

# Assessing the competitiveness and efficiency of the Victorian energy retail market

## Public forum agenda and background information

### Forum details

Date and time: Thursday, 7 November 2019  
8.30am – 2.30pm

Venue: Novotel Melbourne on Collins  
Conference Centre  
Level 3, 270 Collins Street  
Melbourne, Victoria, 3000

### Overview of agenda:

8.30am Registrations

9.00am Opening and welcome

9.15am Part 1 – Session 1: Theme - The customer experience  
Presentation from Prof. Catherine Waddams  
Panel session with Cynthia Gebert, Assoc Prof David Byrne & James Garriock

10.15am Morning tea

10.30am Part 1 – Session 2: Theme - Price and service quality  
Presentation by Danny Price  
Panel session with Assoc Prof Bruce Mountain, Bridget Ryan & Tony Wood

11.30am	Short break
11.35am	Part 1 – Session 3: Theme - Protecting vulnerable customers Presentation by Kris Funston Panel session with David Havyatt and Linda McMillan
12.35pm	Lunch
1.20pm	Part 2 – Facilitated interactive session
2.20pm	Closing remarks
2.30	Close

## Background information

### Independent review

In November 2016, the Victorian government announced an independent review of energy markets in Victoria, which was in response to concerns that the deregulation of these markets was not delivering the expected benefits.

After consulting widely over many months, the Independent Review Panel released its final report in August 2017, which contained 11 recommendations that were aimed at improving outcomes for energy consumers.

### Government's response

In May 2019, the Victorian government released its final response to the Independent Review, supporting all the recommendations.

The following link contains the Independent Review Panel's final report and background material, as well as the government's response:

<https://www.energy.vic.gov.au/about-energy/policy-and-strategy>

### Essential Services Commission's work

The commission has implemented some of the recommendations from the review and is in the process of implementing others, including recommendation 8A.

### Implementing recommendation 8A

The Victorian government has requested the commission monitor and report on the competitiveness and efficiency of the Victorian energy retail market – recommendation 8A of the Independent Review of the Electricity and Gas Retail Markets in Victoria.

The commission is undertaking a consultative approach in developing a framework for this purpose and are seeking the views of a range of interested stakeholders.

### **A consultative approach**

The commission is hosting this public forum to hear from a broad group of experts about their perspectives, in an environment where they can be challenged by each other and a broader stakeholder group. The forum will include:

- Three respected economists have prepared a paper and will present it at the forum. The papers will broadly provide perspectives on how they would undertake the task of assessing the competitiveness and efficiency of the Victorian energy retail market.
- A panel session comprised of stakeholders, including consumer advocates, industry, regulators, commentators and policy advisors. The panel session will provide an opportunity to hear from a broad group of experts about their perspectives, in an environment where they can be challenged by other panel members and the broader audience.
- A Facilitated activity with participants to provide early feedback for the commission's draft approach.

Here is the link to the Eventbrite page: <https://www.eventbrite.com.au/e/how-would-you-assess-whether-victorias-energy-retail-market-is-competitive-and-efficient-registration-75104781423?aff=ebdssbeac>

### **Papers prepared by our invited economists**

Each economist has prepared a paper on their views, which will be presented at the forum, with a panel session to follow. The commission has asked each economist to answer questions about how they would undertake the task of assessing the competitiveness and efficiency of the Victorian energy retail market.

#### **The commission has asked each economist:**

Given the changes to the market that have resulted from the implementation of the recommendations from the Independent Review:

1. What would you expect to observe if the Victorian energy market was operating competitively in terms of outcomes for household and business consumers?
2. What is your view on the Victorian market's performance and how does this compare to other markets?
3. What sort of innovation would we hope to encourage in a competitive market?
4. What measures would you use to undertake your assessment?

The papers are included as an attachment to this document. It should be noted that the papers are the views of the authors and do not reflect the views of the commission.

## Panel sessions

After each presentation there will be a panel session. The panel sessions will be “themed”, with panel members focusing on their theme when initially discussing the economist’s paper, before the discussion can be broader in terms of other perspectives. The themes for the three panel sessions are:

- Customer experience – how should the customer experience be considered when assessing the competitiveness and efficiency of the Victorian energy market?
- Price and service quality – what type of changes in retail prices and service quality should the commission be mindful of when considering the competitiveness and efficiency of the market both in the short-term and the longer term?
- Protecting vulnerable customers – how do we assess the extent to which a competitive market is producing good outcomes for vulnerable customers?

## Developing the framework

The commission aims to take the views presented at this forum and develop a framework that will be used to assess how competitive and efficient the retail market is by the end of 2019. The framework will set out the scope and broad approach, focusing on key outcomes to measure, rather than a detailed list of indicators. The framework will be flexible and agile so that as more insights are gained from monitoring the market, different ways to assess and respond can be developed and implemented.

## Implementing the monitoring and reporting

The commission will begin monitoring the market in the new year, consistent with the framework. In the lead up to the first report the commission will continue to engage to ensure that the inaugural report best meets the needs of all stakeholders.

It is anticipated that the first report will be released after the middle of the 2020 calendar year.

# **Assessing the competitiveness and efficiency of the Victorian energy retail market.**

Catherine Waddams Price

Centre for Competition Policy, University of East Anglia, UK  
November 2019

The retail energy market in Victoria has been open since 2002 with prices deregulated in 2009. Each supplier was required to maintain a standing offer which was paid by those who did not switch to an alternative (market) offer and which included some provisions which may increase their cost. Although many new companies entered the market and 94% of consumers had switched provider or tariff by the end of 2018, concerns remained about the dispersion of the offers available on the market, and the relatively high price of the standing offers. As energy price levels continued to rise, the Victorian government commissioned an Independent Review of the Electricity and Gas Retail Markets which reported in 2017. In its response the following year, the Victorian government replaced companies' obligation to provide a standing offer with one to offer a basic service offer, whose price would be below a level (the Victorian Default Offer) which was to be determined by the Essential Services Commission (ESC). The ESC was also required to "monitor and report on the competitiveness and efficiency of the Victorian retail energy market" and to provide a framework for doing so by the end of 2019. This short paper considers some questions associated with this duty, largely from the perspective of household and small business customers in the British energy market, which has undergone similar changes in the last three years.

## **1. What would you expect to observe if the Victorian energy market was operating competitively in terms of outcomes for household and business customers?**

Competition is a means to an end rather than an end in itself, and can be a powerful tool if used appropriately to deliver better offers and outcomes for most consumers. It effectively aggregates diverse consumer preferences, while not necessarily delivering good outcomes for all. Competition cannot operate without some differentiation between offers, but the process of competition may result in prices which converge, depending partly on how consumers react to the different offers available. Since markets are generally not static, but experience repeated disruptions, such as changing costs, entry and exit and shifting consumer preferences and behaviour, we would not necessarily expect to see equal prices in a real world market which was operating competitively. Moreover it may not be efficient to have equal prices, even in equilibrium. Energy retailers need to recover fixed costs, and the most efficient way to do so is from those consumers whose demand responds least to the consequent increases in price. This is discriminatory in the sense that the proportion of costs recovered depends on the demand responsiveness of the customer, and not merely on the costs of supplying them.

