embedded networks in Victoria | EWOV
[26] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 53
[27] Energy Retail Code of Practice (version 5)
[28] Energy and Water Ombudsman Victoria (EWOV), Submission: Energy Retail Code of Practice Review (2024), 48.

energy laws. Using bulk hot water as an example, billing is typically itemised as a water service, even though the main input affecting the cost is the underlying energy used for heating.

Because of these regulatory gaps, oversight has been historically restricted. For example, the Australian Competition and Consumer Commission examined billing outcomes for embedded network customers but was unable to provide a comparable assessment of many non-electricity services, reflecting the broader transparency gap in this part of the market.[29]

This lack of industry transparency translates directly to practical challenges for customers in embedded networks. For residents in embedded networks, the practical issue is not only whether a service is regulated, but whether the bill clearly explains what is being charged and on what basis to be able to trust that it's fair. This specific confusion is reflected in our most recent survey, which found that embedded networks customers are more likely to be unsure that they are on a competitive energy plan.[30]

Ultimately, robust transparency matters because these bundled utilities are essential service **,** and consumers generally do not choose the infrastructure or supplier. There is also no compelling reason why consumers of these services should not have access to energy consumer protections where a bundled arrangement clearly involves the provision of an energy service, even if it is bundled with another service. We recommend regulation of bundled services is reformed so that consumers of these services have the same protections as consumers of any other energy service.

In that context, clearer disclosure is not about asking households to understand every technical input into the cost stack; it is about ensuring they can see, in plain language, what they are paying for, how the amount has been calculated, and whether concessions, rebates, or other protections have been applied correctly. This is especially important where consumers may only discover the embedded-network arrangement after purchase or settlement,[31] or where the same physical service may be billed under different legal classifications.[32]

The Victorian Government should consider whether bundled services should be brought within a clearer and more consistent disclosure framework, including plain-English information about the service provided, the basis of the charge, any conversion factors used, and the rights that apply if a billing error or dispute arises. The NSW approach is relevant here because it was designed in response to the reality that embedded network customers often have limited or no ability to choose their retailer, which weakens price competition, reduces bill transparency, and creates gaps in consumer protection.[33]

For instance, all bulk hot water providers will need to bill customers strictly in energy units, a maximum common factor and cap the allowable fuel-to-water conversion to prevent consumers from bearing the cost of inefficient central infrastructure, and disclose the system's Coefficient of Performance, and Energy Efficiency Ratio (EER) to ensure building owners and regulators can easily monitor and benchmark performance of centralised systems over time.[34]

Better transparency would help consumers, regulators, and ombudsman schemes identify when charges may be inconsistent, excessive, or poorly explained, and it would reduce the risk that operators recover costs through opaque bundled services when electricity prices are capped.

[29] ACCC, Inquiry into the National Electricity Market - June 2024 report, 104
[30] Appendix. Figure 5
[31] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 47
[32] EWOV-submission-to-the-ESC-–-Review-of-the-Energy-Retail-Code-of-Practice-–-July-2024.pdf, 48
[33] NSW Government response to IPART's recommendations from Future of Embedded Networks review, 4
[34] Ibid.

Responses to consultation paper questions

Questions for stakeholders

1. **In your view, are embedded network customers paying prices (for electricity and gas) above, below, or comparable to competitive on-market offers? Please provide any evidence you may have that supports your views, including copies of bills if possible.**

Yes, as the price cap for electricity customers in embedded networks is set at the VDO, rather than a competitive benchmark, it is likely embedded network customers are paying more than customers on market offers. As outlined previously we recommend that the price cap for customers in embedded networks (for both electricity and gas) be set at the median of the lowest market offers.

The VDO is a safety-net benchmark designed for standard retail electricity supply, not a captive embedded network context. Because it includes allowances for costs such as customer acquisition and retention that embedded-network operators may not incur, it is not a suitable maximum price cap for embedded networks. The regulatory question should therefore be whether the cap reflects the efficient costs of embedded network supply and delivers fair outcomes for captive consumers, rather than whether it simply mirrors a standard retail offer.

