



# Embedded Networks Review

Draft Recommendations Report

June 2021



**Author**

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# Embedded Networks Review

## Draft Recommendations Report

June 2021

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# 1. Introduction

In October 2018, the Victorian Government announced an election commitment to ban embedded networks in new residential apartment buildings, with appropriate exemptions for buildings that use renewable energy microgrids to deliver low-cost renewable energy to apartment blocks.

The Government's election commitment was made in response to ongoing concerns that consumers living in embedded networks pay higher prices and do not have access to the same level of consumer protections as those who live outside of embedded networks.

The Government has appointed an Expert Panel (Panel) to conduct the Embedded Networks Review (Review) and to provide recommendations to the Minister for Energy, Environment and Climate Change (Minister) on how best to implement the Government's election commitment. The Panel comprises Jo Benvenuti, Gerard Brody, Neil Gibbs and Andrea Steele.<sup>1</sup> The Panel is supported by a Secretariat administered by the Department of Environment, Land, Water and Planning (DELWP).

In January 2021, the Panel published the Embedded Networks Review Issues Paper (Issues Paper) setting out some of the key issues identified and seeking feedback from stakeholders. To start off the consultation with stakeholders, the Panel held two online sessions during February 2021 – an Issues Paper Webinar with 87 participants and a Solutions Design Workshop with 37 participants.

During the consultation, the Panel also received 133 submissions from a wide range of stakeholders, including embedded network customers, consumer representatives, embedded network providers, energy retailers and distributors, market bodies and industry groups.

The Issues Paper and submissions are available on the Engage Victoria website. A summary of the submissions and how the feedback has been incorporated into the development of the Panel's draft Recommendations is provided at Appendix 2.

This Draft Recommendations Report (Draft Report) outlines the Panel's draft Recommendations to implement the ban.

The Panel considered stakeholder feedback to develop a proposed approach that seeks to retain the consumer benefits of living in a embedded network (for example through bulk purchasing and reduced energy costs associated with clean energy technologies), while making sure consumers are adequately protected and have actual rather than theoretical retail market access.

This will ensure that, to the fullest extent practicable, all Victorian energy consumers will have access to the same competitive retail offers and consumer protections, regardless of where they live.

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<sup>1</sup> The biographies for each of the Panel members are provided at Appendix 1.

## 1.1 Terminology used in this Draft Report

Throughout this Draft Report, we have used some phrasing or terminology for ease of reference. We have explained below how we have used these terms.

In addition, a glossary of other commonly used terms is available at Appendix 3.

### **Embedded networks and private networks**

The Panel refers to 'embedded networks' and 'private networks' throughout this document.

For the purposes of the Review and the Recommendations, an embedded network is an existing network that was built before the Recommendations are implemented and/or take effect.

Once the Recommendations are implemented and/or take effect and the Essential Services Commission (ESC) has granted an applicant an exemption or a 'Local Energy Service' (LES) licence,<sup>2</sup> new and existing networks will be referred to as 'private networks'. The obligations which fall on an LES licence-holder under the proposed framework are distinctly different to those which fall to an embedded network under the current regulatory framework.

### **Renewable energy and clean energy**

Throughout this document, the Panel refers to 'renewable or clean energy' and/or 'renewable or clean energy technologies'.

For the purposes of the Review and Recommendations, these terms are used to describe renewable or clean energy options or technologies that help with carbon emission reduction in line with Victorian Government policy.

The terminology is intended to cover various options available in the context of delivering emission reduction, examples of which include, but are not limited to, renewable energy such as solar photovoltaics (PV), microgrids, energy storage and battery energy systems, energy efficiency, demand management and smart systems, and/or enabling the purchase of energy derived from renewable sources from the market.

It is also intended that these terms are technology neutral, in line with the principles underpinning the Review to enable future-proofing of the system. The Panel's intent is that future innovative technologies, business models which deliver access to renewable technologies, and/or other clean energy options will also be enabled under the changes proposed by the Recommendations.

## 1.2 Helping you read this Draft Report

This Draft Report has been structured to outline the Panel's task, namely to provide Recommendations to the Minister on how to implement the ban, and how the Panel has approached that task. The Draft Report sets out the scope of the Review, the Panel's Terms of Reference and principles the Panel has established to guide the Review.

The Panel has then set out its vision for the future, and a summary table of its Recommendations. Following that, the Draft Report is structured broadly by topic, with the topics aligned to the Terms of Reference and outputs expected of the Panel.

Under each topic, there is an exploration of the issues and reasons behind the proposed Recommendations, the relevant Recommendation/s for that topic and the Panel's suggested implementation strategy or approach for the Recommendation/s. Under the implementation strategy for each Recommendation, there is a section outlining the feedback sought by the Panel for that Recommendation or topic.

The Panel is interested in receiving feedback from a cross-section of stakeholders, and all feedback is welcome. However, there are some topics where the Panel would like to receive feedback about specific issues. Statements outlining the specific feedback sought are included under the relevant sections.

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<sup>2</sup> A proposed new licence category for private network providers, which is discussed in more detail in the Panel's Vision (p 10) and Recommendations 3 and 4. To be eligible to apply for an LES licence, private networks will have to meet conditions relating to renewable or clean energy.

## 1.3 Scope of the Review

Under the Terms of Reference, the core focus of the Panel is to provide Recommendations to the Minister on how to implement a ban on embedded networks in residential apartment blocks, with appropriate exemptions for renewable energy microgrids that deliver low-cost renewable energy.<sup>3</sup>

In doing so, the Panel must consider how such a ban would intersect with legacy (existing) embedded networks in residential apartment blocks, including options for retrofitting or removing existing infrastructure if appropriate.

The Panel is also tasked with providing Recommendations on how to ensure that, to the fullest extent practicable, embedded network customers in legacy (existing) residential settings can access the same competitive retail offers and consumer protections as on-market customers.<sup>4</sup>

### **Renewable energy and/or other clean energy technologies, beyond ‘microgrids’**

Under its Terms of Reference, the Panel has been tasked with recommending appropriate exemptions to the ban on embedded networks for ‘renewable energy microgrids’ that deliver low-cost renewable energy to new residential buildings.<sup>5</sup>

The exemption seeks to drive government commitments to encourage renewable energy uptake and wider technology innovations as a key pillar of Victoria’s approach to carbon emissions reduction. The exemption also aligns with the government’s commitment to reduce power prices and to ensure the cost benefits of renewable energy are passed onto consumers.

The Panel considers that the term ‘renewable energy microgrid’ was intended to capture the types of renewable generation technology that the government wishes to incentivise as part of its broader policy to promote renewable energy generation and uptake. Moreover, the Panel’s stakeholder consultation in February this year demonstrated that a ‘microgrid’ is a contested term, with a range of views and definitions<sup>6</sup> around the types of technology and functionality it encompasses.

As a result, the Panel has taken a more expansive interpretation and approach, and has considered how renewable or clean energy requirements, including but not limited to microgrids, can be incorporated into requirements for private networks moving forward as a mechanism to pass on benefits to consumers in addition to encouraging renewable energy generation and uptake.

By including renewable and clean energy technology requirements as part of its proposal, the Panel has developed Recommendations which address the underlying policy intent within its Terms of Reference – to support renewable energy uptake to reduce emissions and ensure the benefits associated with innovative renewable or clean energy technologies are passed onto consumers – without the need for a specific exemption for, or potentially restrictive definition of, microgrids.

In addition to the core Recommendations, the Panel has also been asked to provide advice on:

- an exemptions pathway for innovative new technologies including in the form of microgrids;
- the expected impacts of the Panel’s Recommendations;
- actions for regulators, particularly in relation to compliance and enforcement; and
- an appropriate transition process.

The Terms of Reference ask the Panel to consider additional matters as part of the Review. Although the Panel is not required to make specific recommendations on these matters, they may draw any significant issues to the Minister’s attention for future consideration.

Table 1 outlines the key aspects related to the scope of this Review.

<sup>3</sup> The Terms of Reference for the Review are at Appendix 4.

<sup>4</sup> ‘On-market’ or ‘standard’ customers are those customers who are connected directly to the grid and not part of an embedded network. Under the current framework, they are supplied electricity from a licensed distributor and sold electricity from a licensed retailer.

<sup>5</sup> In addition to the exemption for ‘renewable energy microgrids’, the Terms of Reference also require the Panel to advise how exemptions to the ban may allow for innovative new technologies or new/existing applications and other appropriate uses of embedded electricity networks. As well potentially encouraging renewable energy uptake, the Panel is conscious that when used appropriately, embedded electricity networks can bring benefits to consumers, for example where bulk purchasing can result in lower prices in a social housing or retirement village setting.

<sup>6</sup> Significantly, the most common interpretation defines a microgrid as being able to deliver service to customers even when ‘islanded’ (disconnected) from the grid. In many situations, this will be very costly for consumers in private networks and may be counter-productive as the most cost-effective way to deliver a service which can be ‘islanded’ can involve the use of fossil fuels, such as diesel generators.

**Table 1: Key outputs and considerations of the Review**

Key outputs and considerations	
Primary outputs	How to implement a ban on embedded networks in new residential apartment blocks, including appropriate exemptions to the ban for buildings that use renewable energy microgrids to deliver low-cost renewable energy to apartment blocks
	How such a ban would intersect with legacy embedded networks in residential apartment blocks, including options for retrofitting or removing existing embedded network infrastructure if appropriate
	How to ensure that, to the fullest extent practicable, Victorian consumers in residential embedded networks can access the same competitive retail offers and consumer protections as other consumers. This includes consideration of frameworks for electricity, gas and any other embedded networks
Secondary outputs	How exemptions to the ban may allow for innovative new technologies or new/existing applications and other appropriate uses of embedded electricity networks
	Recommended actions for regulators, particularly in relation to compliance and enforcement
	Expected impacts of the Panel's recommendations and the expected impacts of any of the Panel's non-preferred options
	Steps to implementation, including the timing and sequencing of recommended changes
Considerations	Where the Panel recommends more than one potential option, to specify its preferred recommendation
	Any amendments necessary to ensure that Retailer of Last Resort arrangements extend to embedded network customers
	Infrastructure and contractual barriers/opportunities to retrofit or remove legacy embedded networks
	Current regulatory regimes and enforcement options and their effectiveness
	Outcomes of government reviews on embedded networks, including from DELWP, the Essential Services Commission and the Australian Energy Market Commission
	The interaction of the Panel's recommendations with the national energy framework and relevant building and planning legislation
	The interaction of the Panel's recommendations with reforms related to the Victorian Government's Energy Fairness Plan
	Current embedded network retail offerings, in order to identify innovations, competitive pricing practices and the costs faced by embedded network customers, perhaps by using case studies

## 1.4 Principles to guide the Review

The Panel has developed four agreed principles to guide the Review and its Recommendations to the Minister:

- **Place benefits to consumers at the centre**, so that the Review is driven by the needs of consumers, particularly those consumers experiencing vulnerability or disadvantage, and not the business model of suppliers and other interested parties.
- **Prioritise equitable pricing outcomes and consumer protections**, where residential embedded network consumers can access the same competitive retail offers and consumer protections as other Victorian electricity consumers.
- **Future-proof the design of the system** to ensure access to the energy options of today and tomorrow (such as solar photovoltaics (PV), renewable microgrids, energy storage, electric vehicles, demand response and other markets).
- **Ensure that Victoria's regulatory framework will mirror or enhance the national standards** for embedded networks. The Panel's Recommendations will consider whether the Australian Energy Market Commission (AEMC)'s proposed amendments to the national regulatory framework for embedded networks are appropriate for Victoria.<sup>7</sup>

These principles aim to ensure that implementing the Government's commitment does not inadvertently create barriers to residential embedded networks or technologies that deliver benefits to consumers.

## 1.5 Purpose of the Draft Report

The purpose of this Draft Report is to provide stakeholders with a clear understanding of how the Panel considers the Government's election commitment can be delivered and outcomes for embedded network customers can be improved.

The Panel is interested in receiving comments about all or any of the Recommendations, and whether the Recommendations address issues of concern for stakeholders.

The Panel's position is not yet final, and the Panel encourages stakeholder submissions responding to the proposed Recommendations. The Panel would also like to receive information or supporting evidence if stakeholders consider alternative courses of action are more appropriate or justified.

In particular, the Panel is interested in receiving feedback about:

- The proposed requirement to have renewable or clean energy technologies and what this might look like in new residential private networks<sup>8</sup>
- The most cost-effective approach to upgrading internal metering and associated infrastructure in legacy (existing) embedded networks to readily enable a transition for customers to an on-market retailer of their choice
- Reasonable timeframes for upgrading metering and/or internal infrastructure in legacy (existing) embedded networks, and
- Reasonable timelines for industry to transition to the new regulatory arrangements.

The Panel has included specific issues it would like to receive feedback on from stakeholders throughout the Draft Report.

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<sup>7</sup> A summary of how the Panel's proposed Recommendations intersect with the AEMC's recommendations is available at Appendix 5. The Panel has considered and will continue to explore potential linkages with related reforms at the national level, such as the AEMC's recommendations and the Australian Energy Regulator's *Retail Exempt Selling Guidelines review*. See also Australian Energy Regulator (AER), *Updating the Retail and Network and Exemption Guidelines*, Consultation Paper, 2021. <https://www.aer.gov.au/retail-markets/guidelines-reviews/retail-exempt-selling-guideline-review-2021/initiation>.

<sup>8</sup> The phrase "residential private network" has been used in these Recommendations to describe a set up where the site is connected to the electricity grid via a parent meter, and beyond the parent meter there are child meters to separately measure the electricity used by individual apartments or dwellings within the site.

There will also be questionnaires available on the Engage Victoria website where you can provide your comments on the Draft Report. You can do this by completing a questionnaire sharing your feedback in relation to specific questions relating to the Recommendations.

Alternatively, you can make a submission in your own words, rather than responding to the questionnaires.

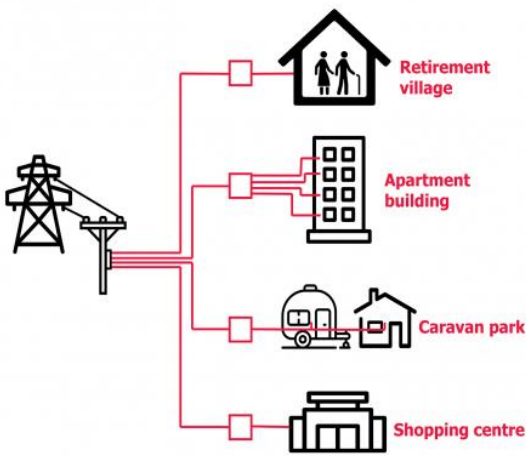
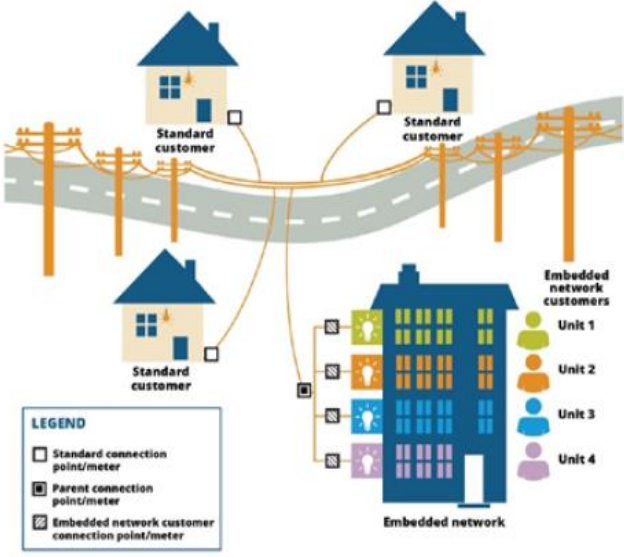
The Panel will consider all stakeholder views when finalising the Recommendations in late-2021.

# 2. The current embedded network landscape

## 2.1 What is an embedded network?

Embedded networks are private electricity networks that serve multiple customer premises (or lots) within a building or self-contained site. Generally, embedded networks are established via a parent meter connection to the electricity grid, with child meters measuring the consumption for individual residences (or shops in a commercial setting) internally within the embedded network.

They are common in multiple occupancy developments, such as apartment blocks, retirement villages, social housing, caravan parks and shopping centres.

<p><b>Figure 1 Types of embedded networks</b></p>	<p><b>Figure 2 Comparison of standard supply arrangements and embedded networks</b></p>
	
<p>Source: ESC Maximum prices for embedded networks<sup>9</sup></p>	<p>Source: AEMC Updating the regulatory frameworks for embedded networks Final Report<sup>10</sup></p>

Embedded networks operate in a unique space from the regulatory perspective.

In Victoria, a party that supplies and/or sells electricity to customers in embedded networks is often called an ‘exempt person’, because it is exempt from the normal requirement under section 16 of the *Electricity Industry Act 2000* (EIA) to hold a licence to sell, supply or distribute electricity.

The activities that are exempt from the requirement to hold a licence under the EIA are set out in the *General Exemption Order 2017* (GEO).<sup>11</sup>

<sup>9</sup> Essential Services Commission (ESC), Maximum electricity prices for embedded networks and other exempt sellers review 2020, 2020. <https://www.esc.vic.gov.au/electricity-and-gas/prices-tariffs-and-benchmarks/embedded-network-tariffs-including-caravan-parks/maximum-electricity-prices-embedded-networks-and-other-exempt-sellers-review-2020>

<sup>10</sup> Australian Energy Market Commission (AEMC), *Updating the regulatory frameworks for embedded networks, Final Report*, 2019, p 11. <https://www.aemc.gov.au/sites/default/files/2019-06/Updating%20the%20regulatory%20frameworks%20for%20embedded%20networks%20-%20FINAL%20REPORT.PDF>

<sup>11</sup> The current GEO is dated 15 November 2017 and was made under s 17 of the EIA, which enables the Governor-in-Council to create an Order specifying conditions for an exemption from the requirement to obtain a licence.

The GEO has three broad categories of exemptions:

- retail exemptions
- distribution exemptions
- generation and multiple activity exemptions.

While persons covered by the GEO may be exempt from the legal requirement to hold a licence, this does not mean that they are exempt from regulation.<sup>12</sup>

When the GEO was originally established, it was designed to cover the incidental sale and supply of electricity where this was not the core business of the person or entity selling or supplying that electricity. At that time, there were not many consumers living within embedded networks.

Due to the absence of clear and transparent information about embedded networks generally, it is difficult to establish actual numbers of embedded network sites or affected consumers. However, it is known that the nature of housing in Victoria has changed over time, with an increasing number of people living in multiple occupancy developments such as apartment buildings and retirement villages. As a result, as at March 2021, more than 131,000 consumers<sup>13</sup> reside in over 1,500 embedded network sites registered with the ESC.<sup>14</sup> It is clear the sector has matured with many operators now selling and supplying electricity and/or other services into these embedded networks as their primary business.

The Panel acknowledges there are differences in the physical infrastructure in an embedded network compared to a standard grid-connection, and this can sometimes mean that obligations applicable to standard licensed retailers or distributors are not appropriate for embedded networks (for example, marketing protections).

Despite these differences, the Victorian Government is committed to improving outcomes for consumers living in embedded networks. Recent policy and regulatory improvements for residents of embedded networks include setting the Victorian Default Offer (VDO) as the maximum price cap and providing most embedded network customers with access to free and independent dispute resolution via the Energy and Water Ombudsman (Victoria) (EWOV).

For further information on how an embedded network is configured and the key development phases in the lifecycle of an embedded network, please refer to the [Issues Paper](#).

## 2.2 Stakeholder views on embedded networks

To date, the Panel has gathered evidence suggesting that there have been varying experiences and outcomes delivered to consumers living in embedded networks.

Stakeholder submissions from the Issues Paper consultation suggest that whilst embedded networks have the potential to deliver benefits to consumers, these benefits are not always adequately or fairly passed on to consumers in practice.

The Panel received 88 submissions on the Issues Paper from embedded network customers. Most of these submissions (84%) expressed a high level of distress and frustration about living in an embedded network. Many consumers mentioned feeling trapped in what they variously described as an 'anti-competitive', 'anti-consumer', 'unethical' and 'monopolistic' arrangement where they are forced to pay high energy rates with no say or input.

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<sup>12</sup> For details on a range of obligations on exempt persons, see ESC, *Embedded Electricity Networks: Exempt Providers' Obligations in Victoria (Commission Guidance)*.

<sup>13</sup> According to the ESC, as at March 2021, 131,000 consumers are being billed by embedded networks, while over 142,000 consumers are supplied by embedded networks. However, the actual number of consumers who are billed and supplied by embedded networks is likely to be higher because not all embedded networks are required to be registered. Therefore, the ESC data is only an indication of the total number of embedded network customers.

<sup>14</sup> ESC, Embedded electricity network data and customer numbers, 2021. <https://www.esc.vic.gov.au/electricity-and-gas/licences-and-exemptions/electricity-licensing-exemptions/embedded-electricity-network-data-and-customer-numbers>

Some consumers expressed a strong desire to choose a retailer based on economic (price), environmental and/or ethical reasons. However, practical barriers to changing retailers, for example costs for meter upgrades, particularly for renters, meant that they were unable to do so.