Outcomes for customers can be identified in a number of ways. Traditional economic models have defined these in terms of the price and quality which are available to customers. But with increasing understanding of consumer behaviour, and how customers behave differently from their text book avatars, outcome has come to refer to the prices and bills which are paid. This carries a danger of narrowing the focus too much, since there are many reasons why people may not take advantage of the lowest price on offer<sup>1</sup>. It may be helpful to think of these in positive and negative terms. On the positive side, a market may

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<sup>1</sup> Papers by Waddams Price and Zhu (2016a) and Flores and Waddams Price (2018) emphasize the heterogeneity of consumer decisions in energy market participation

be operating competitively and producing good outcomes for customers if they have access to all necessary information, even if they choose not to study or act on it, perhaps because they prefer a particular offer, system of billing, certainty about bills, or a quiet life. In other words the choice reflects the customers' preferences. More negatively, if they do not take advantage of better offers because of obstacles, either intrinsic to themselves or their situation or imposed by companies, they are exhibiting barriers to realising an informed choice, and so the higher prices and bills would be at least partly a symptom of the market not functioning well. Switching rates do not record whether consumers made a 'welfare enhancing' choice, and poor choices do not indicate a well functioning market<sup>2</sup>. Thus the outcomes, whether measured in terms of offers or realised bills, need to be interpreted in terms of other conditions in the market. This assessment will be helped by many of the other changes in the energy market inaugurated by the Victorian government, for example on fairness (recommendations 4A to 4E), which address the barriers and obfuscations which are likely to be detrimental for customers.

One complication in interpreting a wide dispersion of prices is that they may represent a positive response to consumers' different preferences and behaviours, in terms of different forms of tariffs. Such tariffs may enable customers to choose the tariff which is best for their particular pattern of consumption; but when these are aggregated using a single consumption pattern, they may result in widely different aggregate prices. This may reveal welcome innovation rather than an ineffective market, depending on customers' ability to choose the best tariff for themselves.

Assessing outcome in terms of prices and bills paid, rather than those on offer, raises further questions about different groups of customers. Much recent criticism and unease with the competitive process in energy markets arises out of a suspicion that it delivers good outcomes only for a privileged few. As noted above, some customers may have apparently less good outcomes because of choice or preferences, and the process of competition does not guarantee particular outcomes to any particular groups. Competition generally puts downward pressure on the average level of prices, but may leave some groups paying more. The ESC and the Victorian Government may need to use other tools if they are to work with the grain of the market, while ensuring particular outcomes for some groups. One possibility would be the use of collective switching, inviting competition *for* supplying a particular group, rather than direct competition *in* the market itself<sup>3</sup>. The presence of a price cap which affects the market is itself likely to complicate the assessment of the market. In particular it may be difficult to assess how the market would operate if the cap were removed<sup>4</sup>.

Price is not the only relevant dimension, even with a product as homogeneous as energy. There may be particular preferences, for example for paper based bills, which are more expensive than other routes, and it is important that focus on price, and the introduction of a price cap, does not result in reduced choice. Where higher quality is more expensive to supply, there is value in signaling this through price differentials, so that customers can make an informed choice. But if particular groups of customers, for example the visually

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<sup>2</sup> Wilson and Waddams Price (2010) reported that in the early days of competition in Britain, between a quarter and a third of electricity switchers changed to a deal that was worse according to their own criteria; Hviid and Waddams Price (2014) have discussed well-functioning markets in the energy context

<sup>3</sup> See Deller et al., 2017a for a report on experience and potential for collective switching.

<sup>4</sup> Deller et al. 2017b discuss issues around removing the British price cap.

impaired, need different services, it may be appropriate to subsidise these from general funds.

Markets are traditionally judged by observed transactions, but customers' perceptions of their experience can also indicate that they are working well. However customer sentiment is affected by their broader views of both markets in general and their expectations of energy markets in particular, so dissatisfaction may not arise directly from the market itself. To provide useful information about how the market is working (rather than whether it is a good idea in principle, for example) consumers' views need to be focused on specific aspects and interpreted in the wider context of their expression

## **2. What is your view on the Victorian market's performance and how does this compare to other markets?**

From an external perspective, the Victorian market's performance compares favourably with that of other liberalised energy markets on several measures. In particular, having only 6% of customers on the Standing Offer after seventeen years of choice (and a decade of fully deregulated prices) is an impressive figure, particularly since these standing offers retain particular features which some customers may prefer, and some customers are likely to pay this rate only temporarily. While not directly comparable, about half of British consumers were eligible for the default tariff price cap in 2019<sup>5</sup>, because they had not switched energy supplier or tariff in the previous four years. Consumer participation in the Victorian energy market therefore appears to compare well with that in Britain.

Another favourable factor in the Victorian market is that customers on hardship schemes, who have particular affordability challenges, are more likely to be paying through market offers than on the more expensive standing offers<sup>6</sup>. This may partly be the consequence of advice which is received via the hardship programme itself, a good example of interaction between general income support and assistance in the energy market. However the ACCC (2018) notes that in other Australian jurisdictions some other potentially vulnerable groups may be overrepresented among the standing offers. This would reflect the situation in Britain, where a higher proportion of many potentially vulnerable groups are less active, in particular those who are young and very elderly (younger pensioners are often among the more active groups) and those with lower income or are classified in lower social categories. While those with affordability pressures may have more incentive to seek out the better deals, it appears they face barriers of time, cognition or opportunity in exercising such choices<sup>7</sup>.

However the quality of customer decision making in Victoria, in terms of achieving the best deal, or at least a reasonably good deal, in the market may be more questionable. The variety of tariffs and discounts available make choosing the best tariff a more complicated process than for most British consumers, partly because of greater innovation and choice. The moves to standardise offers are welcome insofar as they enable more welfare enhancing choices by consumers, but they may lead to a reduction in choice (and welfare) for some consumers. Strengthening this aspect of consumer protection in terms of requiring clear information which is not misleading is an important part of encouraging the market to work well. However the response of retailers to new constraints and requirements for

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<sup>5</sup>[GFK, 2018](#)

<sup>6</sup> ACCC, 2018.

<sup>7</sup> GFK, 2018.

greater transparency may result in unintended consequences. In the British market, both the regional non discrimination clauses and the restriction in the number of tariffs which each retailer could offer, led to the softening of competition and subsequent criticism from the Competition and Markets Authority<sup>8</sup>.

Many of these interventions in Britain were introduced because of dissatisfaction with both the level of energy prices and their dispersion, so that switchers realised significant gains compared with prices paid by those who were inactive in the market. A market investigation by the Competition and Markets Authority (2016) resulted in a British regulator-determined cap on prices paid by the 15% of consumers using prepayment meters in 2017. In 2019 a more widespread and controversial cap was introduced following government legislation, for another half of all residential consumers, who had not recently switched and were paying a default tariff. Both these price caps led to an initial reduction in price dispersion, and the removal of some 'worst' and 'best in market' offers (Ofgem, 2019a). When the level of the cap was raised after four months, the large (previously incumbent) suppliers raised their regulated tariffs by a similar amount, to within £2 of the new cap. However price dispersion increased to previous levels a few months after the default cap was introduced, and reached £350 (28% of the capped price) in June 2019. The regulator attributed this to falling wholesale prices, which led to heavy discounting, especially by newer entrants, with default tariffs staying largely stable and close to the cap. Switching rates increased to historically high levels, despite predictions that a cap would suppress them.