That concern is reinforced by the fact that the VDO is generally higher than competitive market offers,[35] meaning it is unlikely to reflect the prices available to competitively engaged customers. The problem is even more pronounced for gas, where there is no equivalent VDO-style embedded-network price cap. In that context, the NSW IPART review is useful because it recognised that embedded-network consumers require a methodology designed around their actual supply arrangements, rather than a safety net designed for on-market consumers.

We recognise that there is a lack of transparency about embedded network pricing, and this prevents a clear understanding of the prices consumers are actually paying. While it may be useful to gather information from consumers about their bills, this is an inefficient means of collecting this data, which is held by embedded network providers and presumably can be readily supplied by them. If suppliers are not willing to provide this information voluntarily, we recommend the Government consider using information-gathering powers available to the Minister and the ESC under clause 12 of the GEO or to the ESC under the conditions of a licence (e.g. s 23A of the Electricity Industry Act). We note also the Minister has powers to impose licence conditions under both the Electricity and Gas Industry Acts.

Responses to our recent Consumer Energy Report Card show the average annual electricity bill for embedded network was $1,641, compared to $1,557 for on-market customers. However, we note this is self-reported data based on a small sample size (65 consumers on embedded network and 638 on-market consumers in Victoria) so these results may have limited statistical significance.

2. **Are there other key value propositions beyond pricing for customers living in embedded networks? What are these?**

Yes. As provided previously, in theory, embedded networks can deliver value through more efficient use of site infrastructure, integrated energy and building services, and potentially lower operating costs where a site can be served through shared plant and a single connection point. In some cases, embedded networks may also support practical benefits such as centralised billing, easier integration of communal or shared infrastructure, and, where well designed, better coordination of energy and building services.

[35] Energy advice - The Victorian Default Offer: a fair electricity price - Victorian Energy Compare

However, these potential value propositions should be treated cautiously. The primary justification of an embedded network cannot just be structural efficiency; it must be that consumers receive lower energy costs in exchange for their reduced market choice and agency. Our concern is that, in many cases, consumers do not have sufficient transparency to know whether they are receiving a genuinely fair price that reflects this efficiency benefit, and the current framework does not always ensure that the advantages of shared infrastructure are reflected in lower or fairer prices.

For that reason, the existence of embedded networks should be conditional: they should only be permitted to operate if regulatory frameworks guarantee that these structural efficiencies translate into lower costs for consumers in embedded networks. Strong regulatory settings, transparency and protections are the means to ensure that these lower costs are actually delivered. For bundled or centralised services, the same concern applies: any operational efficiencies must be visible in pricing and billing, otherwise the claimed benefits remain theoretical rather than real.

3. **What are the key cost drivers of electricity and gas supplied and sold to embedded network customers, and how do these costs vary relative to on-market customer connections?**

The structural differences detailed in our submission under *'1. Reform the price cap for embedded networks to reflect competitive market prices* are the central reason embedded networks can, in theory, deliver significantly lower costs to serve than standard on-market retail arrangements.

We strongly encourage the Victorian Government to recognise that these structural cost advantages can create a commercially attractive margin opportunity for embedded network operators. As DEECA has acknowledged, the sector has rapidly evolved into a professionalised and profitable industry.[36] This is reflected in the increasing acquisition of smaller embedded network operators by major licensed retailers, who now service over 90 percent of the residential embedded network market in Victoria.[37]

Ultimately, the key question is whether these structural efficiencies are actually passed through to residents and small businesses in the form of lower prices, or whether they are retained by the operator as excess margin. Because embedded network customers cannot switch to competing retailers, the monopoly structure of embedded network supply reduces pressure to pass through bulk procurement and network cost savings to consumers. In our view, the regulatory framework should be redesigned so that any network, procurement, and operational efficiencies are more directly reflected in consumer bills, including through a stronger price benchmark tied to competitive market outcomes.

4. **What are the potential impacts of further price regulation for electricity and gas on embedded network business models, viability, innovation and competition? Please provide any evidence you may have that supports your views.**

Further price regulation is likely to reduce margins for some embedded network operators, particularly where business models have relied on retaining bulk procurement and network savings rather than passing them through to consumers.