Another cause of frustration for many consumers was the lack of information disclosure, such as not being told that an embedded network existed at the time of purchasing or leasing a property<sup>15</sup>. Others also raised concerns about a history of poor customer service and unsatisfactory dispute resolution outcomes.

A small proportion of the consumers who made a submission to the Issues Paper were supportive of embedded networks. These stakeholders were generally consumers who lived in embedded networks that were passing the benefits of bulk purchasing and clean energy technologies on to lot-owners and tenants.

Embedded network operators who made submissions to the Issues Paper and attended the online forums highlighted similar benefits. In particular, social housing operators who supply and sell electricity to their tenants through an embedded network noted this very important part of their infrastructure provides significant benefits to their tenants, who would otherwise forego these benefits if embedded networks were banned entirely.

Similarly, local government noted the benefits of embedded networks in enabling the uptake of renewable energy at both the local and precinct scale.

There was significant support for the implementation of a ban of embedded networks from a range of stakeholders, with most also advocating that consumer protections should be extended to embedded network customers.

Some stakeholders, including some embedded network operators, suggested that moving to a licensing regime for embedded networks, broadly consistent with the AEMC approach, may be the most efficient way of ensuring embedded network customers have access to the full suite of consumer protections. Others, however, suggested that moving to a licensing framework would be undesirable for consumers as it takes control away from site owners, occupiers and operators and gives it to the license holder.

A more detailed summary of the submissions and how the feedback has been incorporated into the development of the Panel's draft Recommendations is provided at Appendix 2.

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<sup>15</sup> Since consultation closed on 26 February, there have been changes to tenancy laws which now require tenants to be advised of the existence of an embedded network.

### 3. The Panel's vision

As energy is an essential service, consumers should have equal protections, market access and treatment no matter where they live or how they get their energy services.

Well-managed private networks have the potential to generate a range of benefits for customers. From bulk purchasing of energy, access to commercial network tariffs (rather than residential network tariffs)<sup>16</sup> through to investment in on-site renewable energy and other clean energy technologies, private networks can be operated in a way that provides real cost savings and other benefits to their customers.

However, evidence gathered during the consultation process in response to the Issues Paper suggests that a significant number of embedded networks are not passing the benefits onto their customers. In addition, the way the exemptions framework currently operates means embedded network customers do not have access to the same consumer protections as on-market customers.

Moreover, embedded networks have not been subject to the same type of monitoring and oversight as other energy providers because they fall outside of Victoria's energy licensing framework for the supply or sale of electricity and gas. Therefore, it has not been possible for the ESC to take tailored and proportionate enforcement action, such as applying penalties, for breaches of the GEO.

Current regulatory requirements for embedded networks, including the conditions of the GEO, are not as extensive as those applicable to on-market customers. The lack of regulatory oversight and monitoring has also resulted in unequal treatment of embedded network customers when compared to on-market customers in Victoria and shows a limitation in the operating environment for embedded networks. Stakeholders are calling for this to be addressed.

Consequently, to give effect to the Victorian Government's election commitment, the Panel is proposing to ban embedded networks in new residential apartment buildings initially by amending the GEO to introduce a stronger regulatory regime. This will ensure that, in the future, these private networks are established in a way that delivers the benefits of enhanced consumer protections consistently and transparently.

In addition, the GEO amendments should enable renewable or clean energy options in line with Victorian Government policy, and choice of a competitive on-market electricity retailer if customers no longer wish to purchase their electricity from the private network operator. The Panel also recommends a mechanism be established to ensure the benefits are demonstrably shared with consumers in a private network on a regular basis.

While the Panel is proposing that this stronger regulatory regime should initially be implemented via changes to the GEO, the ultimate solution proposed by the Panel is to transition to a licensing regime for private networks.

Given electricity is an essential service, the Panel considers it is appropriate for the sale and supply of energy within these settings to be brought into the licensing framework. Bringing these types of operators within the licensing framework will ensure equity and fairness for all consumers, no matter where they live or how they get their energy.

Proposing a staged approach that moves from an exempt person having to meet tighter conditions under a revised GEO to a new licensing category acknowledges the transition time operators will likely need to comply with new regulatory requirements.

#### **Banning embedded networks initially through changes to the GEO**

To deliver the overarching election commitment of banning embedded networks in new residential apartment buildings, the Panel is proposing to amend the GEO as an initial step, so embedded networks as they currently exist will no longer be allowed.

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<sup>16</sup> Commercial tariffs are often cheaper than residential tariffs, although this is not always the case as some commercial tariffs have a demand component which can be expensive.

Instead, to be able to meet the obligations under a revised GEO, all residential private networks will need to have renewable energy or other clean energy technologies that will deliver carbon emission reductions in line with Victorian Government policy, and to comply with the enhanced consumer protections. Revising the GEO can be done without amending legislation, making it a much faster process.

Operators of private networks will also be required to show how benefits arising from the renewable energy generation or other clean energy technologies within the private network<sup>17</sup> are passed on to consumers. Private networks that do not have renewable or other clean energy technologies and/or cannot show how the benefits from these are passed on to consumers within the site will no longer be allowed to sell or supply electricity under the revised GEO.<sup>18</sup> Continuing to do so would be an unlawful activity under the EIA, with the parties involved subject to the penalties for the illegal sale and distribution of electricity.

It is vital that operators who are selling or supplying electricity in these private networks are adequately equipped to provide this essential service. Therefore, entities which sell or supply electricity in private networks will be required to apply to the ESC for approval to sell electricity under the GEO. The approvals process will require operators to satisfy a range of criteria for the ESC, including the new renewable and/or other clean energy technologies obligations.

There will be some conditions in the revised GEO, such as those providing additional consumer protections, with which all private networks will need to comply. As part of the approvals process, they will also need to show the ESC how the obligations are being met.

However, the timing for renewable or clean energy obligations to apply will be different for new and legacy (existing) sites. For sites where construction has commenced after the new requirements relating to renewable or clean energy technologies have come into effect, the criteria will need to be met immediately. The Panel acknowledges that there are likely to be challenges in retrofitting some older sites, so these legacy (existing) sites will need to meet the new renewable or clean energy obligations within three years of being granted an exemption.

### **Phased transition into a licensing regime**

In the longer term, the Panel recommends that the government replace much of the GEO with an expanded fit-for-purpose licensing framework. As a result, an entity which supplies and sells energy in a private network will be required to have a 'Local Energy Service' (LES) licence.

This will be a new category of licence administered by the ESC. Under the proposed licensing regime, LES providers will supply and sell electricity at sites in a way that fosters renewable energy uptake or other clean energy technologies where the benefits must be passed on to customers. This will need to be demonstrated to the ESC.

This goes beyond the simple exemption for microgrids that was flagged in the election commitment, in order to incentivise clean energy innovation and future-proof the system regardless of whether the technology at the site can be considered a microgrid.

The Panel understands that this is likely to have a significant impact on the market, with a smaller number of large LES providers supplying and selling electricity in private networks, rather than the large number of smaller exempt entities currently operating in the market.

The Panel's vision is that over time, there will be a new future market of competitive businesses licensed as LES providers that supply and sell electricity at sites in a way that fosters renewable or clean energy technologies to help with carbon emission reduction in line with Victorian Government policy.

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<sup>17</sup> For example, reduced energy costs due to on-site renewable energy generation, energy storage, demand management and/or energy management technologies.

<sup>18</sup> The Panel acknowledges that it may not be suitable for renewable or clean energy technologies to be retrofitted at some legacy (existing) sites. However, the intention is that private networks will be able to comply with the new renewable or clean energy requirements by providing market sourced renewable energy options to the customers within those sites. Alternatively, the site could remove the private network and change to individual dwellings directly connected to the grid.

## Other protections and market access

Once the new licensing framework is in place, Victorian consumers will have equal or equivalent protections as specified by the ESC, no matter where they live or how they get their energy, as all residential consumers will be sold or supplied energy via a licensed energy provider.

However, until the licensing regime is in place, the Panel recommends that the GEO be strengthened to ensure that all embedded network customers have access to equal or equivalent protections and benefits as on-market customers. For example, consumers should have access to relevant family violence, disconnection and life support protections under the GEO.

The Victorian Government has also committed under its Energy Fairness Plan to strengthen the ESC's powers and to overhaul and significantly increase penalties, so that companies that do the wrong thing face the consequences of their actions. As part of this, the ESC will have wide-ranging powers to monitor and report on the competitiveness and efficiency of the Victorian retail energy market and clearer investigative powers, ensuring it can monitor and appropriately penalise operators for non-compliance with the GEO, ultimately benefiting customers within private networks.

Under the strengthened GEO and the new licensing framework, all residential private network customers will have access to an independent dispute resolution body (EWOV). These consumers will also be able to access energy concessions at the time of paying their bills.

The Panel believes that equity and fairness go beyond access to consumer protections. Therefore, the Panel has made recommendations that will improve consumer outcomes. For example, many submissions noted that while in theory, all Victorian consumers can choose who they buy their electricity from, in practice, this is not the reality for consumers who live in embedded networks.

The technical barriers around metering infrastructure and practical barriers around billing mean that it is very difficult, if not impossible, for these consumers to have access to the competitive retail electricity market. There is also limited oversight of compliance with metering requirements, and exempt persons do not have the same obligations to ensure accuracy of meters or metering data. This means the accuracy of data used to bill customers could be brought into question.

Therefore, the Panel is recommending changes that will make it easier for consumers to choose their own energy retailer if they desire. Similarly, the Panel is recommending that there be more oversight and requirements for anyone supplying energy to ensure the meters and internal infrastructure meet relevant standards and the data used to bill customers is accurate.

The Panel is also recommending changes to the way decisions are made about the installation of a private network before a site is constructed, as well as improvements to the information transparency requirements so that consumers are aware when the site they're considering moving to is part of a private network.

A case study is included below to illustrate the Panel's vision for future private networks. The Panel's Recommendations are set out in Table 2 below, with each Recommendation explored further in the report.

The Panel understands that there will be impacts from their Recommendations, including additional regulatory requirements for industry to accommodate the proposed enhanced consumer protections and retail market access for customers. In drafting the Recommendations, the Panel has tried to balance various and sometimes competing interests, while keeping the principles guiding the Review firmly in mind.

The Panel believes that these Recommendations, once implemented, will lead to more positive outcomes for all Victorians living in private networks.

### **Case study 1: The Panel's vision for LES customers**

It is 2028, and Joanna has recently moved into a new apartment with assistance from a community housing provider, after years of experiencing bouts of homelessness and a lack of access to affordable housing. Her apartment complex has solar panels on the roof and battery storage in the basement.

Joanna received her first energy bill and was pleased to learn that concessions had been applied and bill repayments would be made automatically via Centrepay, along with her rent. Joanna was also able to easily see from her bill that she'd received clean energy benefits from the solar panels and battery storage in her apartment building. Not only was there a reduction in the amount she had to pay, she could feel satisfied that she was contributing to lower carbon emissions by getting her energy from renewable sources.

Joanna's new energy provider was very different to her previous one, as it was a new class of energy provider called a 'Local Energy Service' (LES). Within the last 5 years, LES providers had become popular, particularly for people living in apartments. An LES site enabled residents to take advantage of reduced energy prices through bulk purchasing and clean energy technologies, whilst the site remained connected to the local distribution network service provider. There were different LES providers offering different options – some ensured all buildings offered solar, others focused on the most efficient building materials and most took advantage of affordable renewable technology offerings.

To ensure a safe and efficient supply of electricity and as a condition for providing an essential service, an LES is required to obtain a licence from the ESC. This means that all the consumer protections applicable to on-market retailers also apply to LES customers. LES providers must also ensure that benefits from clean energy technologies and bulk purchasing flow on to customers. Whilst Joanna is satisfied with her current LES, she takes satisfaction in the knowledge that she can switch electricity retailer at any time if she wants to do so.

## 4. Summary of the Panel's Recommendations

The Panel's Recommendations are presented here. Each Recommendation is further explored in the body of this Draft Report, along with a discussion of considerations for implementing each of the Recommendations.

Appendix 6 outlines how the recommendations relate to the Terms of Reference and how each will be applied to legacy (existing) embedded networks and new private networks.

**Table 2: The Panel's draft Recommendations**

The Panel's draft recommendations	
<b>Recommendation 1</b>	Initially, the Victorian Government's commitment to ban embedded networks in new apartment buildings (allowing appropriate exemptions) should be implemented via amendments to the General Exemption Order (GEO).
<b>Recommendation 2</b>	Residential exemptions under the revised GEO should no longer be "automatic". Instead, there should be an exemptions approval process administered and regulated by the Essential Services Commission (ESC).
<b>Recommendation 3</b>	<p>To give longer-term effect to the ban and to ensure equity and fairness for customers, the licensing framework under the <i>Electricity Industry Act 2000</i> (EIA) should be amended to enable licensing of 'Local Energy Service' (LES) providers for private networks.</p> <p>Once the new licensing framework is in place, anyone who supplies and/or sells electricity in new residential sites containing a private network (including apartment buildings, social housing, retirement villages and residential parks) must obtain a specific LES licence from the ESC.</p>
<b>Recommendation 4</b>	Entities which currently sell or supply electricity pursuant to an exemption under the GEO should be transitioned into the LES licensing framework.
<b>Recommendation 5</b>	In the future, if the Victorian Government undertakes a broader licensing framework review, it should consider the intersection of these Recommendations with that review, and further, whether the exemptions framework remains fit for purpose.
<b>Recommendation 6</b>	Once the GEO amendments are given effect as specified in Recommendations 1 and 2, consumers living in all types of residential private networks (including those living in social housing, retirement villages and residential parks) should have access to equal or equivalent consumer protections as on-market customers.
<b>Recommendation 7</b>	The monitoring, compliance and enforcement framework for private networks should be robust and proportionate and aligned with the ESC's framework and approach for current licensed energy providers.
<b>Recommendation 8</b>	All private network customers should have access to the energy retail market and it should be easy for them to transfer to an on-market energy retailer. Customers within a private network should not face a greater financial or administrative burden to change retailers than other Victorian customers.
<b>Recommendation 9</b>	<p>Customers within legacy (existing) private networks should not remain stranded within a private network indefinitely.</p> <p>To support the implementation of Recommendation 4, over time, metering and/or other internal infrastructure in legacy (existing) embedded networks should be upgraded and/or changed to enable these customers to access the retail market without imposing a cost burden on customers to do so.</p>

<b>Recommendation 10</b>	<p>Owners and occupants in residential private networks must be provided with adequate information about their rights and obligations as a customer within a private network and about commercial agreements relating to the private network infrastructure and ownership and management of these assets.</p> <p>Adequate information disclosure should be required under both the GEO and as part of the LES licensing regime.</p>
<b>Recommendation 11</b>	<p>Planning, building and strata requirements should be amended to oblige anyone proposing to install relevant infrastructure associated with the supply and/or sale of electricity within a residential building via a private network to design, build and operate the private network to incorporate renewable or other clean energy technologies which enable benefits to be passed on to customers. Information, especially relating to infrastructure assets, must also be disclosed to prospective purchasers.</p>
<b>Recommendation 12</b>	<p>Planning, building and strata requirements should also be amended to oblige anyone proposing to supply other bundled services within a residential building/site (including bulk hot-water, bulk heating/cooling or unmetered gas for cooktops) to meet similar standards to design, construct, establish and operate those services in the best interests of prospective owners and occupants, and to disclose appropriate information.</p>
<b>Recommendation 13</b>	<p>There should be appropriate regulation, monitoring and enforcement relating to currently unregulated bundled services (including bulk hot-water, bulk heating/cooling and unmetered gas cooktops) to ensure there is no longer secondary, separate treatment for consumers of these essential services.</p>
<b>Recommendation 14</b>	<p>Customers in a private network should be adequately protected in the event that the private network fails or the entity operating or responsible for the private network becomes insolvent.</p> <p>The Victorian Government should give the ESC power to appoint an alternative provider to operate the private network in this situation to ensure continuity of supply for customers within that private network.</p>
<b>Recommendation 15</b>	<p>A mechanism (or mechanisms) should be established to ensure that the voices of consumers living in apartment buildings, retirement villages, social housing and residential parks are heard in policy and regulatory development.</p>
<b>Recommendation 16</b>	<p>The changes to the GEO and the new LES licensing regime will need to be phased in over time.</p>

## 5. Banning embedded networks

The Panel considers that the ban on embedded networks in new apartment buildings (with appropriate exemptions) can be implemented in a staged approach:

- initially through amendments to the GEO, requiring existing exempt persons and new private networks who rely on the GEO to sell and/or supply electricity to apply to the ESC for exemption approval (mid-2022 to late-2023)
- giving longer-term effect to the ban by expanding the licensing framework under the EIA with a new licensing category for LES providers (from late-2023).

Although moving immediately to a new licensing framework is the Panel's preferred approach to implementing the ban, this would require legislative amendment and will take some time to implement. Conversely, the GEO can be amended comparatively quickly, meaning consumers living in residential private networks will begin experiencing many of the benefits of the new framework much sooner than if they had to wait for their provider to become licensed.

The Panel is conscious of the potential impact of these Recommendations on the sector and the obligation to balance that against the needs of consumers. This staged approach includes substantial lead times to allow industry, including embedded network operators and developers, the opportunity to amend their business models and prepare for the new regime before it comes into effect. It also takes embedded network consumers' needs into consideration, allowing them to receive the same protections as on-market consumers as soon as practicable.

This section provides an overview of the Panel's Recommendations for implementing the ban on embedded networks and how it will be applied to new apartment buildings and other types of private networks.

### 5.1 Banning embedded networks (Recommendations 1 and 2)

The Panel recommends that the Victorian Government should ban embedded networks in new residential apartment buildings and other residential settings through amendments to the GEO.

When implementing this recommendation, the government should ensure that the GEO amendments require all new sites with a residential private network, including apartment buildings, social housing, retirement villages and residential parks,<sup>19</sup> to meet certain criteria. This amendment means embedded networks as previously established or known will no longer be permitted in new sites.

For example, to give effect to the renewable energy aspect of the election commitment, private networks should have to demonstrate that the site has renewable or other clean energy technologies that drive carbon emission reduction in line with Victorian Government policy. This might include renewable energy generation, energy storage, demand management and energy efficiency technologies. They should also be required to demonstrate how benefits within the private network derived from, for example bulk purchasing or the installation of renewable and other clean energy technologies, are passed on regularly<sup>20</sup> to consumers within that site.

Currently, most embedded networks can access the exemption framework automatically, and self-assess whether they meet the exemption criteria required by the GEO. For many sites there is a requirement to register with the ESC, however, there is limited capacity for the ESC to monitor or enforce compliance with the GEO requirements (for example the requirement to become an EWOV member).<sup>21</sup>

The Panel considers it vital that operators who are selling or supplying electricity in these private networks are adequately equipped to provide this essential service. Therefore, as outlined in Recommendation 2, it is

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<sup>19</sup> The term "residential parks" has been used in this report to describe caravan parks with long term residents, consistent with the meaning of a Part 4A Park in the *Residential Tenancies Act 1997*, as distinct from short stay holiday rental accommodation at caravan parks.

<sup>20</sup> It is intended that benefits noted under this and other Recommendations would be passed at regular intervals to customers, for example at each billing period.

<sup>21</sup> Under the current regime, the ESC cannot impose any penalties for non-compliance by embedded networks. The only enforcement measure available to the ESC is to deregister the embedded network and pursue them for a breach of the EIA. However, this may lead to issues for customers within the embedded network relating to certainty of supply.

recommended that self-assessed ‘automatic’ exemptions under the GEO be replaced with an approval process overseen by the ESC as a transitional measure to enable improved monitoring and oversight of the sector.

The Panel is of the view that legacy (existing) embedded networks that sell and/or supply electricity should also be required to comply with similar obligations as new residential private networks will be required to meet. This includes the requirement to regularly pass on the benefits from renewable or other clean energy technologies to consumers within the private network. The Panel recognises that this may not be immediately possible in legacy (existing) embedded networks. Therefore, it is recommended that legacy (existing) embedded networks be given 12-months to apply for an exemption from the ESC but three years to comply with the obligation to pass on the benefits from renewable or other clean energy technologies to their customers.

The Panel understands that some sites already operate in a way that is similar to, or aligned with, the Recommendations.

**An example of retrofitting an embedded network – Nightingale Housing**

At The Commons, a Nightingale site with 24 apartments and 4 commercial tenancies, a decision was made to retrofit an embedded energy network into the building.

Owners were provided with an embedded network services proposal from Metropolis Metering and advised that 100% Green Power could be provided to everyone in the building at a cheaper rate than their current price. There was unanimous support from all owners to switch to an embedded network. Upon appointment, Metropolis Metering provided a direct metering agreement, embedded network management services agreement, retail service agreement and deed of appointment of Agent to the Owners Corporation.

By converting to an embedded network, Metropolis estimates the cost of electricity to The Commons community will reduce to \$35,700 (ex-GST) including Metropolis’s service fees. This represents an overall annual saving of \$7,000 (ex-GST) for the community, distributed approximately as \$135.00 (ex-GST) per annum for each residence and \$930.00 (ex-GST) for the common property and business occupancies with the benefit of 100% green power at no additional cost.<sup>22</sup>

The Panel appreciates that this may represent a material challenge for some existing embedded networks and is interested in perspectives on this Recommendation, including information about potential impacts. These obligations should apply until the new LES licensing framework comes into effect (as outlined in Recommendations 3 and 4). This will ensure that consumers begin receiving improved protections and benefits as soon as practicable.