### **3. What sort of innovation would we hope to encourage in a competitive market?**

Innovations are by definition difficult to predict, and one great strength of competition over regulation is that the market will produce innovations which regulators cannot identify, let alone introduce. These arise from the market knowledge, imagination and legitimate self interest of retailers, and while many innovations are welfare enhancing for consumers, not all benefit all consumers. Regulators should ensure that they are not impeding any potentially beneficial innovation, and that innovation does not unduly harm consumers, either as a group or subgroup. This requires monitoring and analysis of new practices.

One area in which the Victorian market has already shown considerable innovation is in tariffs, where a wide range of tariff types is available, with considerable choice for consumers. However such choice can also be a cause for concern if it results in obfuscation and difficulty in customers identifying the best deal. Another area of innovation is technical, in particular the introduction of smart meters, which enable both a greater variety of tariff offers, and more information for the consumer to take advantage of the type they prefer. Similar possibilities arise from smart appliances and other tracking and control devices.

Technical innovations in small scale and community generation and storage could deliver considerable benefits to individual consumers and to the system as a whole. Data innovations, for example data portability so that consumers can use information about their own consumption to obtain accurate quotations from other suppliers and tariffs, may also enable the market to work more smoothly. But many of these depend for their effectiveness and benefits on customer activity, and we have seen that this has been rather disappointing in energy markets, for understandable reasons. It may be that automating or delegating responses will enable benefits to be delivered without depending on real time consumer involvement.

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<sup>8</sup> Hviid, Waddams Price and Minyan Zhu showed that the British regional non discrimination clauses reduced competitive pressure (Hviid and Waddams Price, 2012; Waddams Price and Zhu, 2016b); and the Competition and Markets Authority criticized both these regulatory policies in its 2016 report (CMA, 2016).

A distributive problem may arise if some groups of consumers are better equipped or more inclined to take advantage of innovations than others, analogous to variations in switching activity. If some customers adopt new habits, the costs of the system for those who do not may rise in absolute terms, as well as relatively because they are not taking advantage of the new technology. If the customers who are 'left behind' are more likely to be vulnerable, this poses additional issues for the regulator and other policy makers.

Moreover if innovations incur largely fixed costs, there may be a direct tension between encouraging innovation and reducing price dispersion. Discriminatory prices can maximise the total benefit, so that the fixed costs can be recovered and all are able to afford the (low marginal cost) invention, with larger contributions made by those with less responsive demand patterns, as noted above.

One possible innovation is greater bundling of products – for example electricity with appliances, including cars; or gas and electricity as a bundle together and/or with other utilities. The benefits of such bundling are ambiguous. They often provide immediate advantages through convenience or reduced cost (for example via reduced billing costs); but they may also pose new competition issues if they enable dominance in one market to be leveraged into another. Like many innovations, this will require regulatory analysis of the welfare benefits, the extent to which they are shared with all or some customers, and any adverse distributional effects.

#### 4. What measures would you use to undertake your assessment?

Because competition is a process, and a means to an end rather than an end in itself, its assessment should be multifaceted, capturing a range of aspects which would be expected in a well-functioning market. When energy markets were first opened to new entry, the focus was on the supply side, and structural measures remain important. These would include the number of suppliers, market share and concentration indices and evidence that there are no barriers to entry, exit or expansion. Consumer measures may include both engagement indicators such as search and switching rates (between both suppliers and tariffs) and trust and confidence indicators. On the efficiency side, information about the costs of suppliers and their profit levels will be informative. These are broadly the measure proposed by the British regulator, Ofgem (2019b) and could be adapted to the Victorian situation. Ofgem expects to consider a range of indicators, without committing to a particular balance between them, which seems a sensible way to capture an overview of the market and avoid potentially damaging game playing.

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## A FRAMEWORK

### Introduction

Energy retail competition has been a feature of the Australian electricity supply industry since December 1994 when the Victorian government gave 47 sites consuming more than 40GWh p.a. the option to choose their electricity retailer. Commencement of mass market retailing was on 1 January 2002 in NSW and Victoria. The last electricity customers to be given the choice of their retailer was in Tasmania on 1 July 2014 (although this choice is in name only).- see Table 1 in Annex A.

Because of rapidly rising retail energy prices since 2007/08, Australian governments have undertaken various reviews to determine the causes and to develop policies to address rising prices. In all cases these reviews have resulted in more regulation and government intervention in the NEM. The NEM is now more regulated than it has ever been.

Following the 2017 review into the Victorian electricity and gas retail markets the Victorian government introduced a number of policy changes, the main one being the re-introduction of electricity retail price regulation. Specifically, retailers will be required to offer a regulated Victorian Default Offer which will be set by the Essential Services Commission (ESC). Retailers will be obliged to offer this tariff to all households and small business customers.

The Victorian government has now asked the ESC to develop a framework for assessing the competitiveness of the Victorian energy market by 31 December 2019. I have been asked to propose an approach for assessing the competitiveness of the retail market.

I will start by briefly reviewing and commenting on the previous attempts to assess retail competition by the Australian Energy Market Commission (AEMC), the ACCC's Retail Electricity Pricing Inquiry, IPART and the Essential Commission of South Australia (ESCOSA).

### Previous reviews

The AEMC annually reviews the state of competition in the retail energy market. They do these annual reviews to identify priorities for retail market reform.<sup>1</sup> To assess retail competition the AEMC employs the widely used industrial organisation (IO) structure-conduct-performance (SCP) framework for analysing the competitiveness of energy retailing.<sup>2, 3&</sup> ESCOSA adopted a similar SCP framework

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<sup>1</sup> Australian Energy Market Commission (2019), 2019 Retail Energy Competition Review, Final Report, 28 June, pg i, Weblink: <https://www.aemc.gov.au/sites/default/files/2019-06/2019%20AEMC%20Retail%20energy%20competition%20review%20-%20Final%20report.PDF>

<sup>2</sup> *ibid*, pg 1.

<sup>3</sup> The approach used by the AEMC (and ESCOSA and IPART) is more likely to fall into the category of New Empirical Industrial Organisation (see Bresnahan, T. (1989). *Empirical Studies of Industries with Market Power*, Handbook of Industrial Organization, vol. II. Elsevier, Amsterdam)

<sup>4</sup> A good treatment of the competing definitions of IO and the history of the development of the IO literature can be found in Lelissa, T. B. & A. M. Kuhlil (2018), "The Structure Conduct Performance Model and Competing Hypothesis – A Review of the Literature", *Research Journal of Finance and Accounting*, Vol 9. No. 1.

as the AEMC.<sup>5</sup> & <sup>6</sup>IPART's recent review of the performance and competitiveness of the NSW retail electricity market used aspects of the SCP framework.<sup>7</sup>

The basic idea of the SCP, which is a deductive reasoning process, is that the structure of an industry, in terms of its competitiveness, will give rise to a certain set of behaviours by buyers and sellers and this will determine the economic outcomes in terms of industry costs, prices and service quality. For example, a competitive market would be characterised by a large number of small producers where there are low barriers to entry and exit. This competitive structure would give rise to intense rivalry between producers to gain market share and that this would result in a high level of engagement of consumers with the market and, ultimately, this behaviour would result in lower costs and prices and better customer service.