When assessing the potential impacts on innovation, it is important to recognise that embedded networks are simple commercial resale operations where many function without low-emission infrastructure.[38] While there are emerging concepts around using embedded networks to run advanced localised microgrids, these communities are very much the exception rather than the rule. While we

[36] Victorian Government, Reforming prices for customers in electricity and gas embedded networks: Consultation paper (2026), 15

[37] Ibid.

[38] See, e.g., Justice and Equity Centre, Submission to NSW DCCEEW on the Future of Embedded Networks in NSW (2024), 11, noting they are allowed in the hope of innovation but have largely become a mechanism for profit; see also Independent Pricing and Regulatory Tribunal (IPART), Embedded Networks - Final Report (2024), 10 (Finding 2), noting that many sites currently operate without any low-emission infrastructure.

strongly encourage these highly optimised approaches, these genuine innovations create significant operational efficiencies so such operators should have little trouble offering prices lower than a market-linked cap.

For this reason, as outlined in our submission, we do not believe the VDO is the appropriate mechanism. Instead, a market-linked cap based on competitive offers would better preserve incentives for efficient operation and innovation, while still ensuring that consumers share in the savings created by embedded networks.

It is important to recall why embedded network prices should be regulated (indeed why they are regulated currently): providers in embedded networks operate as a monopoly provider, and in the absence of regulation are incentivised to use their monopoly pricing power to charge consumers a higher price than would be achieved in a competitive market.

We recognise the need to manage any concerns about retailer viability though do not have any information to suggest price regulation is threatening viability of supply in embedded networks. If this is a genuine concern, we suggest retailers are best placed to provide information about their cost structures to DEECA, to inform consideration of any appropriate exemptions. To better protect consumers in the event of retailer exit, the Government should fulfill its commitment to implement Recommendation 14 of the Victorian Embedded Networks Review by establishing a 'Retailer of Last Resort' equivalent mechanism to protect consumers.[39]

5. **What are the potential impacts of further price regulation for electricity and gas customers, whether in embedded networks or on-market, including equity impacts? Please provide any evidence you may have that supports your views.**

As outlined in Sections 1 and 2 of our main submission, the primary equity impact of further price regulation would be to improve parity in outcomes for customers in embedded networks. At present, embedded-network customers often have limited practical ability to choose an alternative supplier or accessing retail competition, such as expensive meter upgrades and the lack of a National Meter Identifier. These barriers are more significant for embedded network customers because a larger share are renters, meaning they are less able to make the physical or contractual changes that would be needed to participate in the market.[40]

For embedded network customers, further price regulation would also reduce the risk that consumers are charged for cost components that are more relevant to standard retail supply than to embedded network arrangements. In that sense, the effect of reform would be to better align regulated prices with the actual cost structure of the service being provided.

For on-market consumers, the broader equity benefit is a more consistent regulatory framework that reduces opportunities for captive customers, like those on embedded networks, to be treated different simply because for the supply model they are placed in. More generally, stronger price regulation would support consumer confidence that energy pricing is transparent and comparable.

6. **Can you provide insights into the benefits and risks associated with aligning embedded network obligations and retail licensing conditions?**

As detailed in Section 2 of our submission, ECA strongly supports establishing parity of outcomes by aligning embedded network obligations with retail licensing conditions. The fundamental principle of this

[39] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 66-67
[40] Appendix, Figure 3

reform must be that a consumer's baseline energy rights and protections should not depend on where they live, or the legal licensing structure of their energy provider.

The main benefit of alignment is that it would close gaps in the current framework and make consumer protections more consistent across embedded networks and on-market supply. It would also give the regulator a clearer and more enforceable compliance framework, particularly for matters such as pricing, billing, hardship, family violence support, and dispute resolution.

While the benefits heavily outweigh the risks, when aligning two distinct regulatory frameworks, there is a risk that it dilutes existing protections. The Government must ensure that establishing parity of outcomes does not come at the expense of diluting existing protections currently required of either licensed retailers or exempt sellers. On the other hand, a one-size-fits-all approach could impose full retail-style obligations on very small or incidental sellers, such as caravan parks or retirement villages, in a way that is disproportionate to their scale and role. That could create unnecessary compliance costs or, in some cases, affect viability. It may be worth considering whether a tiered compliance model might be more proportionate. For instance, there could be core obligations for all providers selling energy in an embedded network, regardless of their size or licence type, that would need to meet mandatory consumer outcomes. This would include the price cap, clear pricing disclosures, accurate billing, EWOV membership and hardship support. Then the actual administrative and reporting burden would be proportionate to the scale and nature of the business.