However, given it is likely to take time for some operators to meet certain relevant requirements, the Panel is recommending a transitional period and timeframes for legacy (existing) embedded networks.

The Panel understands that requiring legacy (existing) embedded networks to apply for an exemption may create regulatory burden for operators. Moreover, it is likely to double up on some of the licensing requirements the entities will need to meet when the new framework comes into effect.

For these reasons, the Panel recommends that the ESC make allowances for this when establishing its own approvals processes. For example, the ESC may consider options for not requiring those private networks which have satisfied requirements under the revised GEO to demonstrate the same requirements again when applying for an LES licence.

**5.1.1 Proposed recommendations**

<b>Recommendation 1</b>	Initially, the Victorian Government’s commitment to ban embedded networks in new apartment buildings (allowing appropriate exemptions) should be implemented via amendments to the General Exemption Order (GEO).
<b>Recommendation 2</b>	Residential exemptions under the revised GEO should no longer be “automatic”. Instead, there should be an exemptions approval process administered and regulated by the Essential Services Commission (ESC).

<sup>22</sup> Further information on The Commons example is available in Nightingale’s submission to the Issues Paper, available on the submissions page on the [Engage Victoria Embedded Networks Review](#) website.

### 5.1.2 The Panel's implementation strategy to ban embedded networks

In implementing Recommendation 1, the Panel suggests the following should be done to give effect to the ban of embedded networks:

- A. The amendments to the GEO should require sites with a residential private network (parent and child meter connections) to:
  - i. have renewable or other clean energy that delivers carbon emission reduction in line with the Victorian Government's policy; and
  - ii. show how benefits within the private network are regularly passed on to consumers within that site.
- B. As there is an opportunity for the benefits flowing from renewable or other clean energy to be passed on to consumers, the GEO amendments should also apply to new residential private networks not just apartment buildings. This includes social housing, retirement villages and residential parks.
- C. This Recommendation should come into effect for new residential private networks when the GEO is revised, anticipated to be by June 2022.
- D. Once the revised GEO comes into effect and any transition period has expired, private networks that do not comply with the new requirements will no longer qualify for an exemption under the GEO and will be in breach of requirements in the EIA unless they become licensed.
- E. When reviewing and amending the GEO, the government should also take the opportunity to clarify obligations and address any identified gaps in the GEO.

In implementing Recommendation 2, the Panel suggests the following should be required when establishing an exemptions approval process:

- A. Anyone wanting to rely on the revised GEO to sell and/or supply electricity will have to apply to the ESC for exemption approval, and demonstrate upon application that they:
  - i. are willing and able to extend relevant consumer protections to customers within the private network they own, operate or occupy
  - ii. are or have commenced the process to become members of EWOV and provide their customers with access to independent dispute resolution services
  - iii. satisfy any financial viability, technical or other requirements set by the ESC as part of the process to obtain an exemption
  - iv. will, within three years of application, regularly pass on the benefits from renewable or other clean energy technologies to consumers within the private network, and how they will do so
  - v. have a plan for deploying appropriate metering or other internal infrastructure to meet current Victorian metering standards, which will be implemented within timeframes consistent with other transitional and retail market access obligations included in these recommendations
  - vi. are able to meet any other requirements that the ESC considers appropriate.

These requirements should be demonstrated to the ESC as part of the exemption application process and should be subject to ongoing oversight and monitoring by the ESC.

- B. Once the GEO is revised, new private networks (which become operational after the revised GEO takes effect) will need to obtain approval from the ESC prior to supplying and selling electricity.
- C. Anyone relying on the GEO for a site which is operational prior to the revised GEO coming into effect will need to apply to the ESC for approval within 12 months of the new approvals process and application criteria being established.
- D. The ESC should develop an exemptions application and approval process that can be proportionate to the size and risk of the private network provider. The ESC should also produce clear information and guidance material to assist applicants in this process and to help them understand their obligations.

### 5.1.3 Feedback sought by the Panel

In relation to Recommendations 1 and 2, the Panel is interested in receiving the following from stakeholders:

1. General feedback about the proposed Recommendations and implementation strategies, including the concept of moving to an ‘approvals’ regime for exemptions
2. Responses to the proposed requirement to have renewable or clean energy technologies, with benefits passed on to consumers, as part of the private network
3. Suggestions as to how the use or implementation of renewable or clean energy technologies can be demonstrated by anyone relying on the revised GEO or an LES licence to supply or sell electricity
4. Feedback about possible thresholds which could be used to assess the renewable or clean energy technologies at a site, including, for example, showing compliance with national or state-based renewable energy targets. Stakeholders are encouraged to provide suggestions on suitable options in their feedback<sup>23</sup>
5. How the benefits flowing from renewable or clean energy technologies could be demonstrated as being passed on to consumers
6. Any other feedback stakeholders would like to provide.

## 5.2 Introducing a licensing framework for new private networks (Recommendation 3)

To give longer-term effect to the ban and ensure equity and fairness for consumers, the Panel recommends expanding the licensing framework under the EIA to include a new category for ‘Local Energy Service’ (LES) providers. Once the proposed new licensing regime is in place, anyone who supplies and/or sells electricity in new residential sites containing a private network (including apartment buildings, social housing, retirement villages and residential parks) must obtain an LES licence from the ESC. This will be a new licence category in addition to those which the ESC currently administers.

The nature of an LES business means the new licence category will need to encapsulate both the sale and supply functions the providers would perform within an LES site. As a result, the proposed licensing regime would ensure that consumers living in new private networks are provided equal or equivalent benefits and protections as on-market customers. LES providers would also be subject to similar monitoring, compliance and enforcement standards by the ESC as on-market electricity retail and distribution businesses.

To be eligible to meet the licensing criteria, it is recommended that an LES licensee demonstrate to the ESC that the benefits of renewable energy and/or other clean energy technologies aligned with government policies are passed on to consumers.

This approach allows for benefits to be passed on to consumers from renewable energy uptake at both the premises and precinct scales – enabling economic, environmental and social benefits. It also enables all innovative new technologies or new/existing applications and other appropriate uses of embedded networks under the Terms of Reference, including microgrids.

In addition to the renewable energy and/or other clean energy technology requirements, the Panel recommends that a licence should include a range of conditions. These conditions for LES licence-holders are intended to be similar to those required for exemptions approval under an amended GEO, as outlined in Recommendation 2.

The Panel recommends that the licensing regime be established in a way that it captures the actual entity providing energy supply and sale services within the private network (such as metering, billing and customer service centre support). This will overcome current compliance and enforcement challenges that result from embedded network operators contracting out of being defined as the ‘exempt person’, with this categorisation (and therefore legal responsibilities) instead falling to asset owners such as owners’ corporations.

While it is not intended that asset owners such as owners’ corporations would become the licensed entity, these entities could apply to obtain an LES licence if they wish to supply and sell energy within the private network on their own, rather than contracting this function out. The Panel envisages that in the vast majority of cases, licensed LES providers would sign contracts with owners’ corporations enabling them to access assets (such as internal wiring between parent and child meters) to facilitate the supply and sale of energy within the private

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<sup>23</sup> Including how to ensure that renewable or clean energy technologies or options provide real benefits and are not simply tokenistic

network. However, such contracts should not lock owners' corporations into long-term arrangements to meet the cost of applying for an LES licence (see Recommendation 7).

The Panel acknowledges that the requirement to become licensed may be burdensome for some businesses, and they may ultimately decide to exit the market. However, the Panel considers that ensuring consumers receive adequate protections and benefits from the LES regime outweigh the concerns that some entities may exit the market as a result of these Recommendations.

Case studies 2 and 3 illustrate a potential future state of the LES licensing regime for both new LES licensees and existing embedded network operators, once it becomes fully operational, that the Panel envisages.

**Case study 2: The Panel’s vision for new LES licence-holders**

PowerForward is a relatively new, small-scale electricity retailer with a strong interest in providing affordable, renewable energy and/or other clean energy options for consumers living in residential apartment buildings. PowerForward saw the value in delivering essential energy services to apartment building residents, since reforms were established that not only improved the consumer experience, but allowed for a fairer market for suppliers to provide competitive offers and sustainable energy outcomes. PowerForward applied for a LES licence through the ESC. There were a number of ESC conditions which PowerForward was required to meet, including demonstrating that clean energy benefits pass to any future customer, and becoming a member of EWOV, so that customers have access to dispute resolution services.

Shortly after PowerForward was granted an LES licence, it was engaged by a tenant at a small, recently developed private network site. This site was fitted with NEM-compliant meters and rooftop solar panels. PowerForward was able to offer better pricing and bundling of services to the tenant, with transparent information disclosure agreement that outlines the tenants’ rights and responsibilities as a new PowerForward customer.

**Case study 3: The Panel’s vision for existing Embedded Network Operators**

PowerRenew is an embedded network operator. PowerRenew had three years from the date when a new LES licensing framework became effective to obtain a licence. This timeframe allowed PowerRenew to also understand the new regulatory changes and impacts on its business model and establish a plan to retrofit legacy metering.

PowerRenew were also able to establish a new GreenPower contract with its retailer at the parent meter, to ensure that customers have access to renewable energy options. PowerRenew welcomed new compliance and enforcement powers for the ESC, which ensures that all private network providers operating under the new licensing framework continue to operate in the best interests of consumers.

5.2.1 Proposed recommendation

<b>Recommendation 3</b>	<p>To give longer-term effect to the ban and to ensure equity and fairness for customers, the licensing framework under the <i>Electricity Industry Act 2000</i> (EIA) should be amended to enable licensing of ‘Local Energy Service’ (LES) providers for private networks.</p> <p>Once the new licensing framework is in place, anyone who supplies and/or sells electricity in new residential sites containing a private network (including apartment buildings, social housing, retirement villages and residential parks) must obtain a specific LES licence from the ESC.</p>
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5.2.2 The Panel’s strategy to implement an LES licensing regime, giving longer-term effect to the ban

In implementing Recommendation 3, the Panel suggests the following:

- A. An LES licence should impose conditions<sup>24</sup> on the licensee, which:
  - i. ensure choice of electricity retailer for customers (see Recommendation 8)
  - ii. ensure, to the fullest extent possible, equal consumer protections

<sup>24</sup> The conditions for LES licence holders are intended to be similar to those required for exemption approval under an amended GEO (see Recommendation 2)

- iii. require the LES site to include renewable or clean energy technologies in line with Victorian government policies, and demonstrate that the benefits flowing from these are regularly passed on to consumers
  - iv. ensure the benefits related to the private network, such as aggregated pricing or those arising from renewable or clean energy technologies, are regularly passed on to consumers
  - v. require the licensee to consider the best interests of consumers and show how benefits will be passed on to consumers when making agreements relating to the private network, including contracts for services with developers, owners' corporations or other related parties
  - vi. require the licensee to meet appropriate financial, organisation and technical capacity and general suitability requirements as determined by the ESC
  - vii. require the licensee to meet any other conditions the ESC considers appropriate.
- B. The LES licensing regime should be established in such a way that it captures third-party service providers or entities whose business model is set up to provide services (such as metering, billing and customer service centre support) relating to the supply and sale of energy.
- C. That the licensing regime covers and captures the appropriate entities – those for whom the supply and sale of electricity is their core business. It is not intended that asset owners, such as owners' corporations, would become the licensed LES entity, although those entities could seek an LES licence if they wished. Instead, licensed LES providers could sign contracts with owners' corporations allowing them to access assets (such as internal wiring between parent and child meters) enabling the sale and/or supply of energy. However, such contracts should not lock owners' corporations into long-term arrangements in order to meet the cost of applying for an LES (see Recommendation 7).

### 5.2.3 Feedback sought by the Panel

In relation to the introduction of a new LES licence, the Panel is interested in:

- 7. General feedback from stakeholders about the proposed Recommendation and implementation strategy
- 8. Feedback about how stakeholders consider the LES framework could support the Panel's vision of a new competitive market of LES providers
- 9. Any other feedback stakeholders would like to provide.

## 5.3 Applying the new licensing framework to other types of new residential and legacy (existing) embedded networks (Recommendation 4)

In addition to apartment buildings, the Panel recommends that the LES licensing regime should apply to other new private networks, such as social housing, retirement villages and residential parks.

In time, all legacy (existing) residential embedded networks should be required to be operated by a licensed LES provider to ensure its customers are receiving the benefits of living in a private network and equal or equivalent consumer protections to on-market customers. The rationale of ensuring equal protections is particularly strong, given that many residents in these types of embedded networks are some of the most vulnerable members of the Victorian community.

## 5.4 Timeframes for introducing the LES licensing category

The Panel understands that it is likely to take some time to establish and introduce a new licensing category for LES providers. However, given the urgency of ensuring that all consumers are receiving the benefits of living in a private network and equal or equivalent protections to on-market customers, the Panel considers it paramount that the new regime be implemented as quickly as possible. The Panel has tried to balance the potential impacts on both industry and consumers when considering appropriate timeframes for introducing the LES licensing regime.

Therefore, the Panel recommends that the LES licensing framework be established within 12 to 18 months after changes to the GEO have been implemented. Once the licensing regime is established (i.e. by late-2023 to mid-

2024), private networks currently in development should be required to operate under an LES licence within six months from the date the licensing regime is established. The Panel considers this timeframe to be feasible as developers and prospective LES operators should have sufficient knowledge of what is likely to be required of them to ensure their sites meet the relevant LES requirements before the licensing framework comes into effect.

Legacy (existing) embedded networks should be operated by a licensed LES provider within three years from the date the licensing framework is established (i.e. by late-2026 to mid-2027). This reflects and accommodates some of the complexities legacy (existing) embedded networks are likely to face around retrofitting and existing contracts, as required.

Further detail on the timing for the introduction of the new licensing regime is set out in the **Figure 3** below.

It is important that the ESC is adequately resourced to ensure a smooth transition to the new licensing framework, including being able to make sure affected private networks understand their obligations and the timeframes for transition. For example, the ESC should run an education campaign, advising stakeholders of the rights and responsibilities under the new framework and assisting industry throughout the licensing process.<sup>25</sup>

The ESC should also be equipped to monitor the market to ensure new private networks and legacy (existing) networks are transitioning to the new regime and customers are receiving appropriate supply and protections.<sup>26</sup>

**5.5 Reviewing the broader licensing framework (Recommendation 5)**

The Panel recommends that if the Victorian Government undertakes a broader licensing framework review in the coming years it should consider the intersection of these Recommendations with that review, and further, whether the exemptions framework remains fit for purpose.

This includes considering whether remaining exemption holders under a revised GEO should hold some sort of a small-scale licence, instead of being able to continue to operate under the exemptions framework.

The feasibility of extending the LES licensing regime to other exempt entities, such as commercial sites, industrial sites and business parks should also be considered.

**5.5.1 Proposed recommendations**

<b>Recommendation 4</b>	Entities which currently sell or supply electricity pursuant to an exemption under the GEO should be transitioned into the LES licensing framework.
<b>Recommendation 5</b>	In the future, if the Victorian Government undertakes a broader licensing framework review, it should consider the intersection of these Recommendations with that review, and further, whether the exemptions framework remains fit for purpose.

**5.5.2 The Panel’s implementation strategy for transitioning into the new LES licensing framework and further licensing or exemption framework reviews**

In implementing Recommendation 4, the Panel considers that existing residential embedded networks should be given a transitional period to comply with any changes to the GEO.

- A. Once the new licensing regime is established (expected to occur by late-2023 to mid-2024):
  - i. Embedded networks that are under development should be given up to six months to apply for an LES licence
  - ii. All other legacy (existing) embedded networks should be given up to three years to apply for an LES licence.

In implementing Recommendation 5, the Panel suggests the Victorian Government should consider:

<sup>25</sup> Further information about the Panel’s proposal for a transitional information campaign is in Recommendation 16B below.  
<sup>26</sup> Further information about the Panel’s proposal regarding monitoring and enforcement powers for the ESC is in Recommendation 7 below.

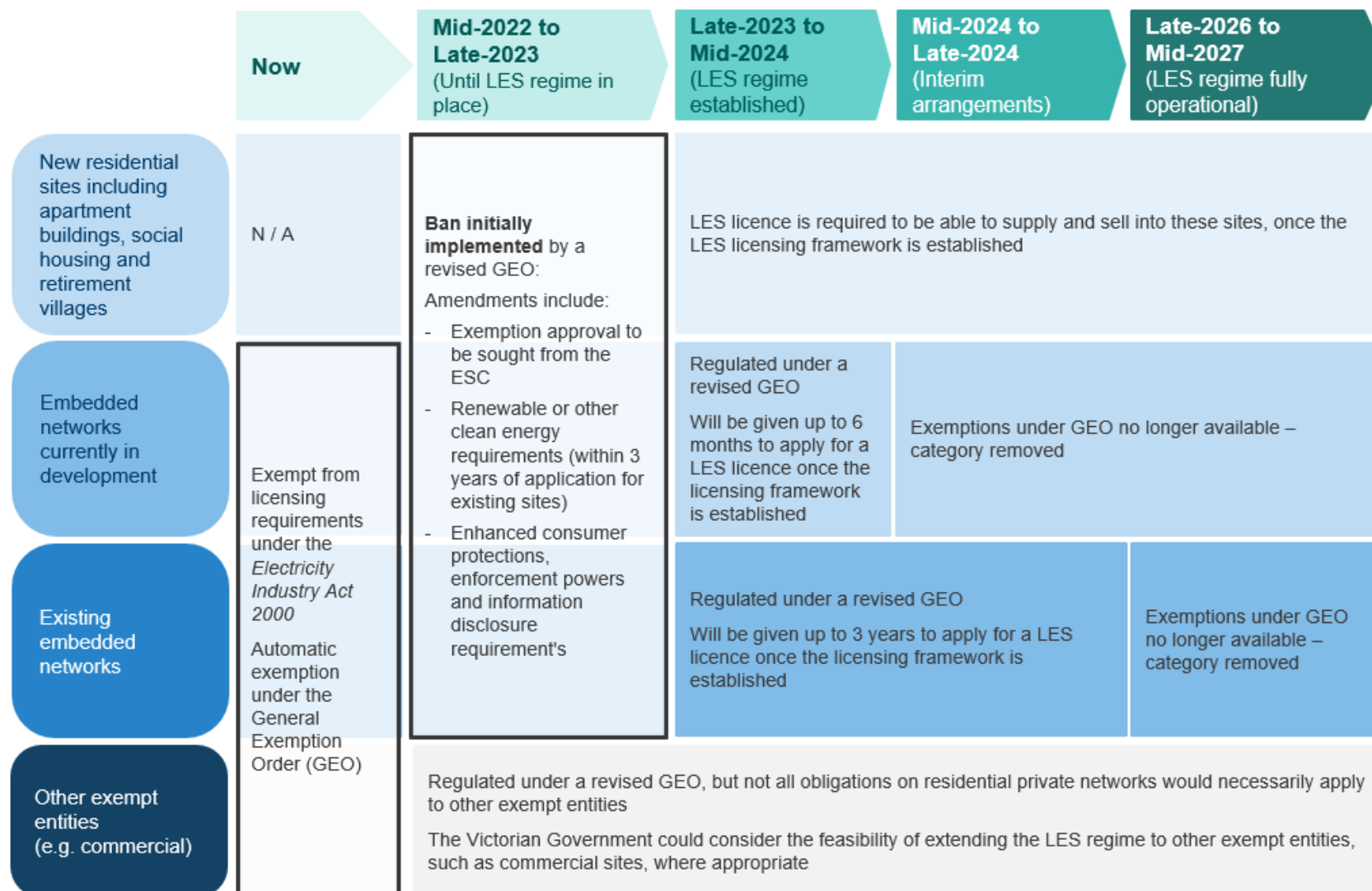
- A. Whether remaining exemption holders under a revised GEO should hold a small-scale licence instead of being able to continue to operate under the exemptions framework, and
- B. The feasibility of extending the LES licensing regime to other exempt entities, such as commercial sites, industrial sites and business parks.

### **5.5.3 Feedback sought by the Panel**

In relation to the Recommendations about transitioning existing embedded networks into the new LES licensing framework or a future licensing/exemptions framework review, the Panel is interested in:

- 10. General feedback from stakeholders about the proposed Recommendation and implementation strategy
- 11. Any other feedback stakeholders would like to provide.

Figure 3: The timeline for transitioning to the LES licensing framework



## 6. Additional Recommendations to support the embedded networks ban

In addition to banning embedded networks in new apartment buildings, the Panel has been asked to consider a range of other issues that currently impact outcomes for embedded network customers.