The SCP framework has its problems, aside from not having a strong theoretical model where there is imperfect competition. For example, in application, and especially in the some of the retail competition reviews that have been conducted in the NEM, there seems to be propensity to search for signs of competition and where these signs exist, especially when a number of indicators are consistently pointing in the same direction, it is concluded that competition has been established. The opposite is also true. When the SCP framework indicates that, for example, there are some structural signs that would suggest a deterioration of rivalry then it is concluded that the market is becoming less competitive. On this score, I agree with Ron Ben-David's conclusions in his entertaining 2015 paper that there are many problems with the application of the SCP framework for assessing changing levels of retail market competitiveness.<sup>8</sup>

For example, the fact that the number of competitors has increased *may* mean that there is additional competition, but it is unclear whether and by how much economic efficiency has improved. Similarly, the fact that retailers are developing new products in an attempt to differentiate themselves does not necessarily indicate that there has been an improvement in competition nor efficiency. Indeed, product differentiation could just as easily and, indeed, is likely to have the opposite effect as it can confuse consumers and raise search costs and discourage switching.

### Approach for assessing retail energy competition and efficiency

Consumers don't demand competition *per se*, they demand choice. Consumers want choice because it means that they can shop around for better deals when they feel they are not getting good value or service. If consumers can freely and easily switch their demand to another producer then no producer will be able to charge more than their competitors, nor provide poor customer service, and remain in business. In a market which supplies a homogenous product and where consumers can freely and easily switch suppliers it would be expected that the price paid by consumers would be identical.

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<sup>5</sup> NERA (2007), *Review of the Effectiveness of Energy Retail Market Competition in South Australia, Phase 3 Report for ESCOSA*, June, Weblink: <https://www.escosa.sa.gov.au/ArticleDocuments/844/070614-EnergyRetailMarketCompetition-Phase3-Report.pdf.aspx?Embed=Y>

<sup>6</sup> ESCOSA (2004), *Monitoring the development of electricity retail competition in South Australia, Final Decision*, September, Weblink: <https://www.escosa.sa.gov.au/ArticleDocuments/848/040917-MonitorEngyRetailComp-FinDec.pdf.aspx?Embed=Y>

<sup>7</sup> IPART (2019), *Review of the performance and competitiveness of the NSW retail electricity market, 2018-19, Draft Report*, October, Weblink: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-compliance-monitoring-energy-publications-market-monitoring-201819/draft-report-performance-competitiveness-of-nsw-retail-electricity-market-201819.pdf>

<sup>8</sup> Dr. Ron Ben-David (2015), "If the retail energy market is competitive then is Lara Bingle a cosmonaut", 25 June, pg. 34, Weblink: <https://www.esc.vic.gov.au/sites/default/files/documents/If-The-Retail-Energy-Market-Is-Competitive-Then-Is-Lara-Bingle-A-Russian-Cosmonaut.pdf>

Electricity is a very good example of an homogenous product. This being the case, in a highly competitive energy market it would be expected that prices being paid by consumers would be very similar, recognising of course that in reality consumers do not react immediately to price signals. Even given customer inertia, it would be surprising to see price differences across consumers to persist in a competitive retail energy market.

In a highly competitive market, producers will work hard to keep customers by offering the best price because they know that if they don't the customer will switch suppliers. This means that high rates of switching from supplier to supplier is not necessarily a feature of a competitive market (even though regulators acknowledge this they often present switching rates as measure of market 'dynamics').

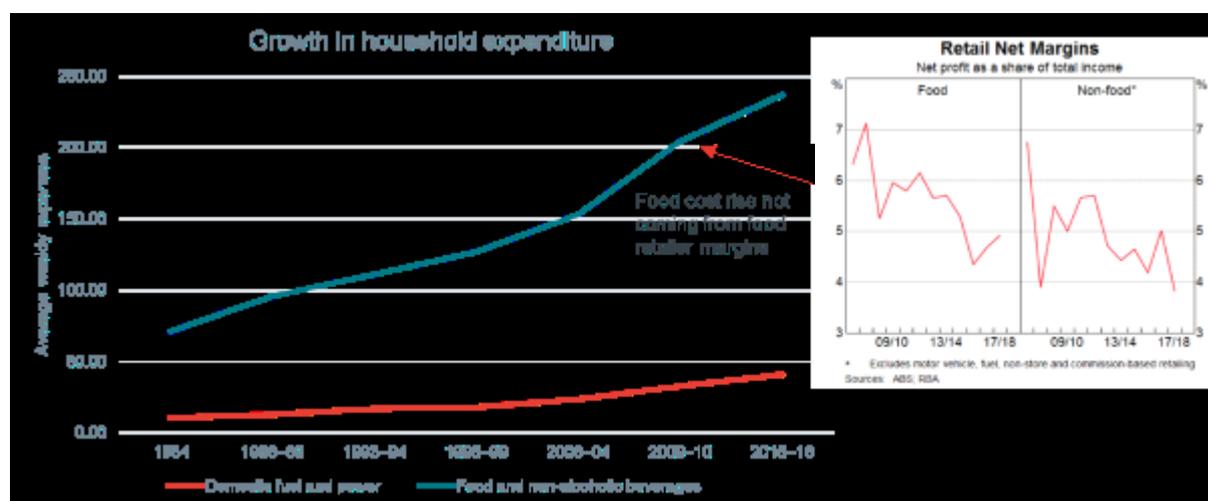
If price differences do persist the cause may also have something to do with the desire of consumers to engage in the market. For example, if energy costs represent a small share of consumers total expenses and the actual or perceived benefits of negotiating with current suppliers or dealing with a new supplier are smaller than the transaction costs, then consumers will make the rational decision to do nothing, except perhaps complain.

Retailers understand the importance of switching costs relative to benefits. Incumbents in all markets attempt to raise switching costs and set prices to deter new entrants. New entrants in all markets attempt to identify customers who are paying the most and/or have the lowest switching costs to entice them away from relatively expensive suppliers.

There is some evidence to support the view that while rising energy costs are a problem in terms of household expenses, it is a relatively small problem, and this could easily explain any lack of engagement with the market, which means that price differences are likely to be more persistent.

Consider **Figure 1** which compares the average household weekly expenditure on food and non-alcoholic beverages to fuel and energy expenditure, with the former outstripping the growth in fuel and energy expenses by five times. Australian families will be more worried about feeding themselves than turning a light on and lowering food costs, and finding a cheaper mortgage is more likely to occupy the scarce time available to families.