7. **In your view, what are the potential impacts, costs and benefits of extending the renewable energy generation condition to licensed retailers providing electricity to embedded network customers? Please provide any evidence you may have that supports your views.**

ECA supports extending the renewable energy generation condition to licensed retailers operating in embedded networks. Doing so would close a regulatory loophole, ensure parity of consumer outcomes and uphold the original intent for the embedded network market.

In 2022, the Victorian Government committed to banning new embedded networks in residential apartment buildings *unless* they met a strict renewable energy condition (sourcing 100 percent renewable electricity, including at least 5% generated on-site).[41] However, because this condition was enacted through the General Exemption Order (GEO) 2022, it only applies to exempt persons. Considering over 90 percent of Victorian embedded network customers now buy their electricity from licensed retailers, there is little evidence to say that new developments currently face the clean energy obligations. The primary benefit of extending this condition to licensed retailers is to close the loophole and ensure the original intent that new embedded networks must deliver demonstrable environmental and consumer benefits to justify their existence, is realised.

While extending the renewable energy condition to licensed retailers is a vital step for new development, we encourage the Government to look broader and address the structural and technical barriers that lock existing embedded network customers out of the benefits from having consumer energy resources such as rooftop solar batteries and electric vehicle charging.

Research by Bastion Insights for the AER found that embedded network customers are at a distinct disadvantage compared to on-market customers when it comes to accessing and using CER. The primary barriers are rarely a lack of customer desire but rather the complexity of installing such resources.[42] We note that the NSW addressed this issue and recognised the need to provide clear guidance and regulatory support to overcome the practical difficulties residents face in getting operator

[41] General Exemption Order (2022), cl 8.
[42] Bastion Insights, Review of the Exemptions Framework for Embedded Networks Research Report (prepared for the Australian Energy Regulator, 2024),8-9, 37.

consent for solar panels and ensuring that residents receive fair payments, rebates, or financial benefits for the excess electricity their system feeds back into the network.

We strongly recommend the Victorian government to adopt this proactive approach and ensure that consumers on embedded network are not left behind in the energy transition. This means:

- Ensure all newly developed embedded networks have access to 100 percent renewable electricity, including at least 5% generated on-site
- Work with the building, strata sectors and local councils to develop clear guidance and regulatory mechanisms that remove the administrative and infrastructure barriers preventing existing embedded network customers from installing CER
- Explicitly require that where shared CER is installed in an embedded network, the operator must transparently pass the financial benefits, such as feed-in tariffs or reduced bulk consumption charges, directly through to residents' bills.

8. **Do you agree with ensuring that price caps for selling energy to customers in embedded networks apply both to exempt persons and licensed retailers? Please provide details to explain your views and any supporting evidence you may have.**

We agree that price caps must apply to licensed retailers selling all energy (electricity, gas and additional services) to customers in embedded networks.

We provide more details under Section 1 of our submission.

9. **Are there any other relevant considerations to ensure both electricity and gas customers in embedded networks are appropriately protected, and obligations can be effectively enforced?**

Please see Section 1 of our submission.

10. **In your view, are embedded network customers paying fair prices for bundled services such as bulk hot water or centralised heating or cooling? Please provide any evidence you may have that supports your views, including copies of bills if possible.**

As detailed in Section 3 of our submission, evaluating whether prices for bundled services are "fair" is structurally impossible under the current regulatory framework, because the costs of these services are inherently opaque and sometimes even hidden from the consumer altogether. The premise of this question assumes that a customer can look at their bill and assess the cost of the service. However, for services such as unmetered gas cooktops or centralised Variable Refrigerant Volume (VRV) heating and cooling, developers and operators frequently bundle the costs opaquely into general owners' corporation fees or rent.[43]

To resolve this opacity and ensure fair outcomes, we strongly encourage the Victorian Government to consider the following reforms:

- Require all bulk and non-bulk hot water providers to bill consumers in underlying energy units rather than volumetric litres. Furthermore, Victoria should implement a maximum "common factor" (e.g., capping the allowable fuel-to-water conversion at 0.40 MJ per litre). Under this mechanism, any system inefficiencies exceeding the cap must be absorbed by the operator or building owner rather than the resident.[44]