This section outlines the Panel's Recommendations in relation to:

- Consumer protections (Recommendation 6)
- Enhancing the ESC's enforcement powers (Recommendation 7)
- Access to competitive retail offers (Recommendations 8 and 9)
- Information disclosure requirements (Recommendation 10)
- Planning and building requirements (Recommendations 11 and 12)
- Bundled services and other fees and charges (Recommendation 13)
- Mitigating disruption of supply due to failure of an embedded network (Recommendation 14)
- Giving voice to energy consumers in private networks (Recommendation 15)
- Transitional arrangements (Recommendation 16)

### 6.1 Consumer protections (Recommendation 6)

*"...it is fundamental that the governance framework for embedded networks ensure that customers are provided with the same protections and regulatory oversight as standard supply customers." – Origin Energy*

*"There is no good reason that customers in legacy embedded networks should enjoy lesser consumer protections than customers in newer embedded networks, or indeed on-market customers." – Consumer Action Law Centre<sup>27</sup>*

The Panel recommends that all private network customers, including those living in social housing, retirement villages and residential parks, should have access to the same or equivalent consumer protections as on-market customers. This will go some way to ensuring all electricity consumers have equal or equivalent protections and treatment, no matter where they live or how they get their energy.

Currently, embedded networks customers do not have all the same consumer protections as on-market customers. This is in part because conditions and regulatory obligations placed on licensed energy retailers are more stringent than those placed on exempt persons. In particular, exempt persons' obligations vary from licensed retailers in areas including disconnections and life support arrangements.

Moreover, reliability standards and guaranteed service-level (GSL) payments for outages (established in Victoria's Electricity Distribution Code) and obligations regarding assistance for consumers affected by family violence do not apply to exempt sellers.

There was overwhelming support from all stakeholders who made submissions to the Issues Paper that everyone should have access to equal or equivalent consumer protections, regardless of whether they are on-market customers or they live in an embedded network.

The Panel recommends that, once licensed (Recommendations 3 and 4), LES providers should be required to extend equal or equivalent protections and benefits to their customers as licensed retailers and distribution businesses are required to provide to on-market customers.

However, as discussed above, it will take some time for all private networks to become licensed. Therefore, as an interim measure, the Government should align all appropriate obligations placed on exempt persons

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<sup>27</sup> Stakeholder quotes are as provided to the Review, including any grammatical or spelling errors

under the GEO with those placed on licensed retailers and electricity distributors (Recommendation 2). For example, these include relevant family violence, disconnection and life support protections.

The business models and network structures of LES licensees are likely to be quite different to those of existing licensed retailers and distribution businesses. The ESC should be mindful of this when determining how these new obligations are placed on LES operators and ensure they are appropriately tailored to reflect the differences. For example, while the Panel believes that LES licensees should be subject to reliability standards and GSL payments, these should be modified to reflect the different operating models and size of the networks. Similarly, the on-market retail consumer protections should be appropriately reflected in the LES obligations.

The GEO should also be amended to ensure all private network customers, including multi-activity exemption holder customers, have access to independent dispute resolution services. Moreover, EWOV's jurisdiction should be sufficiently broad so there is one organisation for consumers to go to if they need help resolving complaints.

The LES licensing regime and the GEO (Recommendations 2 to 4) should require private networks to disclose to customers upon sign up and at least once annually in writing that they have access to these additional protections (e.g. family violence etc.).

#### 6.1.1 Access to concessions

*“Ideally a framework should be put in place that allows for rebates and concessions for embedded network customers be delivered via their bills” – Embedded Network Industry Action Group*

Embedded network customers do not have the same access to rebates and concessions as on-market customers. Eligible on-market customers receive a 17.5 per cent concession automatically applied on each energy bill.<sup>28</sup> However, embedded network customers can only apply for the ‘non-mains energy concession’, which is an amount paid annually based on the amount paid for each energy type in that year.

Although the rebate available to embedded network customers can be as much as 52 per cent of the customer's bill, the customer must pay their energy bill in full each year before they can claim the concession.<sup>29</sup> This may be particularly difficult for vulnerable consumers who struggle to pay their monthly bills.

Information provided to the Panel also suggests that having to apply for the rebate, rather than having the amount automatically deduced from their bill discourages customers from accessing the support for which they are eligible.

There was a large amount of support across industry, consumer advocacy and community stakeholders, as well as from EWOV, for embedded network customers to be given access to energy concessions that are automatically applied on customer bills so their experience is aligned with that of on-market customers.

AGL noted that applying concessions at billing, rather than after issuing the bill has the most positive impact on a consumer's capacity to pay. This was supported by consumers.

*“...concessions were applied however as a rebate once a year and does not help with monthly bills.” – Embedded network customer*

In response to this feedback, the Panel recommends that all consumers should have access to concessions at the time of paying their energy bills, without having to wait until the end of the year to claim a rebate, under both the revised GEO and the new licensing framework (Recommendations 2 to 4).

While this may result in a decrease in the overall concession some individual consumers receive, the number of consumers receiving the non-mains concession is very low.<sup>30</sup> The Panel expects the overall number of consumers who will access concessions will increase if customers have an immediate discount applied to their energy bill (as opposed to a rebate at the end of the year).

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<sup>28</sup> Department of Health and Human Services (DHHS), Non-mains energy concession, 2020. <https://services.dhhs.vic.gov.au/non-mains-energy-concession>

<sup>29</sup> DHHS, Non-mains energy concession.

<sup>30</sup> DHHS 2018-19 annual report

Private networks and LES licensees (Recommendations 2 to 4) should also be required to disclose to customers upon sign up and at least once annually in writing that they may have access to concessions.

### 6.1.2 Proposed recommendation

<b>Recommendation 6</b>	Once the GEO amendments are given effect as specified in Recommendations 1 and 2, consumers living in all types of residential private networks (including those living in social housing, retirement villages and residential parks) should have access to equal or equivalent consumer protections as on-market customers.
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### 6.1.3 The Panel's implementation strategy for ensuring equal or equivalent consumer protections

In implementing Recommendation 6, the Panel considers the Victorian Government should:

- A. align all appropriate obligations placed on private networks with those placed on licensed retailers and electricity distributors (including family violence, disconnection and life support protections)
- B. ensure that all customers have access to concessions at the time of paying their energy bills, without having to wait until the end of the year to claim a rebate
- C. ensure that all customers, including customers of multi-activity exemption holders, have access to EWOV for independent dispute resolution purposes
- D. require an exempt person to disclose to customers upon sign up and at least once annually in writing that they have access to concessions and additional protections (e.g. family violence etc.)
- E. ensure the ESC has the appropriate power and resources to monitor and enforce compliance with regulatory and consumer protection obligations, including conditions in the GEO and the obligation to join EWOV. Whether an entity is licensed or subject to the GEO, the ESC should have appropriate investigation, monitoring and enforcement tools to ensure compliance with customer protections, including the ability to issue notices for non-compliance or penalties (see also Recommendation 7).

### 6.1.4 Feedback sought by the Panel

In relation to ensuring equal or equivalent customer protections, the Panel is interested in feedback about:

12. General feedback from stakeholders about the proposed Recommendations and implementation strategies
13. Any other feedback stakeholders would like to provide.

## 6.2 Enhancing the ESC's enforcement powers (Recommendation 7)

The current embedded networks framework, as set out in the GEO, provides the ESC with limited ability to enforce an exempt person's compliance with their exemption conditions.

This means, for example, if an exempt person charges their customers more than the regulated maximum price (set at the VDO) for electricity or refuses to join EWOV, the ESC cannot impose any penalties for non-compliance. The only enforcement measure available to the ESC is to deregister the embedded network and pursue them for a breach of the EIA. However, this may have implications for consumers within the embedded network as it may lead to issues around certainty of supply. Therefore, it is important that a more appropriate and robust compliance and enforcement regime is considered.

There was overwhelming support from stakeholders for a more robust compliance and enforcement regime for embedded networks. As one embedded network customer noted:

*"Current compliance and enforcement measures are inadequate - there is no point of having rules if there are no incentives for businesses to do the right thing or penalties to deter non-compliance"*

However, some stakeholders cautioned that any new monitoring and enforcement powers must be proportionate, with penalties reflecting the size and sophistication of the embedded network and the harm done to customers.

Accordingly, the Panel recommends that the ESC's monitoring, compliance and enforcement framework for private networks should be robust and proportionate and aligned with the ESC's framework and approach for existing licensed energy providers. Any penalties that can be applied should be paid by the LES holder and should not be directly passed onto the owners' corporation or customers.

The Panel acknowledges that the ESC is expected to receive strengthened compliance and enforcement powers under the Victorian Government's Energy Fairness Plan. The Government should ensure the ESC has effective investigative and enforcement powers as well as a full suite of options enabling the ESC to take action against non-compliant embedded network operators.

The Panel also recommends that the ESC should be adequately resourced to enable it to effectively carry out its new functions relating to private networks.

### 6.2.1 Proposed recommendation

<b>Recommendation 7</b>	The monitoring, compliance and enforcement framework for private networks should be robust and proportionate and aligned with the ESC's framework and approach for current licensed energy providers.
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### 6.2.2 The Panel's implementation strategy regarding improved compliance and enforcement

In implementing Recommendation 7, the Panel considers the following should happen:

- A. To ensure compliance by private networks, the ESC should have:
  - i. effective investigative, monitoring and enforcement powers
  - ii. a full suite of options that are proportionate and appropriate, so it can take action against non-compliant operators.
- B. The ESC should be provided with appropriate resourcing to enable it to implement the exemption approvals and licensing regimes, and so it can effectively and adequately monitor compliance or engage in enforcement activities relating to private networks.
- C. EWOV should have a sufficiently broad jurisdiction so there is one organisation for customers to go to if they need help resolving complaints.
- D. The LES licensee should be responsible or accountable for the actions performed by third-party service providers or agents. Under a revised GEO, until the LES regime is established, it is the exempt person who is subject to regulatory oversight and compliance.

### 6.2.3 Feedback sought by the Panel

In relation to ensuring appropriate compliance and enforcement, the Panel is interested in feedback about:

14. General feedback from stakeholders about the proposed Recommendations and implementation strategies
15. Any other feedback stakeholders would like to provide.

## 6.3 Access to competitive retail offers (Recommendations 8 and 9)

### Customers are dissatisfied they cannot choose their retailer

*"... my major concern is that there are renewable power options which exist and I would like to support but I am unable due to the embedded network. This is incredible frustrating and hugely detrimental to our planet." – Embedded network customer*

*"This is not just about cost and price, it's a matter of conscience ... eg. climate change and Victoria's commitments" – Embedded network customer*

Access to the retail energy market is a key issue.

Seventy percent of consumers who made a submission to the Review expressed strong views that access to competitive retail offers and being able to exercise their choice of retailer is a consumer right that should be mandated.

In their submissions, some consumers showed a high level of distress and frustration related to living in an embedded network. Consumers talked about feeling trapped due to the lack of choice and inability to get out of an embedded network, using expressions like 'anti-competitive', 'anti-consumer', 'unethical' and 'monopolistic' to describe being forced to pay high energy rates with no say or input.

The submissions also show that choice is not simply about price but is also about autonomy and a sense of control. While not being an end in itself, retail choice enables customers to seek better customer service or improved outcomes from an alternative provider, rather than being stuck in an ongoing relationship with a provider that doesn't address their needs or give them the services or outcomes they want:

*"As a consumer of anything from chocolate bars to cars, I have the right to support the companies I choose to - but not when it comes to my energy supplier. I am forced to pay money to a company I despise for services that I would prefer to receive from just about anyone else. .... Consumers should always be allowed choice and free access to the market to choose the providers they want. Big companies shouldn't be able to buy their way to customers." – Embedded network customer*

For consumers, retail choice means being able to change providers not only when they want a better price, but also when they have experienced bad customer service, or when they wish to choose renewable options such as GreenPower or an 'ethical' provider. The inability to access GreenPower in their embedded network was a key frustration for about a third (34%) of consumers.

Some consumers described instances of poor customer service, including not being able to get through to the provider, failure to return calls, inconsistent and inaccurate billing and limited access to dispute resolution. For example:

*"I have tried to make complaints about issues with the billing process (incorrect readings etc) and had a poor experience. Lack of response from the provider etc. The customer service was so bad that I would normally switch provider due to that alone, but because I'm in an embedded network I couldn't." – Embedded network customer*

### 6.3.1 Practical barriers to retail market access

*"Wanted to take up a new provider but couldn't as the cost was too expensive to change (something about needing a new meter installed into the building)." – Embedded network customer*

*"It was impossible. They would have required us to pay a sum north of \$400 to detach the apartment from the embedded network. For people renting an apartment this is not a good option." – Embedded network customer*

Stakeholders also noted the practical barriers to being able to move to an on-market retailer, citing the prohibitive cost of upgrading metering infrastructure for individual consumers, the lack of visibility of child meters within the national Market Settlement and Transfer Solutions system (MSATS) because they do not have a National Meter Identifier (NMI) allocated, lack of business-to-business arrangements and the lack of suitable energy-only plans offered by on-market retailers for embedded network sites.

*"[Active Utilities] acknowledges that some embedded network operators deploy their networks in ways that restrict customers from having any ability to go on-market. [Active Utilities] believes this is due to the following perceived barriers of:*

- *meters not discoverable in MSATS (NMI allocation); and*
  - *lack of B2B process that allows embedded networks to issue network charges to retailers."*
- Active Utilities*

As a principle, the Panel believes that all consumers should have access to competitive offers and should be able to transfer easily to a retailer of their choice. Consumers living within a private network should not face a greater financial or administrative burden to change to an on-market retailer than other Victorian consumers.

Further, it is not fair or equitable to leave some consumers stranded within legacy (existing) embedded networks indefinitely.

However, the Panel recognises there are a number of barriers to retail market access being achieved in practice for consumers in private networks, which are not easy to fix. These include a lack of visibility in MSATS, the absence of National Electricity Market (NEM)-compliant metering in older sites, difficulty with market settlement processes and consumers not being able to access a suitable offer from an on-market retailer.

As noted above, there was strong support for consumers in embedded networks to have access to the same level of customer protections as other Victorian consumers. This includes the right to have their bills based on accurate metering data from meters that are routinely tested and otherwise meet national standards. Accuracy of billing and ensuring metering and data meet current standards are appropriate and necessary for an essential service like electricity, no matter where someone lives or how they get their energy.

One of the challenges and barriers to implementing improvements has been a lack of information or data on which to base recommendations or timeframes for change which are reasonable to industry while also enabling consumers to exercise the choice of retailer to which they are legally entitled.

### 6.3.2 Options considered by the Panel to enable retail market access

The Panel has considered a number of possible options and their impacts in forming its Recommendations.

These include options at either extreme – doing nothing, which would result in legacy (existing) embedded network customers remaining permanently stranded within monopoly embedded networks, or alternatively, removing all existing embedded networks and requiring conversion of these to direct-grid connections. Neither of these options seem reasonable to either consumers or industry, for reasons of fairness, equity and potential cost.

Another option considered by the Panel was to mandate a retrofit of metering and internal infrastructure within a set time frame. This is also likely to be problematic and costly, partly because, at this time, there are issues with physical or size limitations for NEM-compliant replacement meters for some sites.

The Panel's view is that the middle ground is to require metering and/or internal infrastructure upgrades to meet current standards at some point in time, for example requiring meters to be replaced at their end of life (such as within 10 or 15 years) or within a specified time frame (for example, within 5 years).

Given that electricity is an essential service, and the strong support for equal retail market access and customer protections from stakeholders, it is appropriate that over time all sites will be brought up to current standards. In the end, this will help ensure accurate meter data and billing in line with national standards and access to the retail market for all consumers.

The Panel's vision is that all consumers, regardless of where they live or how they get their electricity, will be able to participate in the retail market.

However, the question of when and how this can be achieved remains. For all consumers there will need to be changes to the way the system works. For some consumers, notably those in legacy (existing) sites,<sup>31</sup> there are also challenges associated with getting metering and/or internal infrastructure up to the required standard.

While there were some suggestions from stakeholders about ways the barriers to true market access could be overcome, these were mostly quite general in nature, and the Panel is keen to hear from stakeholders in more detail on this aspect.

### 6.3.3 Proposed recommendations

<b>Recommendation 8</b>	All private network customers should have access to the energy retail market and it should be easy for them to transfer to an on-market energy retailer. Customers within a private network should not face a greater financial or administrative burden to change retailers than other Victorian customers.
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<sup>31</sup> Embedded networks have been required to meet improved metering standards and requirements since the Power of Choice changes took effect on 1 December 2017. Metering installed prior to this date may not meet NEM standards, and may be more difficult to bring up to current standards for space or other infrastructure reasons.

<b>Recommendation 9</b>	<p>Customers within legacy (existing) private networks should not remain stranded within a private network indefinitely.</p> <p>To support the implementation of Recommendation 4, over time, metering and/or other internal infrastructure in legacy (existing) embedded networks should be upgraded and/or changed to enable these customers to access the retail market without imposing a cost burden on customers to do so.</p>
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### 6.3.4 The Panel's implementation strategy regarding retail market access for all customers

In implementing Recommendations 8 and 9, the Panel considers the following should be done to make true retail market access possible for customers in private networks:

- A. All child meters within embedded networks should be issued with a NMI so these meters are visible within the national settlement system, MSATS.
- B. Customers who choose to become an on-market retail customer should receive a single electricity bill which includes both retail and network components.
- C. There should be oversight of metering and infrastructure installed in private networks after 1 December 2017 to make sure entities are meeting existing metering and ancillary obligations (which ensure compliance with NEM standards).
- D. Private networks should be required to provide information on customer numbers and the type/age of metering/infrastructure periodically to the ESC, enabling transparency of this information. This will allow any proposal for the exchange or upgrading of infrastructure (to enable customers to exercise retail choice) to be based on reliable information.
- E. Existing metering, wiring and/or associated infrastructure will need to be changed in some existing embedded networks to enable retail choice, as the current metering and/or associated infrastructure is a material barrier to retail choice in some instances. Options to achieve this should be explored.
- F. The Victorian Government should implement any regulatory changes necessary to enable ease of market transfer and single billing for customers, including:
  - i. Systems or other changes necessary to facilitate transfers and single billing, such as appropriate settlement processes through the Australian Energy Market Operator (AEMO), standardised formats for the 'network' billing component, and network charges no greater than what the customer would pay to the local electricity distributor if they were directly connected to the grid
  - ii. Obligations for on-market retailers regarding available offers for private network customers.
- G. The Victorian Government should also consider any safety implications related to proposals for change or upgrading of metering and/or internal infrastructure, to ensure appropriate safety standards are met and provision is made for associated costs when considering reasonable requirements and timeframes. This may include liaison with, or oversight by, Energy Safe Victoria regarding relevant safety standards and obligations.
- H. Private network customers must have access to relevant information so they can determine whether moving to an on-market retail offer is an appropriate decision for them. Private networks should be required to provide their customers with the same sort of rates/tariff information on their bills as licensed retailers, and to publish this information on their websites, so customers can readily compare the price they pay with available market offers.

The Panel considers it is not appropriate for legacy (existing) embedded network customers to be stranded without retail market access indefinitely and would like to hear from stakeholders about how true retail market access can be achieved in practice.

The Panel is keen to hear from stakeholders about how this can be achieved within a reasonable timeframe.

The Panel is also interested in receiving information and data to support stakeholder advice about any expected or potential impacts associated with achieving actual retail market access for customers.

### 6.3.5 Feedback sought by the Panel

In relation to Recommendations 8 and 9 and providing practical access to the retail market, the Panel is interested in hearing from stakeholders and would like to receive the following:

16. General feedback from stakeholders about the proposed Recommendations and implementation
17. Information about a reasonable timeframe for upgrade or changes to metering and/or other internal infrastructure (for example, when assets reach their end of life, or within a set (X years) timeframe)
18. Suggestions about appropriate and reasonable approaches to facilitate upgrade or change of metering and/or internal infrastructure (for example, requiring embedded networks to submit a plan to the ESC covering how any infrastructure change or upgrade will happen, the related timeframes for it to take place, and to conform to the plan)
19. Information about the type of metering and/or internal infrastructure change or upgrade required to enable easy transfer (for example, change to NEM-compliant metering when assets reach their end of life or within a set (X years) timeframe)
20. Information about the financial and/or commercial arrangements which might be plausible to enable appropriate changes or upgrades within a reasonable timeframe (for example, costs recovered over a period of time, rather than up front)
21. Any additional options which may support or facilitate required changes (for example, a competitive market for meter exchanges and upgrades)
22. Any other feedback stakeholders would like to provide.

## 6.4 Information disclosure requirements (Recommendation 10)

The Panel recommends that lot owners and tenants in embedded networks be provided with adequate information about their rights and obligations as an embedded network customer and about commercial agreements relating to embedded network infrastructure and assets.

### 6.4.1 Transparency and disclosure of the existence of an embedded network

Commercial agreements and decisions around the ownership of an embedded network's infrastructure and assets are made long before new lot owners and tenants take possession or occupy the site. As a result, prospective customers have very little, if any, influence over the design (including technology offerings) and operation of the embedded network.

*"The greatest problem is that the OC DID NOT opt-in to this arrangement...the developer and the strata manager of the day, signed contracts awarding the embedded network to [current operator] well before the Owner's Corporation was properly established with a committee to oversee the governance of the arrangement...[it is] unconscionable that a developer can sign an agreement for a decade or so, which they then sell out of. They are knowingly signing up the future residents of that building."*  
– Embedded network customer

A lot owner and occupant's understanding of the commercial contracts and ownership arrangements associated with the embedded network infrastructure and assets is also often quite limited, making it difficult for them to negotiate a better deal.