**Figure 1:** Lack of engagement of consumers in energy is due to relative unimportance compared to other expenses



Source: Australian Bureau of Statistics

To understand how these price differences arise, and persist, it is important to consider some basic economic pricing principles.

One strategy used to maximise profits by suppliers in any market, which is employed in all retail energy markets, is price discrimination. This involves selling to different consumers at different prices. Retailers seek to attract more consumers by offering discounts to those consumers with a lower willingness to pay using the profits they get from charging higher prices to consumers with a higher willingness to pay. This type of pricing behaviour is only possible in a market which is not perfectly competitive.<sup>9</sup> Since no market is perfectly competitive this pricing behaviour occurs in just about every market. Price discrimination is particularly evident in the airline industry, pharmaceuticals (geographically), cars, cinemas, telecoms, software, economic consulting.

To ensure producers can price discriminate, suppliers engage in a range of practices aimed at preventing consumers switching suppliers by raising the costs of searching for alternative supply arrangements. A classic strategy is to engage in product differentiation. This involves suppliers attempting to convince consumers that their product(s) has some distinctive advantage(s) that sets it apart from other similar products. If this product differentiation of an essentially homogenous product is successful it makes it harder, more costly, for consumers to compare alternative offerings. In these circumstances consumers are less likely to switch away from the supplier if the price rises. Interestingly, the SCP studies that have been undertaken by Australian regulators on the competitiveness of the retail energy market use the development of product offerings by retailers as a positive sign, indicating the operation of a dynamic, vibrant market.

Given that price discrimination occurs in a less than competitive market, the extent to which price discrimination occurs *and persists* can be used a *guide* as to whether the market is getting more or less competitive. To the extent that the market is getting more competitive it could be reasoned, as a

**The ESC could form an index of *unit* price spreads across the market as a simple indicator of competition.**

matter of theory, that outcomes would be more economically efficient.

In the context of the introduction of the Commonwealth's Default Market Offer (DMO), which sets a regulatory cap to the price that retailers can charge, IPART has examined the "price spreads" in the market.<sup>10 & 11</sup>

The results of IPART's analysis conforms with rudimentary economics that we have known for 85 years<sup>12</sup> which says that if regulation curtails price discrimination consumers who shop around lose and

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<sup>9</sup> Varian, H. (2014), *Intermediate Microeconomics with Calculus*, First Edition, W.W. Norton & Company Inc, New York, pg. 482.

<sup>10</sup> IPART 2019 *op. cit.* p49-54.

<sup>11</sup> In their 2019 NEM monitoring report the ACCC observed a spread of retail prices but without any evidence or analysis the ACCC asserted "The ACCC also found that this price dispersion is less likely due to efficient price discrimination and more likely due to retailers taking advantage of customers being inactive or disengaged in the market and/or being confused about which offer constitutes a better deal as a result of retailers' own pricing and discounting practices ... " ACCC (2019), *Monitoring of supply in the National Electricity Market*, March, pg. 35. Weblink: [https://www.accc.gov.au/system/files/1516\\_Monitoring%20of%20electricity%20in%20the%20National%20Electricity%20Market\\_D06.pdf](https://www.accc.gov.au/system/files/1516_Monitoring%20of%20electricity%20in%20the%20National%20Electricity%20Market_D06.pdf)

<sup>12</sup> Robinson, J. (1933), *The economics of imperfect competition*, Palgrave MacMillian, UK 2<sup>nd</sup> Edition 1969

those that do not shop around gain. IPART found early evidence of this following the introduction of the DMO and there is no reason to believe that this early trend will not continue. In fact, this is what the proposed “price trend” index will find over time. It will be important to interpret the results of such an index carefully as ESC will have to account for any price spread compression due to the DMO Victorian counterpart, the Victorian Default Offer (VDO), versus the effects of competition. The easiest way to decompose these effects is to commence the index from the introduction of the VDO, or a year after to account for the transition effects. Alternatively, ESC could econometrically adjust an index ex-post the introduction of the VDO.

This price spread compression effect of the VDO is an important conclusion for how the ESC analyses the development of the competitiveness and economic efficiency in energy retailing. For example, if the ESC adopts the SCP framework used by the AEMC and other Australian regulators, the ESC will inevitably conclude from this approach that competition and, hence, economic efficiency is declining over time following the introduction of the VDO. This occurs because the price behaviour employed by retailers provided a business opportunity for new entrants. The process of retailers charging according to willingness to pay provided an opportunity for new entrants to search for and entice these high paying consumers from their existing arrangements by offering discounts and other inducements to switch retailers. Once these new entrants gained a foothold using the puppy-dog ploy<sup>13</sup> they were able to progressively compete across all customer groups and establish themselves as a competitive force. It will now be difficult for new entrants to come into the market as there is less opportunity and, almost inevitably, some small players will leave the market as the DMO/VDO does the work they once did. This means that there will be fewer new entrants and, probably, fewer active retailers. Using the SCP, these changes would lead to a conclusion that the market is becoming less competitive and efficient from the DMO/VDO.

As the contest for customers weakens with the introduction of the DMO/VDO, because there is less discounts available to offer customers to overcome their inertia and to compensate for their switching costs, the range of products offered to customers may decline. Using the SCP adopted by the AEMC, this would suggest a decline in competition.<sup>14</sup>

## Performance of the Victorian retail energy market

In 2018 the ACCC commissioned consultants to review the operation of retail energy markets in a number of jurisdictions.<sup>15</sup> Whilst this report did not review the relative performance of the four US state markets and six other countries they examined, they did make some important observations. In particular, the report identified that most of the retail markets considered had regulated price caps in place to limit the extent of price discrimination. It was also clear from the report that instead of markets become more liberalised over time, retail energy markets are increasingly subject to more regulation and government intervention. However, there seems to be no evidence that this great regulatory intervention has resulted in better economic outcomes. I would expect that the underlying resources costs of supplying electricity customers will only continue to grow over time (the cost of

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<sup>13</sup> Fudenberg D, & J. Tirole (1984), “The Fat-Cat Effect, the Puppy-Dog Ploy, and the Lean and Hungry Look” *The American Economic Review*, Vol. 74, No. 2, Papers and Proceedings of the Ninety-Sixth Annual Meeting of the American Economic Association, pp. 361-366

<sup>14</sup> It may be that this decline in product differentiation does not occur as the remaining retailers may seek to create entry barriers by confusing consumers, raising the switching costs and reinforcing inertia to prevent switching.

<sup>15</sup> The Brattle Group (2018), *International Experiences in Retail Electricity Markets, Consumer Issues*, June, Weblink: <https://www.accc.gov.au/system/files/Appendix%2011%20-%20The%20Brattle%20Group%20-%20International%20Experiences%20in%20Retail%20El....pdf>

which will be shared between taxpayers and electricity consumers) in the current post-Hilmer phase of re-regulation and government intervention.