[43] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), 49-50
[44] IPART, Final Report - Embedded Networks (2024), 70

- Protect consumers from unfair pricing by extending legally binding price caps to bundled services. Using the IPART methodology, unmetered gas cooktops capped at a flat daily fee based on a low-user benchmark (e.g., 1,000 MJ per year)[45] and centralised heating and cooling could be capped using a benchmarked electricity consumption charge suitable for climates in Victoria.
- Mandate ombudsman access for all services including bulk hot water, centralised heating and cooling to ensure all consumers have a free, independent dispute resolution pathway. This is consistent with Recommendation 13 of the Victorian Embedded Networks Review.[46]

11. **Have you experienced any issues in relation to billing, metering, provision of information, complaint handling or other consumer protection issues for bulk hot water services or centralised heating or cooling? Please provide details and any evidence you may have related to your experience.**

We provide details on these issues in Section 2 and 3 of our main submission. We would also like to highlight that this lack of transparency is not simply a matter of poor disclosure but also reflects the reality of consumers in embedded networks. Recent data from our Consumer Energy Report Card showed that most embedded network customers in Victoria (65 percent) want a "basic" relationship with the energy system.[47]

This means that more than a majority of embedded network customers do not want to, and should not be expected to, understand and decipher or monitor tariffs, or volumetric hot water conversions just to ensure they are not being exploited. Because these consumers are structurally captive, operate within an information deficit and strongly prefer a low-engagement relationship with their energy, the regulatory framework must reflect this. Indeed, consumer protections as detailed throughout this submission are the only way to ensure these consumers are fairly treated.

12. **Are there any examples of the provision of bundled services by embedded networks that have delivered innovative solutions and lowered costs for customers that are not possible for on-market customers? Please provide any details and any relevant supporting documentation.**

13. **What are the potential impacts, costs and benefits for customers, embedded network operators and other stakeholders of price regulation for bundled services? Please provide any evidence you may have that supports your views, including in relation to positive or negative impacts on equity, innovation and competition.**

We consider that price regulation specifically for bundled services is fundamentally justified to correct a market failure arising from the monopoly provision of these energy services.

While it is technically possible (though practically difficult) for a consumer on an embedded network to seek an on-market electricity offer, it is physically impossible for a consumer to seek a competitive market offer for a centralised building service like hot water, unmetered gas cooktops or heating/cooling. Because consumers cannot choose their infrastructure or their supplier for these bundled services, there is a material risk that unchecked monopoly power allows prices to drift significantly above efficient costs. Therefore, the issue is not whether bundled services should be regulated, but how the cap should be set.

We discuss this issue in more detail under Section 1 of our submission but please see our response to Question 10 for what that capping methodology could be following NSW IPART's approach.

[45] Ibid., 81, 95.
[46] Victorian Embedded Networks Review Expert Panel, Embedded Networks Review – Final Recommendations Report (2022), Recommendation 13, p. 53.
[47] Appendix. Question 16.

14. **Are there any emerging risks, barriers, consumer protection issues, benefits or opportunities for customers in embedded networks arising from new technologies or services (for example, electric vehicle charging)? Please provide details and any evidence you may have, including examples of pricing, billing, access, outages, or dispute resolution issues.**

Other emerging technologies such as electric vehicle charging and flexible trading arrangements could introduce complexity and new risks for consumer harm. For instance, shared vehicle charging infrastructure could create disputes over cost allocation, and secondary settlement points could complicate billing. As flexible trading evolves, the regulatory framework must ensure that a consumer's primary household energy supply is never jeopardised or disconnected due to disputes or technical failures related to secondary household services like electric vehicle charging.

Appendix: Household survey data on embedded network customers in Victoria

We had a look at our most recent Consumer Energy Report Card to understand how some consumers on embedded networks in Victoria are experiencing energy in comparison to their on-market counterparts. The sample size for embedded networks in Victoria is 103 which may not provide exhaustive evidence to suggest that the following findings is representative of all consumers on embedded networks. This data is provided with the intent to provide insight on consumers on embedded network and how they may or may not differ from on-market consumers in Victoria.