*"The apartment developer signs you up to an embedded network, gets a commission/kickback and then washes their hands of it despite signing you up to horrendous rates for 5 years. Developer signed the OC up to a 5-year plan (with zero incentive for them to shop around) so owners are now stuck with an embedded network plan that we had no say in. Residents have had no benefit: the only benefits were the financial structure -- and these accrued to the developer and the embedded network operator."* – Embedded network customer

Despite the information and disclosure obligations on exempt persons under the GEO and owners under the *Residential Tenancies Act 1997* (VIC),<sup>32</sup> embedded network customers are not always fully informed of the presence of an embedded network or their rights as a customer of an embedded network.

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<sup>32</sup> *Residential Tenancies Act 1997* (Vic), s 498LB(d).

A number of consumers and consumer advocates noted that they (or the people they represent) were not informed of the existence of an embedded network within the complex at the time of purchasing a property or signing a lease. EWOV also raised concerns that customers often do not clearly understand the implications of living in an embedded network:

*“Customers currently run the risk of finding themselves in an embedded network without clearly understanding the implications of their decision. Given the relatively limited consumer protections that apply to those customers, (and the current barriers that exist to prevent them from accessing market offers), this is an inequitable outcome that should be addressed.” – EWOV*

One consumer noted that they “bought an apartment off the plan, signed a contracting to purchase with a clause that outlined the purchaser got to choose the electricity network, then at settlement the building was built with an embedded network and the owners and tenants did not get a choice of provider. We did not get a choice of a greener energy supplier, nor the competition of the market.”

Industry participants generally supported greater information disclosure requirements. One embedded network provider suggested Victoria adopt a similar legislative framework to New South Wales, providing the incoming owners corporation with agency over the appointment of long-term service agreements and contracts, while another suggested Victoria adopt Queensland’s information disclosure legislation.

*“Formalise a minimum requirement disclosure regime for embedded network arrangements in the contract of sale and for the inaugural meeting of Owners Corporations.” – Real Utilities*

To rectify concerns regarding the transparency and disclosure of the existence of an embedded network, the Panel recommends that prospective purchasers and owners should be provided with information disclosing the existence and details relating to an embedded network. Such information could be similar to the information required for tenants pursuant to the *Residential Tenancies Act 1997*.<sup>33</sup>

Owners’ corporation members should be advised about any relevant agreements relating to ongoing service management of the embedded network as soon as practicable including any initial and ongoing financial arrangements between the developer and other entities who are associated with the installation, ownership or delivery of services to the embedded network.

The Panel also recommends the government should consider either limiting the length of contracts for ongoing management of an embedded network or adopting similar obligations as exist in other state jurisdictions relating to agreements made between developers and third-party service providers for the ongoing management of an embedded network. The government should also ensure these contracts are subject to unfair contract laws, such as those within the *Australian Consumer Law*.

The Panel notes that the ownership of pivotal or critical essential service infrastructure can be problematic in embedded network settings. Some stakeholders described the effectiveness and benefits of a ‘fee-for-service’ agency model, where ownership of the embedded network infrastructure can remain with the owners’ corporation or residents’ association:

*“... Under [a fee-for-service] approach, the Embedded Network Owner (ENO) will hold the electricity supply contract with a licensed retailer for the supply to their parent meter(s), and they will contract a Third-Party Service Provider / Embedded Network Manager (ENM) to perform the internal billing and ENM services on their behalf. The ENO retains full control of the price setting to consumers under this model with the service provider providing guidance to them so that they can make informed and compliant decisions... This means that the decision-making power rests with the Body Corporate, Resident’s Association or Retirement Village operator. Under this model the benefits from the Exempt Selling operations tend to be retained within the village, for the benefit of the consumers.”  
– Network Energy Services*

This type of ‘fee-for-service’ model also operates in shopping centres and industrial parks. Given the apparent effectiveness of this approach, the Panel recommends that the Government consider whether there should be limitations on who can own pivotal or critical essential service infrastructure (for example metering or wiring) in a private network setting. However, the Panel acknowledges that third parties would still need to access

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<sup>33</sup> *Residential Tenancies Act 1997* (Vic) s 30D(d).

these assets and may need to have contractual obligations regarding upkeep of these assets to comply with the LES obligations.

#### 6.4.2 Clarity and transparency around pricing and bundling of services

Transparency of pricing information is another ongoing issue for customers in embedded networks. Commonly, embedded networks bundle several services together on a single bill to include charges for the gas used to produce hot water and unmetered gas for stove tops. Further, the limited information on the bills means that some customers do not know how the price was calculated.

A number of industry and consumer stakeholders called for greater pricing transparency, with some suggesting the embedded network operators should provide their customers with a pricing fact sheet.

*“We support increased transparency of network and first-time connection fees as a means to maintain the benefits that embedded networks provide, whilst limiting the negative consequences that result from the practices of less scrupulous developers and service providers.” – HIP V. Hype*

*“To ensure transparency, each embedded network should have a simple, easy to understand price fact sheet that is published electronically somewhere logical...” – Active Utilities*

However, some developers do not believe more transparency is required, arguing customers do not require visibility of common area electricity costs unless they are on the owners corporation or visibility of how gas stove top costs are calculated unless they are separately metered.

The Panel considers it vitally important that customers are aware of their provider bundling services and that the pricing of these services is clear and transparent.

Therefore, it is recommended information packs should be provided to each lot owner and occupant advising who the exempt person is, as well as how common area, bulk hot water and bulk cooling/heating, unmetered gas and fees (such as connection or move-in/move-out fees) are calculated and charged to each lot.

The information pack should be written in plain English and be provided annually or on request by owners or occupants.

#### 6.4.3 Proposed recommendation

<b>Recommendation 10</b>	Owners and occupants in residential private networks must be provided with adequate information about their rights and obligations as a customer within a private network and about commercial agreements relating to the private network infrastructure and ownership and management of these assets.  Adequate information disclosure should be required under both the GEO and as part of the LES licensing regime.
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#### 6.4.4 The Panel's implementation strategy about information disclosure to customers

In implementing Recommendation 10, the Panel suggests the following should be done:

- A. Prospective purchasers and owners should be provided with information disclosing the existence and details relating to a private network<sup>34</sup>. Such information could be similar to the information required for tenants pursuant to the Residential Tenancies Act 1997.<sup>35</sup> If a private network is not contemplated when initial sale documentation is provided to a purchaser, then new disclosure statements should be provided to the purchaser once the decision is made to install the private network (usually by the developer). Such documentation should be provided a reasonable time prior to settlement of the transaction taking place.
- B. Information packs should be provided to each lot owner and occupant advising who the private network operator is, as well as how common area, bulk hot water and bulk cooling/heating, unmetered gas and fees (such as connection or move-in/move-out fees) are calculated and charged to each lot. The information pack should be written in plain English and be provided annually or on request by owners or occupants.

<sup>34</sup> For example, in the Vendor's Statement required under the *Sale of Land Act 1962* (s32).

<sup>35</sup> *Residential Tenancies Act 1997* (Vic) s 30D(d).

- C. Owners' corporation members should be advised about any relevant agreements relating to ongoing service management of the private network as soon as practicable.
- D. The Victorian Government should either limit the length of contracts for ongoing management of a private network or adopt obligations similar to those that exist in other state jurisdictions relating to agreements made between developers and third party service providers for the ongoing management of a private network. In doing so, the Victorian Government should ensure these contracts are subject to unfair contract laws, such as those within the *Australian Consumer Law*.
- E. The Victorian Government should consider whether there should be limitations or prohibitions on who can own pivotal or critical essential service infrastructure (for example meters or wiring) in a private network setting.

#### 6.4.5 Feedback sought by the Panel

In relation to information disclosure to customers, the Panel is interested in feedback about:

- 23. General feedback from stakeholders about the proposed Recommendation and implementation strategy
- 24. Whether a fee-for-service type approach is appropriate, and whether there should be limitations on who can own pivotal or critical essential infrastructure in residential private networks.
- 25. Any other feedback stakeholders would like to provide.

### 6.5 Planning and building requirements (Recommendations 11 and 12)

Feedback received in the consultation process indicated that stakeholders are very concerned about the way in which embedded networks are often established in new residential sites with very little regard for the impact it is likely to have on consumers.

*"New buyers and occupants are not privy to the contractual arrangements between developer and/or subcontractors / supplier nor [do they] understand what the implications of buying into an apartment with an embedded network is." – Embedded network customer*

The Panel does not have expertise in building and planning. Furthermore, the Terms of Reference limit the Panel to considering the interaction of its Recommendations with the relevant building and planning legislation.

However, the Panel does consider this to be a very important issue and recommends that it become part of the Building Systems Review.

In particular, the Panel recommends that planning, building and strata requirements should be amended to oblige anyone proposing to supply or sell electricity within a residential building via a private electricity network to design, construct, establish and operate the private network in the best interests of prospective owners and occupants.

Any information, including any one-off or ongoing financial arrangement between a developer, owners corporation and a third-party entity, should be disclosed at the time of sale to prospective purchasers, including off-the-plan sales. Moreover, financial benefits from any aggregated pricing should be demonstrably passed onto owners and occupants.

These sites should also be required to incorporate renewable and/or other clean energy technologies in line with government policies, with the benefits from these technologies demonstrably passed onto owners and occupants.

Finally, the ownership and buy-out arrangements for any infrastructure assets, including electricity and hot water meters, centralised hot water systems, solar PV systems and electric vehicle infrastructure assets should be disclosed to the prospective purchaser at the time of sale.

### 6.5.1 Proposed recommendations

<b>Recommendation 11</b>	Planning, building and strata requirements should be amended to oblige anyone proposing to install relevant infrastructure associated with the supply and/or sale of electricity within a residential building via a private network to design, build and operate the private network to incorporate renewable or other clean energy technologies which enable benefits to be passed on to customers. Information, especially relating to infrastructure assets, must also be disclosed to prospective purchasers.
<b>Recommendation 12</b>	Planning, building and strata requirements should also be amended to oblige anyone proposing to supply other bundled services within a residential building/site (including bulk hot-water, bulk heating/cooling or unmetered gas for cooktops) to meet similar standards to design, construct, establish and operate those services in the best interests of prospective owners and occupants, and to disclose appropriate information.

### 6.5.2 The Panel's implementation strategy for changes to planning, building and strata requirements

In implementing Recommendation 11, the Panel considers that amendments to planning, building and strata requirements for private networks should include obligations to:

- A. design, construct, establish and operate the private network in the best interests of prospective owners and occupants
- B. design, construct, establish and operate the private network to incorporate renewable or other clean energy technologies that drive carbon emission reduction in line with government policies and targets
- C. disclose any and all appropriate information, including any one-off or ongoing financial arrangement between a developer, owners' corporation and a third-party entity, at the time of sale to prospective owners and occupants, including off-the-plan sales.
- D. disclose at the time of sale to prospective purchasers whether any infrastructure assets, including electricity and hot water meters, centralised hot water systems, solar PV systems and/or electric vehicle infrastructure assets, are owned by third-party entities, and if there are any applicable buy-out arrangements or obligations on the owners' corporation.
- E. not incur a debt for any infrastructure assets, including electricity and hot-water meters, centralised hot-water systems, solar PV systems and/or electric vehicle infrastructure assets, that are owned by third-party entities, which would fall on prospective owners within the private network to fund in the event that an agreement entered into at the design and construction stage of the residential building was terminated and a buy-out of the infrastructure assets was a consequence of the termination.

In implementing Recommendation 12, the Panel considers that amendments to planning, building and strata requirements for bundled services in within residential buildings should include:

- A. disclosure of any and all appropriate information, including any one-off or ongoing financial arrangement between a developer, owners' corporation and a third-party entity, at the time of sale to prospective purchasers, including off-the-plan sales.
- B. disclosure at the time of sale to prospective purchasers about whether any infrastructure assets, including electricity and hot water meters, centralised hot water systems, solar PV systems and/or electric vehicle infrastructure assets, are owned by third-party entities, and if there are any applicable buy-out arrangements or obligations on the owners' corporation.

### 6.5.3 Feedback sought by the Panel

In relation to proposed changes to planning, building and strata requirements proposed in Recommendations 11 and 12, the Panel is interested in feedback about:

- 26. General feedback from stakeholders about the proposed Recommendations and implementation strategies.
- 27. Suggestions from stakeholders as to what the changes could look like and how they could be implemented.
- 28. Any other feedback regarding these proposed Recommendations.

## 6.6 Bundled services and other fees and charges (Recommendation 13)

Some services that are common in apartment buildings, such as bulk hot-water, bulk heating/cooling, unmetered gas cooktops and solar PV, are often bundled together with electricity embedded networks and provided by the same third-party service provider. As such, imposing a ban on embedded networks through the implementation of a licensing regime may have flow-on consequences for the price of these other so-called “bundled services”.

Stakeholders expressed divergent views on the impact of a ban on embedded networks on other services, such as bulk hot-water. While some stakeholders argued that there is no risk as bulk hot-water, bulk heating/cooling and unmetered gas cooktop infrastructure are able to be supplied independently of embedded electricity networks, others suggested that removing embedded electricity services from a building will make managing other centralised services more complicated from the consumer perspective, resulting in future sites reverting to utility-supplied models for those services.

The Panel remains very concerned about bundled services and believes they should be appropriately regulated and monitored to ensure there is no longer secondary, separate treatment for consumers of essential services.

Unmetered gas cooktops, as a common bundled service, raise concerns about safety. Due to safety issues, there is also no equivalent exemptions framework like the GEO for gas and anyone who sells or supplies gas must hold a licence under the *Gas Industry Act 2000* (GIA). Although developers and/or embedded network operators may suggest that they do not “sell” gas (as these services are unmetered, and therefore not charged individually), these services are still being “supplied” to the site, which the Panel considers is likely to be a breach of the GIA if done without a licence.

Although the VDO price cap on the sale of electricity in an embedded network is now in place, some third-party service providers and exempt persons may seek to recover costs (or lost profits) through these other bundled services.

Therefore, pricing relating to bundled services should be clear and transparent, and customers should be provided with bills which clearly specify how each component of the bill is calculated.

The Panel also recommends caps should be placed on the costs which can be imposed on customers for bundled and other services, such as connection charges or move-in/move-out fees. The ESC should be able to monitor and enforce compliance with maximum pricing for such services, alongside any assessment of compliance with other pricing obligations (for example, the VDO).

### 6.6.1 Proposed recommendations

<b>Recommendation 13</b>	There should be appropriate regulation, monitoring and enforcement relating to currently unregulated bundled services (including bulk hot-water, bulk heating/cooling and unmetered gas cooktops) to ensure there is no longer secondary, separate treatment for consumers of these essential services.
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### 6.6.2 The Panel’s implementation strategy for regulation, monitoring and enforcement of bundled services

In implementing Recommendation 13, the Panel suggests the following:

- A. Pricing relating to bundled services should be clear and transparent, and customers should be provided with bills which clearly specify how each component of the bill is calculated.
- B. Providers should also be required to publish details of the rates, tariffs, fees and charges applicable for bundled services or other services, such as connection and move-in/move-out fees. For example, prices should be made readily available on the provider’s website.
- C. There should be maximum prices which can be charged for bundled services, to ensure customers are not subject to price gouging for these monopoly services.
- D. Caps should be placed on the costs which can be imposed on customers for other services, such as connection charges or move-in/move-out fees.

- E. The ESC should monitor and enforce compliance with maximum pricing for bundled services or fees and charges, alongside any assessment of compliance with other pricing obligations (for example, the Victorian Default Offer).
- F. The ESC should enforce unlicensed supply and sale of bundled services if these activities breach legislative or regulatory requirements (see also Recommendation 7).

### 6.6.3 Feedback sought by the Panel

In relation to bundled services, the Panel is interested in feedback about:

- 29. The proposed Recommendation and implementation strategy
- 30. How bundled services could be appropriately regulated, including bulk hot water, bulk heating/cooling and unmetered gas cooktops
- 31. Other relevant matters regarding bundled services or suggestions regarding implementation of the proposed Recommendation.

## 6.7 Mitigating disruption of supply due to failure of an embedded network (Recommendation 14)

As an essential service, disruption to electricity and other bundled service supply should be mitigated to the fullest extent possible, regardless of where people live. For electricity supply, the Retailer of Last Resort (RoLR) scheme under the EIA is designed to guarantee continuity of electricity supply in the event of failure of an on-market retailer, by designating a RoLR who will continue to supply consumers in the event in the incumbent retailer fails.

In recent times, there have been heightened concerns around embedded network operators, particularly related to the impacts of the COVID-19 pandemic. For example, if multiple customers within an embedded network are unable to pay their bills, an exempt person may, in an extreme circumstance, be unable to pay the retailer for supply at the parent meter. This in turn may prompt the retailer to request disconnection of the parent meter, jeopardising supply for the embedded network customers.

The risk of operator failure therefore represents a regulatory gap for embedded network customers in Victoria, as the RoLR scheme does not extend to consumers living in embedded networks. This is because the RoLR scheme only applies to licensed retailers under the EIA, and not exempt persons operating under the GEO.

Similar observations have been made by the AEMC at the national level. The AEMC's *Review of the Retailer of Last resort scheme* final report<sup>36</sup> found that embedded network customers supplied by an exempt seller have no default or designated retailer assigned to their connection point if the exempt seller fails. Previously, the AEMC recommended in the final report of its *Updating the Regulatory Frameworks for Embedded Networks* review<sup>37</sup> that a modified set of RoLR arrangements for embedded networks be established, where the retailer at the parent connection point would become the RoLR in the event of the failure of an off-market retailer.

During the stakeholder consultation, only a handful of stakeholders provided feedback on the RoLR arrangements, but of those who did, there was strong support for RoLR-type arrangements (a colloquial term) to be extended to cover embedded network customers.

*"We consider the most effective solution [to ensure customers in embedded networks continue to receive electricity] to be the extension of the [RoLR] scheme to apply to embedded networks. The failure to do so currently represents a significant gap in protections for customers in embedded network." – Consumer Law Action Centre*

*"...[O]ne approach [to solving this issue] would be to extend the RoLR process that currently applies to licensed retailers, to include embedded networks." – EWOV*

<sup>36</sup> AEMC, *Review of the retailer of last resort scheme*, Final Report, 2021. [https://www.aemc.gov.au/sites/default/files/documents/rpr0015\\_-\\_review\\_of\\_the\\_retailer\\_of\\_last\\_resort\\_scheme\\_-\\_final\\_report\\_-\\_website\\_copy\\_0.pdf](https://www.aemc.gov.au/sites/default/files/documents/rpr0015_-_review_of_the_retailer_of_last_resort_scheme_-_final_report_-_website_copy_0.pdf).

<sup>37</sup> AEMC, *Updating the regulatory frameworks for embedded networks*, Final Report, 2019. <https://www.aemc.gov.au/sites/default/files/2019-06/Updating%20the%20regulatory%20frameworks%20for%20embedded%20networks%20-%20FINAL%20REPORT.PDF>.

The Panel recommends private network customers should be adequately protected in the event that an private network (or an LES provider once the licensing regime is in place) fails or the entity operating or responsible for the private network (or LES provider) becomes insolvent.

The Victorian Government should confer on the ESC power to appoint an alternative provider to operate the private network (or an alternative LES provider) in this situation to ensure continuity of electricity and other bundled services supply for customers within the private network.

For example, this may include establishing a public register of interested parties, including private network operators, who may step in and manage a site on behalf of the owners of the private network if the existing operator fails. If no parties join the register or do join but are unwilling to take over the functions of a failed operator in a particular case, the ESC should have the power to appoint a party that is then required to supply and sell electricity within the site.

Once the licensing regime is in place, the alternative provider should be required to hold an LES licence.

### 6.7.1 Proposed recommendation

<b>Recommendation 14</b>	Customers in a private network should be adequately protected in the event that the private network fails or the entity operating or responsible for the private network becomes insolvent.  The Victorian Government should give the ESC power to appoint an alternative provider to operate the private network in this situation to ensure continuity of supply for customers within that private network.
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### 6.7.2 The Panel's implementation strategy to protect customers' ongoing supply if a private network fails

In implementing Recommendation 14, the Panel suggests the following should be done:

- A. Private networks or their operators should be required to proactively provide any relevant information to the ESC if there is the possibility of insolvency or if there is another issue which may put ongoing supply for customers within the private network at risk.
- B. Private networks could be required to self-report to the ESC as a condition of their exemption or under the LES licensing framework once established. Criteria or disclosure thresholds triggering the obligation to self-report to the ESC could be aligned with duties in the *Corporations Act 2001* (Cth).
- C. In conjunction with Recommendation 13, the Government should give consideration to the nature of bundled services being supplied into private networks, and how these services would be maintained in the event that a private network fails.

### 6.7.3 Feedback sought by the Panel

In relation to adequate protections for customers in the event that a private network fails, the Panel is interested in feedback about:

32. General feedback from stakeholders about the proposed Recommendation and implementation strategy
33. Any other feedback stakeholders would like to provide.