This interventionist trend has important implications for the design of the entire energy market because the operation of the retail market has important implications for the dynamic efficiency of the wholesale market through hedging. Retail competition was established as the mechanism for ensuring that the efficiency gains from the upstream reforms were passed on to consumers. To ensure a lower cost and more orderly transition, it will be important for governments to carefully consider the upstream effects of downstream interventions that prevent the transfer of legitimately higher upstream costs to consumers.

One way to consider the performance of the Victorian energy market is to compare the returns being apparently earned by Victorian retailers against a competitive benchmark. To my knowledge, the most sophisticated, economics based, approach to determining a competitive retail benchmark was that conducted by SFG Consulting in 2013 on behalf of IPART.<sup>16</sup> In that review SFG found that, using the average of a range of approaches, the EBITDA retail margin was 5.7% in 2013 when the market was more benign (in terms of risk) than it is now. In their 2019 monitoring report of the NEM the ACCC found that the average retail margin in 2017/18 was 11%.<sup>17</sup> This is twice that of the SFG benchmark but it is important to note that the 11% is based on the ACCC's analysis of margins, which is plagued with estimation issues, and the context of this margin is a more risky market. Even accepting the ACCC's finding it is important to note that the difference between the ACCC's estimate and the SFG benchmark is about \$80 p.a. If the SFG analysis was conducted again, it is very likely that the efficient retail margin would be higher and, therefore, the difference between the actual and a theoretical benchmark would be relatively small. On this basis, I would conclude that the retail market is not doing such a bad job and that the retailers don't deserve to be demonised in the way they have been and that the interventions that have been put in place are not justified and are likely to result in higher, not lower, costs.

### Desirable innovation in the retail energy market

Given the energy system is likely to increasingly reflect the system that interventionists prefer rather than what is likely to be economic, it would seem to me that encouraging the entry of service providers (let's call them retailers) who can offer consumers an opportunity to bypass these costs and avoid poor system outcomes would be desirable. To a degree, this is already happening with the rapid development of distributed energy resources. It would be easy to see how communities could benefit in the future being served by a modern district energy and utilities network (DEUN) incorporating power, gas, water and telecoms.<sup>18</sup> These systems allow the connected community to choose their own level of reliability, rate of emissions and costs. As the costs of these systems fall because scale economies are being achieved at lower levels of output and because of the capture of scope

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<sup>16</sup> SFG Consulting (2013), Estimation of regulated profit margin for electricity retailers in NSW, 2 June, Weblink: [https://www.ipart.nsw.gov.au/files/f2342b47-09d6-429a-8652-a1e00091c310/Consultant\\_Report\\_-\\_SFG\\_Consulting\\_-\\_Estimation\\_of\\_the\\_regulated\\_profit\\_margin\\_for\\_electricity\\_retailers\\_in\\_NSW\\_-\\_June\\_2013.pdf](https://www.ipart.nsw.gov.au/files/f2342b47-09d6-429a-8652-a1e00091c310/Consultant_Report_-_SFG_Consulting_-_Estimation_of_the_regulated_profit_margin_for_electricity_retailers_in_NSW_-_June_2013.pdf)

<sup>17</sup> ACCC (2019), Monitoring of supply in the National Electricity Market, March, pg. 40. Weblink: [https://www.accc.gov.au/system/files/1516\\_Monitoring%20of%20electricity%20in%20the%20National%20Electricity%20Market\\_D06.pdf](https://www.accc.gov.au/system/files/1516_Monitoring%20of%20electricity%20in%20the%20National%20Electricity%20Market_D06.pdf)

<sup>18</sup> Lund H., Ostergaard, P.A., Chang, M., Werner, S., Svendsen, S., Sorknaes, P., Thorsen, J.E. Hvelplund, F., Mortensen, B.V., Bojesen, C., Duic, N., Zang, X. and Bernd Moller (2018), "The status of 4<sup>th</sup> generation district heating: Research and results", *Energy*, Vol 164 pp147-159. Elsevier Publishers.

economies, DEUN systems are becoming an economic alternative to the increasingly chaotic and high grid supply.<sup>19</sup>

### Measures to put in place to undertake assessment

To form an index of price spreads, ESC would need access to accurate information about the rates that customers are paying. This information could be gained from surveys (expensive and dubious reliability) or license obligations on retailers to provide this data. ESC would also need to understand other pecuniary and non-price inducements or concessions that form part of the offer to customers so that a consistent index can be formed. While this index can be useful for showing whether the market is becoming more or less competitive over time, this information will need to be put in the context of other measures of competitiveness, such as retailer returns. This is a much harder measure to form, requiring an estimation of wholesale costs (which is notoriously difficult because retailers have different ways of blending energy purchase costs over products and over time), network tariffs and retailer costs. While this is possible it does involve some costs for ESC.

It is expected that as the Big Stick legislation takes effect it will be easier to track retailer returns as retailers will likely react to the risks of the Big Stick by shortening contracts with customers (to manage the risk they are accused of setting prices that are inconsistent with 'market prices'). This shortening of contracts means that it will be easier (but still challenging) to match retailers' wholesale costs with the wholesale component in retail tariffs.

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<sup>19</sup> Frontier Economics (2018), *NEM Structure in Light of Technology and Policy Changes*, Report for the Australian Energy Council, 13 December, Website: <https://www.energycouncil.com.au/media/14945/20181213-final-report-advice-on-nem-structure-in-light-of-technology-change-stc.pdf>

## Annex A

**Table 1:** Retail competition timetables

State	NSW			VIC			QLD			SA			ACT			TAS		
Options	Date	Threshold per annum	Sites	Date	Threshold per annum	Sites	Date	Threshold per annum	Sites	Date	Threshold per annum	Sites	Date	Threshold per annum	Sites	Date	Threshold per annum	
Tranche 1	1-Oct-96	>40GWh	47	1-Dec-94	> 40GWh	47	1-Jan-98	> 40 GWh	43	1-Apr-98	> 40 GWh	25	1-Oct-97	> 40 GWh	5	1-Jul-06	> 20 GWh	
Tranche 2	1-Apr-97	> 4GWh	660	1-Jul-95	> 4 GWh	330	1-Jan-99	> 4 GWh	346	1-Jul-98	> 4GWh	125	1-Mar-98	> 4 GWh	40	1-Jul-07	> 4 GWh	
Tranche 3	1-Jul-97	> 750 MWh	3,500	1-Jul-96	> 750 MWh	1,500				1-Jan-99	> 750 MWh	600	1-May-98	> 750 MWh	247	1-Jul-08	> 750 MWh	
Tranche 4	1-Jul-98	> 160 MWh	10,800	1-Jul-98	> 160 MWh	9,000	1-Jan-00	> 200 MWh	6,317	1-Jan-00	> 160 MWh	2,400	1-Jul-98	> 160 MWh	781	1-Jul-09	> 150 MWh	
Tranche 5	1-Jan-02	All	2,700,000	1-Jan-02	All	1,957,300	1-Jul-07	All	1,497,000	1-Jan-03	All	700,000	1-Jul-03	All	125,000	1-Jul-11	> 50 MWh	
Tranche 6																	1-Jul-14	All

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BRISBANE | MELBOURNE | SINGAPORE | SYDNEY

Frontier Economics Pty Ltd  
395 Collins Street Melbourne Victoria 3000

Tel: +61 (0)3 9620 4488

[www.frontier-economics.com.au](http://www.frontier-economics.com.au)

ACN: 087 553 124 ABN: 13 087 553



**Economic views on assessing  
competitiveness and efficiency of the  
Victorian retail energy market**

Essential Services Commission (Victoria)

November 2019

## Background

The Essential Services Commission (ESC) is undertaking an inquiry to develop a framework to assess the competitiveness and efficiency of the Victorian retail energy market.<sup>1</sup> As part of its consideration of how to assess the competitiveness and efficiency of the Victorian energy retail market, myself (Kris Funston) and two other economists have been asked to answer four questions:

1. What would you expect to observe if the Victorian energy market was operating competitively in terms of outcomes for household and business customers?
2. What is your view on the Victorian market's performance and how does this compare to other markets?
3. What sort of innovation would we hope to encourage in a competitive market?
4. What measures would you use to undertake your assessment?