- 65 consumers on embedded network and 638 on-market consumers in Victoria self-reported their electricity bill in the Autumn 2026 Consumer Energy Report Card. The self-reported average annual electricity bill for embedded network customers was $1,641 and for on market customers $1,557. However, noting the limited sample size, this difference is not statistically significant.

Figure 1. Victorian consumers on embedded networks are more likely to live in apartments.

	House	Townhouse	Apartment	Other
On-market customer	72%	12%	15%	2%
Embedded network customer	32%	4%	56%	8%

Figure 2. Gas connection in Victorian embedded networks (n=103)

Yes, via delivered gas bottles	Yes, via piped gas	Don't know	No
77	6	3	17

A.12 Is your home currently connected to gas?

Figure 3. Appliance usage in Victorian embedded networks connected to gas network (n = 77)

	Heating	Oven	Cooktop	Water heater
Electricity	56	46	9	32
Gas	17	29	67	31
Don't know	2	2	1	11
Not relevant for me	2	0	0	3

A11 - Our electricity supplier is chosen by our strata or residential management company – it's not something we can choose on , A12 – yes, via piped gas, A13

Figure 3. Embedded network consumers are more likely to be renting than on-market consumers. In Victoria

	Own your home outright	Paying off a mortgage	Renting	Other	Total
On-market customer	280 (33%)	347 (38%)	210 (26%)	18 (2%)	855
Embedded network customer	28 (29%)	27 (27%)	46 (43%)	2 (1%)	103

A.11 - Our electricity supplier is chosen by our strata or residential management company – it's not something we can choose on, A9a. Do you own or rent the home you live in? Removed off-grid/don't know respondents.

Figure 3a. How much do you know about the following things? How your home electricity bill is calculated

	I definitely know this	I have some idea about this, but I'm not sure	I don't know what this is	Total
On-market	246 (27%)	515 (61%)	94 (12%)	855
Embedded network	35 (32%)	56 (54%)	12 (14%)	103

Figure 3b. How much do you know about the following things? What a "retail electricity tariff" is (e.g., flat rate vs. time-of-use tariffs)

	I definitely know this	I don't know what this is	I have some idea about this, but I'm not sure	Total
On-market	211 (23%)	243 (29%)	401 (48%)	855
Embedded network	26 (21%)	40 (43%)	37 (36%)	103

Figure 3b. How much do you know about the following things? Which of your household appliances use the most energy

	I definitely know this	I don't know what this is	I have some idea about this, but I'm not sure	Total
On-market	267 (30%)	101 (14%)	487 (57%)	855
Embedded network	29 (31%)	12 (10%)	62 (59%)	103

Figure 4. Embedded network consumers similarly want a basic relationship with the electricity system to on-market consumers

	ACTIVE RELATIONSHIP (BASIC +)	BASIC RELATIONSHIP	Total
On-market	366 (39%)	489 (60%)	855
Embedded network	36 (36%)	67 (64%)	103

Count of Q16. And which of the following best characterises the type of relationship that you would like to have with Australia's electricity system?

Figure 5. Embedded network consumers are more likely to be either not at all or not very confident (combined 40%) that they're on a competitively priced energy plan than on-market consumers (combined 24%)

	Don't know	Not at all confident	Not very confident	Somewhat confident	Very confident	Total
On-market	26 (3%)	50 (6%)	155 (18%)	469 (55%)	155 (18%)	855
Embedded network	6 (6%)	10 (11%)	28 (29%)	48 (41%)	11 (12%)	103

Count of Q71. How confident are you that you're on a home\business energy plan that is competitively priced?

Figure 6. The types of tariffs that embedded networks consumers have self-reported to be on is similar to on-market consumers

	An Electric Vehicle (EV) plan	Demand tariff	Flat-rate tariff	Time-of-use tariff	Other	Don't know	Total
On-market	22 (2%)	19 (2%)	287 (32%)	268 (31%)	1 (>1%)	258 (32%)	855
Embedded network	1 (1%)	4 (2%)	37 (30%)	24 (25%)	3 (2%)	34 (40%)	103

Count of Q75. What type of electricity tariff or plan do you currently have for your electricity plan?

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