## 6.8 Giving voice to energy consumers in private networks (Recommendation 15)

In May 2021, the ESC published its draft vulnerability strategy, *Getting to Fair: Breaking Down Barriers to Essential Services*.<sup>38</sup> The purpose of the draft strategy is to ensure the ESC is supporting consumers who are at risk or experiencing vulnerability to access essential services, noting that legislation requires the Commission to consider vulnerable and low-income consumers in its decision-making.<sup>39</sup>

<sup>38</sup> ESC, *Getting to Fair: Breaking Down Barriers to Essential Services*, 2021. <https://www.esc.vic.gov.au/other-work/regulating-consumer-vulnerability-mind>

<sup>39</sup> *Essential Services Commission Act 2001* (Vic) s 8A(1)(e)(i).

The Panel recognises that many people living in apartment building, retirement villages, social housing and residential parks may be experiencing vulnerability. Indeed, it was the recognition of the barriers experienced by consumers living in these settings that was a key trigger for the establishment of this Review.

Core to the ESC’s draft strategy is better incorporation of the full spectrum of consumers’ voices in regulatory processes. The ESC’s draft decision papers states: “Listening to consumers and responding to their concerns is critical to achieving the anticipated outcomes from this work. We see improving our consumer engagement as integral to us remaining an effective, empathetic, and relevant regulator”. Many of the goals and strategies proposed by the ESC involve the embedding of “consumer voices” in its regulatory decision-making.

The Panel recognises that for the voices of customers in private networks to be considered effectively in policy and regulatory decision-making, they need to be appropriately coordinated and resourced.

For this reason, the Panel considers that a mechanism or mechanisms need to be established to ensure consumer voices are heard. This could involve the government resourcing relevant consumer groups to represent consumers of private networks in policy and regulatory discussions relevant to services delivered in private networks, the ESC establishing an advisory panel incorporating consumers living in private networks, or both establishing partnerships with community representatives that enable the experiences of consumers living in private networks to be shared effectively.

The Panel seeks feedback on the design of effective ways to realise its draft Recommendation.

**6.8.1 Proposed recommendation**

<b>Recommendation 15</b>	A mechanism (or mechanisms) should be established to ensure that the voices of consumers living in apartment buildings, retirement villages, social housing and residential parks are heard in policy and regulatory development.
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**6.8.2 The Panel’s implementation strategy to ensure consumer voices are heard in policy and regulatory development**

In implementing Recommendation 15, the Panel suggests the following:

- A. Establishing appropriate support services for tenants/occupiers with grievances, in addition to access to EWOV.

**6.8.3 Feedback sought by the Panel**

In relation to ensuring consumer voices are heard in policy and regulatory development, the Panel is interested in feedback about:

- 34. The best way to establish a mechanism to ensure that the voices of private-network consumers are heard in policy and regulatory development
- 35. The proposed Recommendation
- 36. Any other feedback stakeholders would like to provide.

**6.9 Transitional arrangements (Recommendation 16)**

When the government is undertaking significant regulatory reform, it is vital that affected stakeholders have a clear understanding of the key changes, including their rights and obligations as well as the sequencing and timelines for the reforms coming into effect. Therefore, the Panel is proposing a phased transition, to allow stakeholders time to familiarise themselves with the new obligations and reallocate resources as required.

The Panel expects this phased approach will minimise negative impacts of consequences flowing from the proposed changes. It will also account for the various forms and levels of understanding of regulatory obligations across different kinds of exempt persons, including those administering networks in apartment buildings, social housing, retirement villages and residential parks.

The new regulatory framework will have implications for new developments, so consideration will also be given to the lead times for the planning and building phase of apartment buildings.

As stated above, the new licensing regime will take time to come into effect, so the GEO should be amended to ensure consumers start benefiting from the enhanced protections as soon as practicable. However, in doing so, embedded network providers must be given the opportunity to familiarise themselves with the new obligations and reallocate resources as required.

All residential embedded network customers should have access to consumer protections from a specific date. However, due to practical issues of rolling out NEM complaint meters in existing embedded networks, access to the retail electricity market will not be available for all legacy sites simultaneously.

This phased approach is broadly supported by stakeholders, with some noting that consideration should be given to legacy (existing) embedded networks, in particular to allow them to understand and transition to the new framework.

Therefore, the Panel recommends the ESC should, with necessary resources provided, conduct a targeted information campaign to ensure all stakeholders impacted by these changes, including developers, embedded network operators and consumers are aware of and have sound understanding of the new framework and obligations. This will enable a smooth transition to the new licensing framework.

### 6.9.1 Proposed recommendations

<b>Recommendation 16</b>	The changes to the GEO and the new LES licensing regime will need to be phased in over time.
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### 6.9.2 The Panel's implementation strategy for a phased transition

In implementing Recommendation 16, the Panel suggests the following:

- A. A phased approach as set out in Figure 3 will:
  - i. allow stakeholders time to familiarise themselves with the new obligations and reallocate resources as required
  - ii. account for the various forms and levels of understanding of regulatory obligations across different kinds of exempt persons
  - iii. account for the lead times for the planning and building phase of apartment buildings.
- B. The ESC should, with necessary resources provided, conduct a targeted information campaign, advising developers, owners corporations, entities that own or operate private networks and customers of the new obligations and rights.
- C. All residential private network customers will have access to relevant consumer protections from the date of changes to the GEO as set out in Recommendations 1 and 2.
- D. As set out in Recommendations 8 and 9, retail contestability will not be available for all legacy sites simultaneously, and will depend on system changes, as well as metering and other internal infrastructure upgrades taking place.

### 6.9.3 Feedback sought by the Panel

In relation to the suggestions for a phased transition to the new licensing regime, the Panel is interested in feedback about:

37. The proposed Recommendation and implementation strategy
38. Feasible and/or reasonable timeframes for the transition
39. Any additional requirements appropriate or necessary for the phased transition
40. Any other matters stakeholders consider relevant.

## 7. Request for comment and next steps

DELWP is committed to providing opportunities for stakeholders to engage with the Review and provide views on the Panel's proposed approach and potential impacts arising from the Recommendations.

Submissions in response to the Draft Report are invited by **5pm on 6 August 2021**.

You can provide your comments on the Draft Report by completing a short or long questionnaire sharing your feedback in relation to specific questions relating to the Recommendations. Alternatively, you can make a submission in your own words, rather than responding to one of the questionnaires.

In addition to making a submission, stakeholders are invited to attend an information webinar on **22 July 2021**. We request that stakeholders register their interest to participate in the webinar:

- at the Review website at [www.engage.vic.gov.au](http://www.engage.vic.gov.au); or
- by emailing [EmbeddedNetworks.Review@delwp.vic.gov.au](mailto:EmbeddedNetworks.Review@delwp.vic.gov.au).

The Panel is expected to release a final report by the end of 2021.

### 7.1 How to make a submission

We invite stakeholders to make submissions in response to this Draft Report. Submissions should be made by **5pm on 6 August 2021**.

Stakeholders intending to make submissions are strongly encouraged to do so by the due date. We may not be able to consider submissions received after this deadline.

To make a submission to this Draft Report, please choose from one of the following:

- go to [Engage Victoria's website](http://www.engage.vic.gov.au);
- email at Embedded Networks Review (DELWP) [EmbeddedNetworks.Review@delwp.vic.gov.au](mailto:EmbeddedNetworks.Review@delwp.vic.gov.au); or
- mail your submission to:

Manager, Embedded Networks Review  
Energy Sector Reform  
Department of Environment, Land, Water and Planning (Vic)  
PO Box 500  
East Melbourne VIC 800

Any questions should be directed to the DELWP Secretariat for the Review by email to [EmbeddedNetworks.Review@delwp.vic.gov.au](mailto:EmbeddedNetworks.Review@delwp.vic.gov.au).

### 7.2 Publication of submissions

We will treat submissions received in response to this discussion paper as public documents and submissions may be placed on the Review website at [www.engage.vic.gov.au](http://www.engage.vic.gov.au).

If you believe that there are aspects of your submission that are confidential or commercially sensitive, you should mark those sections 'IN CONFIDENCE'. In such instances, formal requests for confidentiality will be honoured, however, submissions may be made available publicly under the *Freedom of Information Act 1982* (Vic). Any requests for public access to a submission will be determined in accordance with that Act.

DELWP is committed to protecting personal information provided by you in accordance with the principles of the Victorian privacy laws. For more information, please read [DELWP's Information Privacy Policy](#) and the Privacy Collection Statement (Appendix 7).

# Appendix 1: Biographies of the Expert Panel Members

## Ms Jo Benvenuti

Jo is an experienced consultant across a range of consumer matters, specialising in consumer engagement and energy and water policy.

Jo is currently a sole trade consultant, as well as a Director at Gippsland Water and a Panel Member of the COAG Energy Council's Independent Energy Appointments Selection Panel.

As part of her consulting work, Jo produced a 2016 research report on embedded networks for the Energy and Water Ombudsmen of SA, NSW and Victoria. The research report examined the applicability of ombudsman jurisdiction for Australian energy consumers in the midst of energy market reform and innovation, with particular focus on identifying energy transactions that fall outside of the jurisdiction of ombudsmen schemes.

During 2016-17, Jo provided consultancy services to the Consumer Policy and Research Centre on embedded networks.

Prior to her current roles, Jo was the Chair of the Consumers' Federation of Australia from 2013 to 2015 and Executive Officer of the Consumer Utilities Advocacy Centre from 2008 to 2015. Jo has previously held executive positions for the Energy and Water Ombudsman Victoria and RSPCA Victoria.

Jo holds a Higher Diploma of Teaching Secondary from the Melbourne College of Education and a Graduate Diploma in Public Policy from the University of Melbourne.

## Mr Gerard Brody

Gerard has been the CEO of the Consumer Action Law Centre for more than six years and is a leading consumer rights advocate and lawyer. Prior to his role as CEO, he spent around ten years in various policy officer, solicitor and management roles at both the Consumer Action Law Centre and the Brotherhood of St Laurence.

Gerard has also held the role of Chairperson at the Consumers' Federation of Australia for the past four years.

Gerard has represented consumers on a number of bodies, including the ACCC's Consumer Consultative Committee, the Australian Securities and Investments Commission's Consumer Advisory Panel and the Australian Energy Regulator's Customer Consultative Group.

Gerard holds a Bachelor of Laws and Bachelor of Arts (both with Honours) from the University of Melbourne and also holds a Master of Public Policy and Management from the University of Melbourne.

## Mr Neil Gibbs

Following a career in global energy markets, Neil now actively supports the decarbonisation of the electricity system, specialising in the evolution of technology, business models, regulation and markets at the "grid edge" – harnessing the value of innovation and customer engagement to deliver secure, reliable, affordable and low-emissions energy and services. His core skills are in strategy development, the art of building organisational support for change, and the diligence of strategy execution.

He is the Founder & Principal of OnLine Power, a boutique advisory firm serving the Australian energy industry. He is also Co-Chair of the Clean Energy Council's Distributed Energy Leadership Forum, and is currently engaged to support the Energy Security Board's Post 2025 Electricity Market Redesign process with a focus on Distributed Energy Resource markets. His previous roles include as the Founding Chair of both GreenSync and i.n. concepts, Founder & CEO of Marchmont Hill Consulting, VP for AT Kearney (Asia Pacific Energy), VP for Cap Gemini Ernst & Young, and Global Energy Practice leader for PA Consulting Group.

## Ms Andrea Steele

Andrea is a lawyer who specialises in providing legal, regulatory, compliance and energy-related strata law advice to the Australian electricity and gas sectors.

Andrea is currently a Principal Consultant at ENRG Consulting, which specialises in providing advice to the Australian energy sector – with a particular focus on the embedded network industry.

Between 2012 and March 2019, Andrea worked in-house at WINconnect, an embedded electricity network provider in Australia, as an Executive General Manager and General Counsel. Andrea advised WINconnect on their retail electricity and gas operations, embedded network, hot water and solar businesses.

Andrea's key focus and capabilities include advice relating to the national electricity and gas markets and their respective regulatory frameworks, including how the regulatory instruments apply in these markets.

Andrea holds Bachelor's degrees of Law and Commerce from Bond University. In addition, Andrea holds a Masters of Laws (International Banking & Finance and European Law) and a Masters of Legal Practice.

## Appendix 2: Summary of stakeholder submissions on the Issues Paper

The Expert Panel – Embedded Networks Review (Panel) released an Issues Paper on 11 January 2021, seeking industry and community feedback to the identified issues and questions posed. The Issues Paper was released through the government’s online consultation platform, Engage Victoria.

The Panel held two online stakeholder consultation sessions – an Issues Paper Webinar on 3 February and a Solutions Design Workshop on 10 February 2021. There were 82 participants for the webinar and 37 participants for the workshop. Submissions closed on 26 February 2021.

DELWP received 133 responses to the Issues Paper from a broad range of stakeholders:

- 88 individual consumers (66%)
- 7 consumer advocacy groups (5%)
- 26 industry stakeholders (including embedded networks, electricity retailers and distributors) (20%)
- 12 others (e.g. local government, Energy and Water Ombudsman (Victoria) (EWOV), consultancy, research institutes) (9%)

### Overview of submissions

The submissions from all stakeholders broadly support implementing changes to improve embedded network customer access to competitive retail offers, consumer protections and concessions. There was also strong industry support for implementing the Australian Energy Market Commission’s (AEMC’s) proposed amendments to the national regulatory framework for embedded networks in Victoria.<sup>40</sup>

Some industry submissions noted potential high costs associated with requiring infrastructure upgrades in legacy sites (required to support full access to retail choice for customers in those networks). There was some diversity in the submissions in relation to possible microgrid definitions, with some stakeholders noting the ability to “island” or operate independently was key, while other stakeholders favoured a more outcome focused definition.

Embedded network customers expressed a high level of distress and frustration relating to living in embedded networks. Consumers talked about feeling trapped in an arrangement which they variously described as anti-competitive, anti-consumer, unethical and monopolistic where they are forced to pay high energy rates with no say or input. Further, numerous submissions noted instances of poor customer service, including not being able to get through to the embedded network provider, failure to return calls, inconsistent and inaccurate billing and limited access to dispute resolution.

### Key feedback from the submissions (by stakeholder type):

- Embedded network customers strongly support:
  - banning embedded networks (both new and legacy)
  - access to retail choice and market offers, including GreenPower options and being able to choose an ‘ethical’ retailer
  - improved transparency in bills
  - benefits of being in an embedded network being passed on to customers
  - improved consumer protections particularly on dispute resolution and better customer service
  - improved access to concessions on bills
  - access to renewable energy options

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<sup>40</sup> Australian Energy Market Commission (AEMC), Updating the regulatory frameworks for embedded networks, Final Report, 2019

- Consumer advocate groups support:
  - the same access to customer protections and retail choice for all customers, including those in legacy (existing) embedded networks
  - improved monitoring, compliance and enforcement
  - improved transparency relating to the existence of an embedded network at the time of purchasing a property or signing a lease, and information about implications of living in an embedded network
- Embedded network industry stakeholders (including developers) support:
  - implementing the AEMC recommendations in Victoria to help form a consistent approach and to minimise regulatory compliance costs
  - ensuring effective compliance and enforcement, for existing regulatory obligations as well as any new requirements. A number of stakeholders noted changes to the regulatory obligations in recent years which should have improved customer outcomes, but which are not adequately enforced
- Licensed electricity retailers and distribution businesses support:
  - implementing the AEMC recommendations in Victoria, particularly the requirement for embedded networks to be licensed and changes to ensure customers can more readily access the national market
  - consistent national application of regulatory requirements, particularly to minimise costs
- Local government noted the need to ensure that:
  - implementing the ban does not inadvertently create barriers to the take up of embedded networks or technologies that will be a critical part of the transition to fossil fuel free, all electric buildings and precincts, powered by 100% renewable electricity.
  - any definition of microgrids (or another class of exemption for prescribed embedded networks) extends beyond on-site generation, sharing and storage and which would facilitate the take up of renewable energy at scale.

## What we did with stakeholder feedback

Submissions covered the full range of issues raised in the Issues Paper and for ease of analysis and reporting, can broadly be broken down into the following themes:

- *Support for the ban*: most consumers support a ban of embedded networks
- *Equity*: all customers should have the same protections, regardless of whether they are on or off market
- *Market access and the power to choose*: barriers to the energy retail market for embedded network customers need to be removed and customers must be given the power to choose
- *Concessions*: access to concessions must be improved
- *Customer service and dispute resolution*: customer service and access to dispute resolution services must be improved
- *Transparency*: information disclosure must be more transparent
- *Monitoring and enforcement*: a stronger compliance and enforcement framework, including effective monitoring, is required
- *Support for AEMC reforms*: industry generally supports the AEMC's 2019 Embedded Networks Report recommendations and a nationally consistent approach to embedded networks
- *Defining microgrids*: an outcomes-focused definition of a microgrid, with a focus on passing on benefits to consumers is generally preferred

- *Bundled services*: risks to other services, such as bulk hot water, must be considered if embedded electricity networks are banned
- *Transition and timing*: a considered transitional approach is required

The key points in each submission were categorised into the thematic areas and grouped according to stakeholder/organisation type.<sup>41</sup> This feedback was incorporated into the development of the Panel's Draft Report.

## Themes

### 1. Support for the ban

*"Please ban all of them! Competition can only be a good thing! We are stuck paying ridiculous prices!!! Please help us as we can't afford to keep paying these sort of bills, we need these banned not just from new developments but existing also!" - Embedded network customer*

*"Please ban inbedded networks!!!! They know we don't have a choice and overcharge us! I just want the freedom of being able to choose who supplies my energy, so that it best suits me and the planet." – Embedded network customer*

### What we heard

- Most consumers who made a submission (84%) support a ban on embedded networks. However, some customers who live in an embedded network that is passing on the benefits expressed concern that a ban would mean customers would no longer be able to access the benefits associated with embedded networks.
- Consumers expressed a range of explicit or implied reasons for supporting for the ban including:
  - a strong desire to choose a retailer based on economic (price), environmental and/or ethical reasons.
  - feeling trapped in an anti-competitive, anti-consumer, unethical and monopolistic arrangement where they are forced to pay high energy rates with no say or input
  - a history of poor customer service with no viable options to improve their experience, and unsatisfactory dispute resolution outcomes
  - practical barriers to changing retailers for example costs to upgrade meters, particularly for renters
  - lack of information disclosure, such not being told that an embedded network existed at the time of purchasing or renting a property
- Consumers living in existing embedded networks expressed a plea for the ban to extend to legacy (existing) embedded networks.

### Our response

A key principle developed by the Panel to guide the Review and its recommendations is placing benefits to consumers at the centre, so that the Review is driven by the needs of consumers, particularly consumers experiencing vulnerability or disadvantage, and not the business model of suppliers and other interested parties.

This principle has been incorporated throughout the recommendations to ensure that customers of new residential private networks under the proposed licensing framework (see Section 3 of the Draft Report) as well as legacy (existing) embedded networks have access to benefits of bulk purchasing and renewable energy or other clean energy technologies in addition to the same consumer protections as on-market customers.

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<sup>41</sup> Stakeholder quotes are as provided to the Review, including any grammatical or spelling errors

## 2. Equity

*"We consider that it is fundamental that the governance framework for embedded networks ensure that customers are provided with the same protections and regulatory oversight as standard supply customers." – Origin Energy*

*"There is no good reason that customers in legacy embedded networks should enjoy lesser consumer protections than customers in newer embedded networks, or indeed on-market customers" – Consumer Action Law Centre (CALC)*

*"The focus of our submission is to highlight embedded networks that have been operated ethically and for the benefit of consumers. This was the initial vision for embedded networks when the General Exemption Order was first created.*

*...it will be important to make effective policy that does not seek to erode savings and benefits where they are being realised by consumers." – Network Energy Services*

### What we heard

- There was overwhelming support from stakeholders that all customers have access to the same consumer protections, regardless of whether they are on-market or embedded network customers.
- Moving to a licensing regime for embedded networks may be the most efficient way of ensuring embedded network customers have access to the full suite of protections.
- A consumer information campaign to educate embedded network customers of their rights and implications of living in an embedded network would be beneficial.

### Our response

The Panel recommends that all embedded network customers, including those living in residential parks, social housing and retirement villages, should have access to equal or equivalent consumer protections as on-market customers.

Consistent with the principle of placing benefits to consumers at the centre, this will go some way to ensuring all electricity customers have equal or equivalent protections and treatment, no matter where they live or how they get their energy.

## 3. Market access and power to choose

### What we heard

This theme was commented on extensively in the submissions stating that barriers to the energy retail market for embedded network customers need to be removed and customers must be given the power to choose.

### Choice of electricity retailer

*"The greatest problem is that the OC DID NOT opt-in to this arrangement...the developer and the strata manager of the day, signed contracts awarding the embedded network to WINconnect well before the Owner's Corporation was properly established with a committee to oversee the governance of the arrangement...its unconscionable that a developer can sign an agreement for a decade or so, which they then sell out of. They are knowingly signing up the future residents of that building." – Embedded network customer*

*"As a consumer of anything from chocolate bars to cars, I have the right to support the companies I choose to - but not when it comes to my energy supplier. I am forced to pay money to a company I despise for services that I would prefer to receive from just about anyone else. .... Consumers should always be allowed choice and free access to the market to choose the providers they want. Big companies shouldn't be able to buy their way to customers." – Embedded network customer*

- A very high proportion of embedded network customers who made a submission (70%) expressed strong views that retailer choice is a consumer right that should be mandated.