## Assessing competition and the efficiency of markets

To assess competitiveness of markets, a structure-conduct-performance (SCP) framework is often adopted. Developed by Joe Bain in the late 1950s, the SCP framework has been adopted by regulators to assess the effectiveness of competition in energy markets, including the Australian Competition and Consumer Commission (ACCC),<sup>2</sup> the Australian Energy Regulator (AER),<sup>3</sup> and the Australian Energy Market Commission (AEMC).<sup>4</sup>

The SCP framework suggests the structure of a market determines the conduct of the participants, and this conduct ultimately leads to performance outcomes, including how efficient the market is. It involves generally examining each of the following:

- **Structure** – This assesses what the overall market looks like. The analysis focuses on the number of firms and level of market concentration; the structure of firms - i.e. the degree of vertical and horizontal integration and whether they are government or privately owned; the ease of entry, expansion and exit to the sector; the number and the types of consumers in the market and the demand for services; and the type of service being supplied along with the technologies used to supply the service, which can impact on the cost structure of supply. In the retail electricity market stand-alone retailers have highlighted that a challenge of entering or expanding in retail markets is a lack of liquidity in the wholesale contract market.<sup>5</sup>
- **Conduct** – This assesses how both firms and consumers behave in the market. For firms, this involves pricing and product strategies, research and development work, and advertising and marketing. In the retail energy market in Victoria (and other states), a pricing strategy that has been predominantly used is price discounting, in particular what are known as conditional discounts, such as pay-on-time discounts.<sup>6</sup> For consumers, conduct relates to how consumers engage with the market, which includes such things as their willingness to consider and then undertake switching, how many customers are on market offers versus standing offers, the levels of confidence in the market, and the willingness to adopt new technologies offered in the market.
- **Performance** – This assesses the overall outcomes that the market is delivering for consumers and retailers. For consumers in the retail energy market it involves looking at such things as levels of satisfaction with the quality of service and value for money,<sup>7</sup> but also the

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<sup>1</sup> ESC, *Assessing the energy retail market's competitiveness and efficiency 2019*

<<https://www.esc.vic.gov.au/electricity-and-gas/electricity-and-gas-inquiries-studies-and-reviews/electricity-and-gas-retail/electricity-and-gas-retail-markets-review-implementation-2018-competitiveness>>.

<sup>2</sup> ACCC, 'Monitoring of supply in the National Electricity Market: March 2019 Report' (15 March 2019).

<sup>3</sup> AER, 'Wholesale electricity market performance monitoring: Draft 2020 Focus' (October 2019).

<sup>4</sup> AEMC, '2017 Retail Energy Competition Review' (25 July 2017); AEMC, '2018 Retail Energy Competition Review' (15 June 2018); and AEMC, '2019 Retail Energy Competition Review' (28 June 2019).

<sup>5</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018), p 21, 38.

<sup>6</sup> ACCC, 'Inquiry into the National Electricity Market: August 2019 Report' (20 August 2019), p 61.

<sup>7</sup> This type of information can be sourced from Energy Consumers Australia, which conducts a bi-annual survey. For the most recent report, see: Energy Consumers Australia, *Energy Consumer Sentiment Survey* (June 2019).

levels of complaints and disconnections. For energy retailers, it involves assessing margins or an appropriate measure of profit for the sector.

While the SCP framework is used by regulators and is drawn upon in answering the questions posed here, it is important to recognise that it has its limitations and the causal relationships between structure, conduct and performance presented above are over-simplistic. For example, performance can also affect structure – new firms will enter profitable markets – and performance can also affect conduct – low consumer satisfaction in the electricity market appears to have contributed to a much larger uptake of solar by consumers and a rapid increase in 'prosumers'.

Further, when assessing competition, no single measure should be used to draw conclusions about the state of competition. A complete assessment involves assessing the measures in combination, along with their trends over time. For example, market structures with high levels of concentration can still be effectively competitive if firms choose to compete vigorously on price.

### Question 1

**What would you expect to observe if the Victorian energy market was operating competitively in terms of outcomes for household and business customers?**

If the Victorian energy market were operating competitively, it would be expected that there would be a high degree of rivalry among the energy retailers. This would be reflected in market conduct where retailers engaged in a level of pricing and product differentiation.

Despite the homogeneity of retail energy products, price differentiation would occur as energy retailers design products for different consumers through effective customer segmentation. This would involve tailoring tariff structures and product offerings to meet the preferences of households and business customers, as retailers look to outcompete each other in terms of the services they deliver.<sup>8</sup> Tariffs differentiated by customer types and designed to meet consumer preferences and different consumption patterns due to the ownership of solar systems and batteries, should result in a high degree of price dispersion in the market. Further, retailers, in looking to differentiate their product offerings, would aim to innovate and provide new products and services to customers. This innovation is likely to be enabled through a combination of smart meters in Victoria, the increased digitisation of the sector, and improvements in consumer access to data (all discussed further in **Question 3**).

The conduct of households and business customers in such a market would be reflected by consumers having a high degree of confidence in their ability to make choices. Retail offerings would be clear and comparable so that consumers could, with minimal effort and time, choose the tariff structure and product offering that best met their preferences. The market should see this in the form of improving levels of consumer satisfaction with the level of competition, value for money and lower levels of complaints (discussed further in the comparison to other states in **Question 2**). In turn, those retailers earning the highest margins in the sector, would only be doing so through effectively outcompeting other retailers in what they offered customers. Over time it is anticipated that if successful retailers did not further improve retail energy service offerings, other retailers would be able to compete these margins away.

We would also expect that retailer energy firms in an effectively competitive market would also take a long-term view of their activities in the market. Robust competition should result in retailers attempting to build a good reputation over time by continuing to deliver positive customer experiences. This in turn will provide consumers with some level of protection. Nevertheless, even in an effectively competitive market, some level of minimal consumer protection regulations will be required.<sup>9</sup>

Across all markets currently, protections are provided to consumers against untoward retailer behaviour through the Australia Consumer Law under the *Competition and Consumer Act 2010*

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<sup>8</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018).