- Customers wanting retail market choice was not just related to price, but also due to poor customer service experiences, inability to resolve disputes, the desire to choose renewable energy options, or because customers wanted to be able to choose and 'ethical' retailer.

### **Access to GreenPower**

*"... my major concern is that there are renewable power options which exist and I would like to support but I am unable due to the embedded network. This is incredible frustrating and hugely detrimental to our planet." – Embedded network customer*

- Around a third (34%) of embedded network customer submissions expressed frustration at the inability to be able to access GreenPower or other renewable options in their embedded network.
- Industry involved in developments using renewable energy and local government implementing carbon neutral policies support embedded networks in terms of their ability to enable access to renewable energy and decarbonisation of the electricity grid.
- Social and community housing organisations which already provide green energy to residents in their embedded networks expressed concern that the ban may negatively impact them and other similar housing.

### **Removing barriers to the energy retail market**

*"Wanted to take up a new provider but couldn't as the cost was too expensive to change (something about needing a new meter installed into the building)" – Embedded network customer*

*"We consider the cost of a NEM compliant meter is the key barrier to switching and accessing competition for legacy networks built before December 2017 (this is not an issue for future microgrids)." – Energy Australia*

Stakeholders noted that the three main barriers to customers being able to access the retail electricity market were the absence of visibility in the national Market Settlement and Transfer System (MSATS), the prohibitive cost of meter and/or internal infrastructure upgrades and the lack of suitable on-market offers.

Stakeholders identified a range of options for removing the barriers and making it easier for embedded network customers to access the market competition:

- monitoring and enforcement of regulatory obligations that commenced post-December 2017 requiring market compatible meters to be installed
- allocating NEMs to all child meters within embedded networks
- government support, such as funding or subsidising metering upgrades to address some of the cost barriers to replacing the meters
- adopting the AEMC's proposed framework and embracing reform at a national level.

### **Our response**

The Panel's vision is that all customers, regardless of where they live or how they get their electricity, will be able to participate in the retail market. Customers living within a private network should not face a greater financial or administrative burden to change to an on-market retailer than other Victorian customers.

However, the Panel recognises there are a number of barriers to retail market access being achieved in practice for customers in private networks, which are not easy to fix. The Panel's view is to require metering and/or internal infrastructure upgrades to meet current standards at some point in time, for example requiring meters to be replaced at their end of life or within a specified time frame.

Given that electricity is an essential service, and the strong support for equal retail market access and customer protections from stakeholders, it is appropriate that over time all sites will be brought up to current standards. In the end, this will help ensure accurate meter data and billing in line with national standards and access to the retail market for all customers.

## 4. Concessions

*“Concession were applied however is a rebate once a year and does not help with monthly bills” – Embedded network customer*

*“Ideally a framework should be put in place that allows for rebates and concessions for embedded network customers be delivered via their bills” – Embedded Network Industry Action Group*

### What we heard

There was high level support across industry, consumer advocacy and community stakeholders, as well as EWOV for embedded network customers to be given the access to the same energy concessions as on-market customers, where concessions are automatically applied on regular customer bills (rather than customers needing to apply annually for a rebate).

### Our response

The Panel recommends ensuring all customers have access to concessions when paying their energy bills, so that customers have equal or equivalent protections as on-market customers. The Panel also recommends requiring exempt persons to notify their customers, at least once annually, of concessions and any additional protections available to them, when they sign up to a residential private network.

## 5. Customer service and dispute resolution

*“I have tried to make complaints about issues with the billing process (incorrect readings etc) and had a poor experience. Lack of response from the provider etc. The customer service was so bad that I would normally switch provider due to that alone, but because I'm in an embedded network I couldn't.” – Embedded network customer*

*“As a matter of principle, all energy customers should have the same protections regardless of the arrangement by which they purchase their energy. Not only is this equitable, it also makes the energy sector easier to regulate and energy related disputes simpler to resolve. Measures designed to foster a sustainable, ongoing, affordable energy supply for customers in vulnerable circumstances should always be regarded as a priority. These are the areas where a failure to apply appropriate protections can cause the greatest harm, and lead to the worst consumer outcomes.” – EWOV*

### What we heard

Almost half (40%) of embedded network customer submissions commented on experiencing poor customer service or dispute resolution outcomes. There are a number of barriers preventing customers from accessing dispute resolution services, including:

- the failure of some embedded network operators to join EWOV
- behavioural factors (for example, in a caravan park, the embedded network operator is often also the landlord. Customers can be reluctant to make an energy complaint as they fear damaging the landlord/tenant relationship)
- customers unaware they are able to make a complaint because they had previously been unable to do so or they have not been advised of their right to do so
- the potential for a customer to effectively lodge a complaint against themselves (ie the customer may also be member of the owners' corporation which is the “exempt person”).

### Our response

The Panel recommends that existing exempt persons and new private networks become members of EWOV, so that customers have access to independent dispute resolution services, including customers of multi-activity exemption holders. It is appropriate that if a customer is not satisfied by the service provided by their retailer, they have access to EWOV, to independently investigate and facilitate the resolution of customer complaints. Further, improved access to retail market choice will enable customers to find an alternative retailer if they are not satisfied with the private network (for the retail component).

## 6. Transparency

*“My problem is that I bought an apartment off the plan, signed a contracting to purchase with a clause that outlined the purchaser got to choose the electricity network, then at settlement the building was built with an embedded network and the owners and tenants did not get a choice of provider. We did not get a choice of a greener energy supplier, nor the competition of the market.” – Embedded network customer*

*“Formalise a minimum requirement disclosure regime for embedded network arrangements in the contract of sale and for the inaugural meeting of Owners Corporations.” – Real Utilities*

### What we heard

- A number of consumers and consumer advocates noted that they were not informed of the existence of an embedded network within the complex at the time of purchasing a property or signing a lease and that customers often don't clearly understand the implications of living in an embedded network.
- Targeted education campaigns would help to upskill embedded network operators in retirement villages, social housing and caravan parks supported by monitoring, compliance and enforcement activity by the ESC.
- Industry participants generally supported greater information disclosure requirements. Key comments included that it may be beneficial to adopt approaches in other jurisdictions including information disclosure legislation and legislative frameworks providing the incoming owners corporation with agency over the appointment of long-term service agreements and contracts, as well as adopting the AEMC's reform package that addresses concerns with information disclosure to lot owners and tenants in residential apartment buildings regarding their rights as embedded network customers.

### Our response

The Panel recommends stronger information disclosure agreements between the customer and private networks.

Private networks should also be required to provide the ESC details of its metering infrastructure and total number of customers. Pricing information relating to bundled services on energy bills and the provider's websites should be made clear and simple, so customers are made appropriately aware of the services they are paying for.

## 7. Monitoring and enforcement

*“I believe that embedded networks have their place IF they are still regulated by the ESC and fall under legislation and consumer affairs are able to intervene. As it stands, for the avg customer, embedded networks are untouchable.” – Embedded network customer*

*“Utilisation of the existing auditing and enforcement structures for licensed energy retailers to ensure regulatory compliance.” – Real Utilities*

### What we heard

A stronger compliance and enforcement framework, including effective monitoring, is required.

Stakeholder feedback included:

- overwhelming support for the ESC to have stronger monitoring and enforcement powers to ensure better compliance with the regulatory regime.
- that the current regulatory framework in Victoria under the GEO is failing to provide good customer and community outcomes when compared to their counterparts in other jurisdictions.
- EWOV noted the standards of regulatory understanding and professionalism can sometimes be very low resulting in poor consumer outcomes. The penalty regime should be scalable depending on the size and nature of the business. If the penalties are not sufficient, they will not generate the desired consumer protection.

- that embedded networks should attract the same level of compliance monitoring and penalties for non-compliance.
- EWOV cautioned that the prevalence of billing agents in the embedded network sector creates a complication for any new compliance regime, as applicable penalties will naturally fall to exemption holders – while the non-compliant conduct itself will in many cases have been committed by a billing agent.

### Our response

The Panel recommends strengthening the compliance and enforcement framework so that the ESC has appropriate powers to monitor and investigate instances of regulatory non-compliance for private networks.

The Panel believes that the ESC should be able to take proportionate and appropriate actions to address non-compliant operators and be resourced to do so.

## 8. Support for AEMC reforms

*“A Victorian framework that is not aligned with the AEMC Reform Package also risks imposing increasing regulatory and compliance cost on industry and in turn embedded network consumers.” – AGL*

### What we heard

Industry generally supports the AEMC’s 2019 Embedded Networks Report<sup>42</sup> recommendations and a nationally consistent approach to embedded networks

- Many industry stakeholders recommend that the regulatory framework implementing the ban should draw heavily from the AEMC’s approach and that there would be significant implementation and operational efficiencies if Victoria were to harmonise with the National regime
- Some industry stakeholders raised concerns that embedded networks should be regulated under the Victorian framework as the national framework creates barriers to distributed energy resources and providing consumers with low-cost renewable electricity through microgrids and microgrid technologies.
- Some industry stakeholders support the creation of a licensing framework for embedded network operators that replaces the current exemption framework to improve consumer protections and that this framework should be harmonised with the proposed AEMC Embedded Network Framework and rule changes.

### Our response

The Panel has considered the AEMC’s recommendations and supports those that align with the Panel’s vision and Terms of Reference; including extending customer protections to legacy (existing) embedded network customers and requiring all class exemptions to be registered.

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<sup>42</sup> AEMC, *Updating the regulatory frameworks for embedded networks, Final Report*, 2019, p 11. <https://www.aemc.gov.au/sites/default/files/2019-06/Updating%20the%20regulatory%20frameworks%20for%20embedded%20networks%20-%20FINAL%20REPORT.PDF>

## 9. Defining microgrids

*"The focus of our submission is to highlight embedded networks that have been operated ethically and for the benefit of consumers. This was the initial vision for embedded networks when the General Exemption Order was first created....it will be important to make effective policy that does not seek to erode savings and benefits where they are being realised by consumers." Network Energy Services*

*"The City of Melbourne wishes to highlight that embedded networks can in fact help facilitate a range of renewable energy initiatives beyond microgrids. Most significantly, this includes the potential for renewable Power Purchase Agreements and the delivery of zero carbon precincts. ... The City of Melbourne has accessed the potential of different community energy models in the city. One of the viable models identified recognises embedded networks and microgrids as a key enabler to support community energy projects." – City of Melbourne*

*"Removing obstacles that prevent renewables being installed into embedded network, or microgrids, will ultimately benefit consumers by being able to install larger solar PV systems which enhances the affordability of their energy and benefits the environment." – Lifestyle Communities*

### What we heard

An outcomes-focused definition of a microgrid, with a focus on passing on benefits to consumers is generally preferred.

- A number of stakeholders offered their own definition of a microgrid, for example:
  - EWOV - "microgrids should be defined as having both on-site generation and the ability to 'island', making them clearly distinguishable from an embedded network."
  - Strata Community Association (Vic) - "a localised energy grid with control capability, which means it can disconnect from distribution or transmission grids to potentially operate autonomously."
  - WINconnect - "any independent electricity network (which includes multiple independent consumer connection points) which is connected, via a single point coupling, to a regulated electricity network. The network will allow for the physical installation of existing or new technologies which will serve the interests of the community within the network."
  - Network Energy Services - community focussed model they operate under as an example of a well-designed embedded network ie. Fee for service model – embedded network operator retains full control of the price setting to consumers...service provider providing guidance to them so that they can make informed and compliant decisions.
  - Monash University recommends that a microgrid should have the following features:
    - > dynamic control of load, local renewable generation and/or storage;
    - > active integration of local and network supply;
    - > optimisation of electricity supply and use to benefit users; and
    - > ability to monitor the balance of customer use between local and grid supply.
- Local government stakeholders noted that it may be useful to consider the function and outcomes being achieved rather than solely the configuration of the microgrid or network itself. That is, there should be exemptions for networks that use on-site (solar PV) and off-site renewable energy to deliver zero carbon electricity commitments; respond to growing needs such as renewable electricity storage through batteries and use of electric vehicles; and use sophisticated building management systems to optimise efficiency, demand response and enhance resilience and stability in the system.
- It was noted that the inability of renewable energy microgrids to be 'low cost' should not be the sole reason to discard them. Overall sustainability measures should also weigh as important factors in determining the viability of a microgrid embedded agreement.
- WINconnect believes the only appropriate way to ensure that benefits are flowing to customers (regardless of the technology within the network) is to implement a regulatory framework which ensures customers within the microgrid are afforded the same protections as on-market customers, operators are subject to compliance oversight and allows for retail transfer and hence competition to occur within the site.

- There wasn't a single agreed approach to establishing an appropriate definition for a microgrid. The main concerns were to ensure that appropriate renewable energy/innovative options remained available to customers via the private network set up. Also noted by stakeholders was that the "islandable" definition actually creates restrictions and may be counter-productive or not cost effective to encourage sustainable options (if back-up is supplied via diesel or other fossil fuel driven energy).

## Our response

To move forward from the issue of how to define a microgrid, the Panel proposes a new concept of 'LES licence', as it encapsulates networks with renewable or clean energy technologies, the benefits of which are to be passed on to residents within the private network.

## 10. Bundled services

### What we heard

Stakeholders had conflicting views about whether banning electricity embedded networks will have any risk to, or impact on, other bundled services.

Some submissions suggested bundled services would still continue to be supplied, as these are independent of electricity embedded networks, while other stakeholders suggested that removing electricity embedded networks from a building would make managing other centralised services more complicated and less efficient, and therefore more expensive, to supply.

Some submissions raised concerns about bundled services being unregulated with no price caps, building in high costs and long-term monopoly contracts for these services. Further there were concerns raised about gas operated bulk hot water heaters being inefficient, unsustainable and becoming more costly to run over time (being fossil-fuel dependent).

### Our response

The Panel recommends further monitoring, enforcement and regulatory oversight for such bundled services as bulk hot-water, bulk heating/cooling and unmetered gas cooktops, and noted the comments about services relying on gas being counter to the Victorian Government's focus on driving investment in renewable or clean energy to drive emissions reduction.

It is also appropriate for any unlicensed supply and sale of bundled services to be subject to ESC enforcement. A maximum price for bundled services set by the ESC should be introduced, to protect customers from potential instances of price gouging.

## 11. Transition and timing: a considered transitional approach is required

*"The Issues Paper itself correctly identifies many of the factors that need to be considered in developing a transition strategy for the proposed reforms. We support the broad principle that the reforms should be phased in." – EWOV*

### What we heard

A considered transitional approach is required. Stakeholders support a phased transition approach. Key comments included:

- EWOV notes that the implementation phase can involve significant administrative lags and these should be taken into account when possible. Providing an appropriate lead time is also very important
- that legacy networks should be offered a generous transition period to comply with new rule and regulations
- that a limited transition period enabling existing legacy sites to appoint a full licensed retailer or become licensed themselves. This should harmonise the AER's framework.

## **Our response**

The Panel recommends a two-stage transition approach to implementing the Government's election commitment. Stage 1 from mid-2022 to late-2023 will give initial effect to the ban via GEO amendments.

Amendments should require residential private network sites to have renewable or other clean energy and demonstrate how benefits pass to consumers.

The commencement of stage 2 from late-2023, marks the establishment of a new LES licensing regime, where legacy embedded networks must acquire an LES licence from the ESC, to continue supplying and selling electricity in new residential private network sites.

## Appendix 3: Glossary of terms

Term	Description
Child connection point	A connection point that connects to the parent meter and measures the consumption for individual residences (or shops in a commercial setting) within the embedded network.
Community energy project	A project which a community of people develops, delivers and benefits from sustainable energy, including renewable energy installation and storage.
Embedded network	<p>A distribution system connected at a parent connection point to either a distribution system or transmission system that forms part of the national grid and which is owned, controlled or operated by a person who is not a network service provider.</p> <p>For the purposes of the Review and the recommendations, an embedded network is an existing network that was built before the recommendations are implemented.</p>
Essential Services Commission (ESC)	Victoria's economic regulator of essential utility services.
Exempt person	A person who is exempt from holding a licence under section 16 of the <i>Electricity Industry Act 2000</i> (EIA) to engage in certain activities as set out in clauses 4 and 5 of the General Exemption Order.
General Exemption Order (GEO)	An order made under section 17 of the EIA and published in the Victorian Government Gazette that outlines the terms and conditions an electricity supplier can operate without a licence.
Local Energy Service (LES) Licence	<p>A proposed new licence category for private network providers.</p> <p>Licensing conditions will require renewable energy and/or other clean energy technology and the benefits from this to be demonstrated to be passed on to customers.</p> <p>Once the new LES licensing framework is in place, anyone who supplies and/or sells electricity in new residential sites containing a private network (including apartment buildings, social housing, retirement villages and residential parks) must obtain a specific LES licence from the ESC.</p>
Microgrid	A small energy system that efficiently manages the supply and demand of electricity from local sources of generation and storage for end-user consumption.
Multiple activity exemption	<p>An exemption for a provider that generates, distributes and/or sells electricity at a site. This can include solar power purchase agreement providers and community energy projects.</p> <p>See also Part 4 of the GEO 2017 for the multiple activity exemptions.</p>
National Electricity Market (NEM)	A synchronous electricity grid comprising of transmission lines and cables connecting all states and territories in Australia, to create a national wholesale electricity market operated by the Australian energy Market Operator (AEMO).
On-market customers	Those who are connected directly to the electricity grid and not part of an embedded network
Parent connection point (also known as parent meter or gate meter)	The connection point between the distribution network and the individual child meters in an embedded network.

Private network	Once the recommendations are implemented and the ESC has granted an applicant an exemption or an LES licence, new and existing networks will be referred to as a 'private network'.
Renewable or clean energy / renewable or clean energy technologies	<p>For the purposes of the Review and recommendations, these terms are used to describe renewable or clean energy options or technologies that help with carbon emission reduction in line with Victorian Government policy.</p> <p>The terminology is intended to cover various options available in the context of delivering emission reduction. Examples include, but are not limited to, renewable energy generation options (such as solar photovoltaics), energy storage and batteries, energy efficiency, demand management and smart systems, and/or enabling purchase of energy using renewable sources from the market.</p> <p>These terms are technology neutral, in line with the principles underpinning the Review to enable future-proofing of the system.</p>
Retailer of Last Resort (ROLR) event	An event that triggers the operation of the Retailer of Last Resort scheme under the National Energy Retail Law, whereby the right to buy or sell electricity or gas is revoked.
Third-party service provider	A utility service provider that buys and sells energy to end-user consumers.
Victorian Default Offer (VDO)	A simple, trusted and fair electricity option regulated by the ESC that safeguards residential and small business customers who may be unable or unwilling to engage in the Victorian electricity retail market.

# Appendix 4: Terms of reference

## Background

The Victorian Government has committed to ban embedded networks in new residential apartment blocks, which too often lock in high costs on consumers. Exemptions will be allowed for buildings that use renewable energy micro grids to deliver low-cost renewable energy to apartment blocks.

## Purpose

The Embedded Network Expert Panel (the Panel) is requested to engage with and advise the Minister for Energy, Environment and Climate Change and the Minister for Solar Homes (the Minister) on the implementation of a ban on embedded electricity networks in new residential apartment blocks.

The purpose of banning embedded networks in new residential apartment blocks is to ensure that, to the fullest extent practicable, these Victorian consumers can access the same competitive retail offers and consumer protections as other Victorian consumers.

Any Victorian consumers that will remain in residential embedded networks (including apartment blocks and other types of residential embedded networks) should also, to the fullest extent practicable, have access to the same competitive retail offers and consumer protections as other Victorian consumers.

## Function and Output

The main output of the Panel will be written recommendations to the Minister on:

- how to implement a ban on embedded networks in new residential apartment blocks, including the appropriate exemptions to the ban for buildings that use renewable energy micro grids to deliver low-cost renewable energy to apartment blocks;
- how such a ban would intersect with legacy embedded networks in residential apartment blocks, including options for retrofitting or removing existing embedded network infrastructure if appropriate; and
- how to ensure that, to the fullest extent practicable, Victorian consumers in residential embedded networks (including apartment blocks and other types of residential embedded networks) can access the same competitive retail offers and consumer protections as other Victorian consumers. As part of this, the Panel should consider the frameworks for electricity, gas and any other (such as bulk hot water and variable refrigerant volume) embedded networks.

In addition to its written recommendations, the Panel's Review should also deliver written advice on:

- i. how exemptions to the ban may allow for innovative new technologies or new/existing applications and other appropriate uses of embedded electricity networks;
- ii. recommended actions for regulators, particularly in relation to compliance and enforcement;
- iii. the expected impacts of its written recommendations and the expected impacts of any of its non-preferred options; and
- iv. steps to implementation, including the timing and sequencing of recommended changes.

While undertaking the Review, the Panel should consider:

- where it recommends more than one potential option, to specify its preferred recommendation;
- any amendments necessary to ensure that Retailer of Last Resort arrangements extend to embedded network customers;
- infrastructure and contractual barriers/opportunities to retrofit or remove legacy embedded networks;
- current regulatory regimes and enforcement options and their effectiveness;

- outcomes of government reviews on embedded networks, including from DELWP, the Essential Services Commission and the Australian Energy Market Commission;
- the interaction of its recommendations with the national energy framework and relevant building and planning legislation;
- the interaction of its recommendations with reforms related to the government's Energy Fairness Plan; and
- current embedded network retail offerings, in order to identify innovations, competitive pricing practices and the costs faced by embedded network customers, perhaps by using case studies.

The scope of the Review excludes the price cap for embedded electricity network customers.

In preparing its recommendations, the Panel:

- may attend meetings with DELWP and other government departments to discuss policy and implementation considerations;
- may meet with relevant stakeholders (including from industry, consumer groups, the Energy and Water Ombudsman and government)
- may publish written reports to guide consultation and accept written or verbal submissions from stakeholders;
- will be required to make consensus recommendations at the conclusion of its Review; and
- may brief the Minister throughout the Review on its proposed recommendations and the implications for Victorian consumers, embedded network operators and other energy retailers.

## Chair

The Minister will nominate the Panel Chair.

## Secretariat

The Panel will be supported in its work by the DELWP Secretariat (the Secretariat). The Secretariat will comprise a DELWP manager and staff. The Secretariat will be responsible for the administration and operation of the Panel including:

- providing all necessary project management and policy support;
- providing guidance on key technical elements of the Review;
- facilitating consultation with other State and Commonwealth Government stakeholders (such as the Essential Services Commission, Consumer Affairs Victoria and the Australian Energy Market Commission);
- drafting written material as necessary, preparing briefings and arranging meetings with relevant stakeholders and/or the Minister; and
- procurement of any additional advice required by the Panel to inform their considerations.

## Completion

The Panel will be required to provide its recommendations to the Minister within 12 months of its establishment. The Panel may be asked to provide follow-up advice related to its recommendations. To allow for this, the Panel may be extended as necessary.

## Appendix 5: How the Panel and the AEMC's recommendations intersect

The Panel's draft Recommendations	Comparing the Panel's draft Recommendations to the AEMC recommendations <sup>43</sup>
<p>Initially, the Victorian Government's commitment to ban embedded networks in new apartment buildings (allowing appropriate exemptions) should be implemented via amendments to the General Exemption Order (GEO). <b>(Recommendation 1)</b></p> <p>Residential exemptions under the revised GEO should no longer be "automatic". Instead, there should be an exemptions approval process administered and regulated by the Essential Services Commission (ESC). <b>(Recommendation 2)</b></p> <p>To give longer-term effect to the ban and to ensure equity and fairness for customers, the licensing framework under the <i>Electricity Industry Act 2000</i> (EIA) should be amended to enable licensing of 'Local Energy Service' (LES) providers for private networks.</p> <p>Once the new licensing framework is in place, anyone who supplies and/or sells electricity in new residential sites containing a private network (including apartment buildings, social housing, retirement villages and residential parks) must obtain a specific LES licence from the ESC. <b>(Recommendation 3)</b></p>	<p>The AEMC is not recommending that embedded networks be banned, however, it does believe that the number of parties eligible for a network service provider and retail exemptions should be significantly reduced.</p> <p>Similar to the Panel, the AEMC recommends a new licensing (authorisation) category be established for 'Off-market retailers'. Under the AEMC's proposed model, off-market retailers would be required to obtain an authorisation from the Australian Energy Regulator (AER) and would be subject to most requirements that existing authorised retailers are subject to.</p> <p>The AEMC also recommends a role for Embedded Network Service Providers (ENSPs) be created. ENSPs would be required to register with AEMO and subject to many of the existing regulatory requirements placed on distributors.</p> <p>Any remaining exempt parties that do not fall within these categories will be required to register with the AER.</p>
<p>Entities which currently sell or supply electricity pursuant to an exemption under the GEO should be transitioned into the LES licensing framework. <b>(Recommendation 4)</b></p>	<p>The AEMC's approach to legacy embedded networks is somewhat different to the Panel's.</p> <p>The AEMC recommends that legacy embedded networks that are currently subject to deemed and individual exemptions would not be required to transition to the new framework.</p> <p>Under the AEMC's proposed model, there would be two possible pathways for legacy embedded networks with registrable exemption, depending on the age of the network:</p> <p>Legacy embedded networks established on or after 1 December 2017 would be required to fully comply with the new requirements.</p> <p>Legacy embedded networks established prior to 1 December 2017 would be required to comply with the arrangements for off-market retailers under the NERR but would be exempt from the metering provisions. Network exemptions would be grandfathered into the new arrangements.</p> <p>Legacy embedded networks may seek an individual exemption.</p>

<sup>43</sup> AEMC, *Updating the regulatory frameworks for embedded networks, Final Report*, 2019, p 11.  
<https://www.aemc.gov.au/sites/default/files/2019-06/Updating%20the%20regulatory%20frameworks%20for%20embedded%20networks%20-%20FINAL%20REPORT.PDF>

The Panel's draft Recommendations	Comparing the Panel's draft Recommendations to the AEMC recommendations <sup>43</sup>
<p>In the future, if the Victorian Government undertakes a broader licensing framework review, it should consider the intersection of these Recommendations with that review, and further, whether the exemptions framework remains fit for purpose. <b>(Recommendation 5)</b></p>	<p>The AEMC does not make recommendations regarding a broader licensing framework review.</p>
<p>Once the GEO amendments are given effect as specified in Recommendations 1 and 2, consumers living in all types of residential private networks (including those living in social housing, retirement villages and residential parks) should have access to equal or equivalent consumer protections as on-market customers. <b>(Recommendation 6)</b></p>	<p>Similar to the Panel's draft recommendations, the AEMC recommends that almost all of the existing consumer protections under the <i>National Energy Retail Law</i> and <i>National Energy Retail Rules</i> should apply to embedded network customers.</p> <p>This includes consumer protections in areas such as disconnections, billing information, payment options and notification of planned outages.</p> <p>Like the Panel, the AEMC is calling for embedded network customers to have better access to concession schemes and independent dispute resolution.</p>
<p>The monitoring, compliance and enforcement framework for private networks should be robust and proportionate and aligned with the ESC's framework and approach for current licensed energy providers. <b>(Recommendation 7)</b></p>	<p>Consistent with the Panel, the AEMC recommends that embedded networks be subject to stronger regulation which enhances the AER's ability to enforce compliance with obligations to provide protections.</p>
<p>All private network customers should have access to the energy retail market and it should be easy for them to transfer to an on-market energy retailer. Customers within a private network should not face a greater financial or administrative burden to change retailers than other Victorian customers. <b>(Recommendation 8)</b></p> <p>Customers within legacy (existing) private networks should not remain stranded within a private network indefinitely.</p> <p>To support the implementation of Recommendation 4, over time, metering and/or other internal infrastructure in legacy (existing) embedded networks should be upgraded and/or changed to enable these customers to access the retail market without imposing a cost burden on customers to do so. <b>(Recommendation 9)</b></p>	<p>Like the Panel, the AEMC believes that embedded network customers should have access to competitively priced market offers by making it possible for customers to choose their retailer.</p> <p>However, while the Panel recommends that over time all embedded network customers should have access to the retail market through upgraded compliant metering, the AEMC has put forward a different approach.</p> <p>The AEMC suggests the National Electricity Rules' metering framework be extended to all embedded networks built after 1 December 2017. However embedded networks established before this date should be exempt from these metering requirements.</p> <p>Similar to the Panel, the AEMC recommends the introduction of standardised billing arrangements for the recovery of external network charges from embedded network customers who choose to go on-market with an alternative retailer.</p>
<p>Owners and occupants in residential private networks must be provided with adequate information about their rights and obligations as a customer within a private network and about commercial agreements relating to the private network infrastructure and ownership and management of these assets.</p> <p>Adequate information disclosure should be required under both the GEO and as part of the LES licensing regime. <b>(Recommendation 10)</b></p>	<p>While the AEMC does not make recommendations regarding the provision of information requirement, the AEMC recommends that any charges levied by ENSPs should be required to be reasonable and that any disputes should be resolved by the AER.</p>

The Panel's draft Recommendations	Comparing the Panel's draft Recommendations to the AEMC recommendations <sup>43</sup>
<p>Planning, building and strata requirements should be amended to oblige anyone proposing to install relevant infrastructure associated with the supply and/or sale of electricity within a residential building via a private network to design, build and operate the private network to incorporate renewable or other clean energy technologies which enable benefits to be passed on to customers. Information, especially relating to infrastructure assets, must also be disclosed to prospective purchasers. <b>(Recommendation 11)</b></p>	<p>The AEMC does not make any recommendations regarding the introduction of planning, building and strata requirements to design, build and operate private networks to incorporate renewable or other clean energy technologies.</p>
<p>Planning, building and strata requirements should also be amended to oblige anyone proposing to supply other bundled services within a residential building/site (including bulk hot-water, bulk heating/cooling or unmetered gas for cooktops) to meet similar standards to design, construct, establish and operate those services in the best interests of prospective owners and occupants, and to disclose appropriate information. <b>(Recommendation 12)</b></p> <p>There should be appropriate regulation, monitoring and enforcement relating to currently unregulated bundled services (including bulk hot-water, bulk heating/cooling and unmetered gas cooktops) to ensure there is no longer secondary, separate treatment for consumers of these essential services. <b>(Recommendation 13)</b></p>	<p>The AEMC does not make any recommendations regarding the planning, operation and regulation of bundled services.</p>
<p>Customers in a private network should be adequately protected in the event that the private network fails or the entity operating or responsible for the private network becomes insolvent.</p> <p>The Victorian Government should give the ESC power to appoint an alternative provider to operate the private network in this situation to ensure continuity of supply for customers within that private network. <b>(Recommendation 14)</b></p>	<p>The AEMC recommends a modified set of Retailer of Last Resort (RoLR) arrangements be established for embedded networks where the retailer at the parent connection point would become the RoLR in the event of the failure of an off-market retailer.</p> <p>This may not be possible under the Panel's proposed approach as the retailer at the parent connection point may not have an LES licence.</p>
<p>A mechanism (or mechanisms) should be established to ensure that the voices of consumers living in apartments buildings, retirement villages, social housing and residential parks are heard in policy and regulatory development. <b>(Recommendation 15)</b></p>	<p>The AEMC does not make a recommendation to establish a mechanism to ensure the voices of consumers living in embedded networks are heard in policy and regulatory development.</p>
<p>The changes to the GEO and the new LES licensing regime will need to be phased in over time. <b>(Recommendation 16)</b></p>	<p>The AEMC recommends a phased approach to implementation, which is similar to the Panel's recommended approach.</p>

## Appendix 6: Addressing the Terms of Reference and how the Panel proposes it will apply in legacy (existing) embedded networks and new private networks

Primary outputs	The Panel's proposed Recommendations to achieve the outputs	Applying the Recommendations to existing embedded networks	Applying the Recommendations to new private networks
<b>How to implement a ban on embedded networks in new residential apartment blocks, including the appropriate exemptions to the ban for buildings that use renewable energy microgrids to deliver low-cost renewable energy to apartment blocks</b>	<p>The ban will be implemented initially via changes to the GEO (to categories and conditions), then further through new LES licensing framework being introduced.</p> <p>Licensing conditions will require renewable energy and/or other clean energy technology and the benefits from this to be demonstrated to be passed on to customers.</p> <p>Automatic exemption no longer exists – an approvals process via the ESC should be established as an interim measure until a new licensing framework is established (and while GEO remains the primary regulatory instrument).</p> <p>Changes extend to most smaller residential exemption categories, like residential parks, retirement villages, social housing and legacy apartment buildings.</p>	<p>Amendments to the GEO to apply by June 2022.</p> <p>Anyone relying on the GEO for a site which is operational prior to the revised GEO coming into effect will need to apply to the ESC for approval within 12 months of the new approvals process and application criteria being established</p> <p>Existing residential embedded networks (including apartment buildings, retirement villages, residential caravan parks and social housing) to be given a transition period to be covered by the new licence once the framework is established:</p> <ul style="list-style-type: none"> <li>• 6 months for sites currently in development</li> <li>• 3 years for legacy (existing) sites</li> </ul>	<p>Once the GEO is revised, new private networks (which become operational after the revised GEO takes effect) will need to obtain approval from the ESC prior to supplying and selling electricity.</p> <p>New sites that are operational after the licensing framework comes into effect will need to be operated by an LES licence holder from the date of operation.</p>
<b>How such a ban would intersect with legacy embedded networks in residential apartment blocks, including options for retrofitting or removing existing embedded network infrastructure if appropriate</b>	<p>The government should implement regulatory changes required to ensure ease of transfer, including:</p> <ul style="list-style-type: none"> <li>• NMI allocation</li> <li>• Single billing for both retail and network components (settlement processes, standards for network billing)</li> <li>• Oversight of metering/infrastructure to ensure compliance with obligations</li> </ul>	<p>Metering and internal infrastructure should be upgraded to enable customers within legacy (existing) embedded networks to access the retail market rather than leaving these customers stranded indefinitely.</p> <p>The Panel is seeking feedback from stakeholders in relation to appropriate approach and timing to enable this.</p>	<p>New private networks will be required to have compliant metering.</p> <p>Regulatory changes will apply as soon as they are established.</p>

Primary outputs	The Panel's proposed Recommendations to achieve the outputs	Applying the Recommendations to existing embedded networks	Applying the Recommendations to new private networks
	<ul style="list-style-type: none"> <li>• Information about metering/infrastructure and customer numbers to be provided to the ESC annually</li> <li>• Obligations regarding available offers from on-market retailers for embedded network customers</li> <li>• Relevant information for embedded network customers to enable comparison between what they're paying and current market offers</li> </ul>		
<b>How to ensure that, to the fullest extent practicable, Victorian consumers in residential embedded networks can access the same competitive retail offers and consumer protections as other consumers - including consideration of frameworks for electricity, gas and any other embedded networks</b>	<p>GEO categories and conditions should be strengthened to ensure all embedded network customers have access to the same benefits as on-market customers.</p> <p>The Panel is recommending regulating bundled services and other fees/charges, including caps on pricing and disclosure of such on websites etc</p>	<p>Amendments to the GEO to apply by June 2022.</p> <p>Legacy (existing) embedded network customers will have access to the retail market, although this will necessarily be phased due to complexities with updating/changing metering infrastructure.</p>	<p>Consumers in new private networks will have access to the retail market immediately.</p>

Secondary outputs	The Panel's proposed Recommendations to achieve the outputs	Applying the Recommendations to existing embedded networks	Applying the Recommendations to new private networks
<b>How exemptions to the ban may allow for innovative new technologies or new/existing applications and other appropriate uses of embedded electricity networks</b>	<p>The Panel recommends an open approach to "renewable or other clean energy technologies" to enable as wide a range of technologies or renewable options as possible, not just limited to microgrids.</p> <p>It should be linked to Victorian government policy for increased uptake of renewable energy or other clean energy technologies driving carbon emission reduction, with the benefits being demonstrated as being passed on to consumers.</p>	<p>Upon application for an exemption, legacy (existing) embedded network operators will need to demonstrate to the ESC that they will pass on the benefits, within three years of application, from renewable or other clean energy to customers within the private network, and how they will do so</p>	<p>New sites will be required to have renewable energy and/or other clean energy technologies immediately.</p>
<b>Recommended actions for regulators, particularly in relation to compliance and enforcement</b>	<p>The compliance, monitoring and enforcement framework for exempt entities and LES licence holders should be robust and proportionate. Any penalties that can be applied should not penalise private network customers.</p>	<p>Changes to the compliance, monitoring and enforcement obligations under the GEO will come into effect by June 2022.</p> <p>Compliance, monitoring and enforcement obligations under the new licensing framework will come into effect once the site is operated by a licensed LES provider.</p>	<p>Compliance, monitoring and enforcement obligations will apply once the new private network is established and the LES licensing framework has come into effect.</p>
<b>Expected impacts of its recommendations and the expected impacts of any of its non-preferred options</b>	<p>The Panel understands that the move to a licensing framework will impose some costs to industry. However, the Panel considers it the simplest way to enable fair/equitable protections to consumers (as they would be covered by licensing protections under licensing framework), rather than separately under the exemptions framework.</p>		
<b>Steps to implementation, including the timing and sequencing of recommended changes</b>	<p>The Panel is recommending a phased transition with the ban initially implemented via GEO changes, then extended via new LES licensing framework.</p> <p>The changes will be extended to other categories of embedded network (eg retirement villages, residential parks).</p>	<p>Amendments to the GEO will come into effect by June 2022.</p> <p>Existing residential embedded networks (including apartment buildings, retirement villages, residential caravan parks and social housing) will be given a transition period to be covered by the new licence once the framework is established:</p> <ul style="list-style-type: none"> <li>• 6 months for sites currently in development</li> <li>• 3 years for legacy (existing) sites</li> </ul>	<p>Once the GEO is revised, new private networks (which become operational after the revised GEO takes effect) will need to obtain approval from the ESC prior to supplying and selling electricity.</p> <p>New sites will need to be under the LES framework once the new licensing regime is established</p>

Considerations	The Panel's response to the considerations
<b>Where it recommends more than one potential option, to specify its preferred recommendation</b>	The Panel's preference is to have all customers within private networks be sold and supplied electricity by an energy licence holder regulated and monitored by the ESC.
<b>Any amendments necessary to ensure that Retailer of Last Resort arrangements extend to embedded network customers</b>	Government should enable the ESC to nominate an appropriate provider to take over in the event a private network fails to ensure continuity of supply for customers. Providers should be required to provide information to the ESC, and disclose risk of insolvency in line with <i>Corporations Act 2001</i> (Cth) requirements.
<b>Infrastructure and contractual barriers/opportunities to retrofit or remove legacy embedded networks</b>	Customers should not be stranded indefinitely within a legacy (existing) embedded network. The Panel is seeking feedback from stakeholders about how to ensure customers can access the retail market, particularly in relation to reasonable timeframes/approach and how this should be funded.
<b>Current regulatory regimes and enforcement options and their effectiveness</b>	The ESC should have appropriate investigative and enforcement powers, and a full suite of options to take appropriate and proportionate action against non-compliant entities.
<b>Outcomes of government reviews on embedded networks, including from DELWP, the Essential Services Commission and the Australian Energy Market Commission</b>	The Panel has considered earlier reviews including the AEMC recommendations. Appendix 5 provides a comparison between the Panel's proposed recommendations and the AEMC's approach.
<b>The interaction of its recommendations with the national energy framework and relevant building and planning legislation</b>	<p>The Panel has considered metering requirements/standards under national energy framework and how they apply within Victoria.</p> <p>Planning/building/strata requirements should be changed so that customer outcomes are considered at design/construction phases of new builds that use private networks.</p>
<b>The interaction of its recommendations with reforms related to the government's Energy Fairness Plan</b>	ESC will have powers relating to embedded networks enhanced once Energy Fairness Plan legislation has been passed.
<b>Current embedded network retail offerings, in order to identify innovations, competitive pricing practices and the costs faced by embedded network customers, perhaps by using case studies</b>	Case studies have been included in the Draft Report

# Appendix 7: Privacy Collection Statement

The Department of Environment, Land, Water and Planning (DELWP) is committed to protecting personal information provided by you in accordance with the principles of the Victorian privacy laws. For more information read DELWP's Information Privacy Policy at:

[http://www2.delwp.vic.gov.au/\\_data/assets/pdf\\_file/0019/5464/DELWP-Privacy-Policy.pdf](http://www2.delwp.vic.gov.au/_data/assets/pdf_file/0019/5464/DELWP-Privacy-Policy.pdf)

The information you provide will be used to inform the Embedded Networks Review (the Review) which has an objective of implementing the Victorian Government's 2018 election commitment to ban embedded networks in new residential apartment buildings, with appropriate exemptions for buildings that use renewable energy microgrids to deliver low-cost renewable energy to apartment blocks. The information in your submission is collected by DELWP to administer the public consultation process only.

Your contact details may be used by DELWP or its contracted service providers under confidentiality agreements as part of the Review process.

DELWP may do the following with your submission (your personal information will not be included):

- publish a copy of your submission on the DELWP website or other Victorian Government website
- quote directly from your submission in the Review report
- make it available to other Victorian Government agencies to inform the Review.

For transparency and accountability, the contents of your submission may be published on a Victorian Government website which is accessible worldwide. Any person may view your comments.

Your comments may remain on external servers, even once your comments are removed from the original website it was published on.

All submissions are public documents and may be accessed by any member of the public unless you request, and your comments are given, confidential status.

If you are making comment as an organisation, then your comments may be published, including the name of your organisation.

If you are making comments as an individual, then your comments may be published, including your postcode but with no other details.

If you freely and voluntarily provide any 'sensitive information' under the *Privacy and Data Protection Act 2014* in your submission, DELWP will consider that provision to be consent to collect the information and will then protect it under the Information Privacy Principles in the Act. Sensitive information is information relating to racial or ethnic origin, political opinions, membership of a political association or trade association/union, religious or philosophical beliefs or affiliations, sexual preference or criminal record.

You have the right to access and correct your personal information. Requests for access should be sent to the Project Manager, Secretariat of the Embedded Networks Review, by one of the following:

- email at [EmbeddedNetworks.Review@delwp.vic.gov.au](mailto:EmbeddedNetworks.Review@delwp.vic.gov.au)
- mail to:

Embedded Network Review

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