<sup>9</sup> C. Decker, 'Regulatory implications of new products and services in Australian energy markets' (17 July 2015) <<https://www.energy.gov.au/government-priorities/energy-markets/national-energy-customer-framework>>

(Commonwealth). However, the essential service nature of energy means it has been identified as requiring a higher level of consumer protection regulation. In Victoria this is done through the Retail Energy Code, while other states and territories have adopted the National Energy Consumer Framework (NECF). These provide similar protections, including covering matters such as a guaranteed connection, and minimum terms and conditions for standard retail contracts.

Finally, it is important to note that even when a retail energy market is effectively competitive, it does not provide any guarantee that the service will be affordable. Customers may experience issues with affordability of energy due to personal circumstance even in a competitive market that is delivering efficient pricing outcomes.<sup>10</sup> Retail energy prices are to a large extent influenced by wholesale and network pricing outcomes. If these increase, there is the potential for retailer energy price increases irrespective of how vigorous competition is in the retail market. Further, to the extent that broader economic conditions result in flat wages, it creates an environment where there is greater potential for increased numbers of vulnerable customers and higher numbers of customers on hardship payment programs.

### Question 2

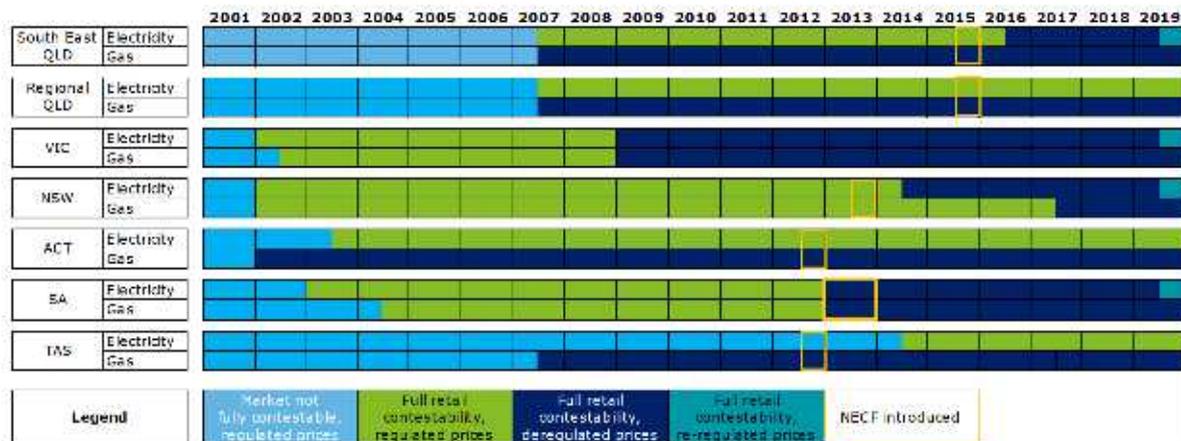
**What is your view on the Victorian market’s performance and how does this compare to other markets?**

#### Victorian retail energy market compared to other states and territories

Energy retail markets in Australia have been gradually subject to deregulation. Figure 1 shows the timeframe for deregulation of the energy market across regions, and that Victoria’s retail gas and electricity markets have been deregulated since 2009 - the longest timeframe across all regions.

As highlighted in Figure 1, all retail electricity markets have had some form of price regulation introduced since 1 July 2019. In Victoria, there was the introduction of the Victorian Default Offer (VDO), and in the other National Electricity Market (NEM) jurisdictions, the Default Market Offer (DMO) was put in place.

Figure 1: Deregulation of the regions in the National Electricity Market (NEM)



Source: AEMC.<sup>11</sup>

The longer period of retail market deregulation appears on face value to have resulted in the Victorian market performing better on many measures of structure, conduct and performance relative to energy markets in other regions.

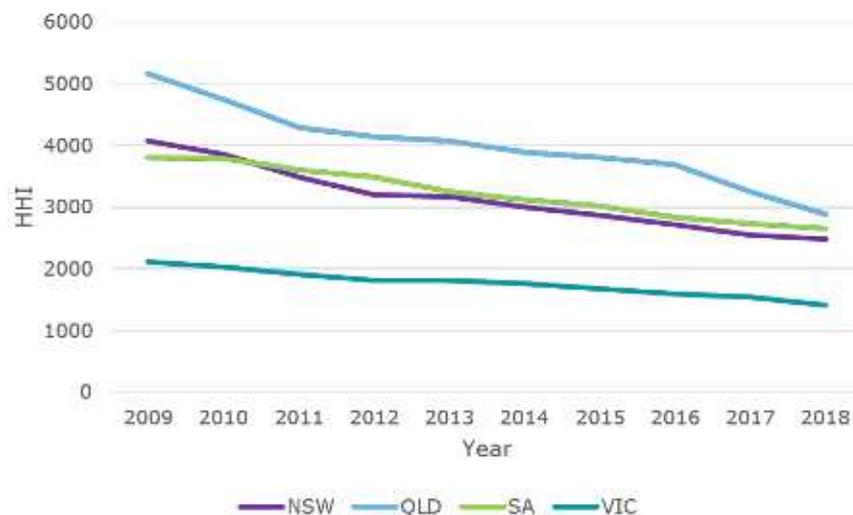
<sup>10</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019).

<sup>11</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 6.

In terms of **structure**, in March 2019 the Victorian retail market had 22 electricity retailers (and 27 retail brands), and 15 gas retailers (and 17 retail brands).<sup>12</sup> The number of gas retailers is the highest among the National Energy Market (NEM)-based jurisdictions, while for electricity, the number of retailers is second to NSW. Further, in Victoria the market share of customers with the so called 'Big 3' retailers – EnergyAustralia, Origin and AGL - is the lowest across all regions for electricity (55%) and gas (62%).<sup>13</sup> Tier 2 retailers hold a relatively greater share of the market in Victoria compared with other jurisdictions.<sup>14</sup> The ACCC considers vertically-integrated Tier 2 retailers provide the greatest level of independent rivalry to the Big 3, as they are better able to capitalise on economies of scale than small retailers.<sup>15</sup>

The Victorian retail electricity and gas markets have consistently been the least concentrated retail markets across regions, as measured by the Herfindahl-Hirschman Index (HHI).<sup>16</sup> Figure 2 shows the HHI for the retail electricity market since deregulation.

Figure 2: Victorian electricity retail market HHI, December 2009-18



Source: AEMC.<sup>17</sup>

The Victorian retail energy market HHI for electricity was 1,293 in December 2018 and for gas was 1,693 in June 2018.<sup>18</sup> The ACCC in assessing mergers notes that it is less likely to identify competition concerns if the post-merger HHI is less than 2,000, with 2,000 sometimes being interpreted as a threshold for workably competitive market outcomes.<sup>19</sup>

The **conduct** of consumers in the Victorian retail market shows that in 2017-18 small consumers (households and businesses) on the higher standing offers in electricity was 6% and in gas was 7%.<sup>20</sup> The proportion of the customer base on standing offers in both markets has

<sup>12</sup> AEMC, *Retail energy competition review 2019: Victoria* <<https://2019.aemc.gov.au/competition-review/jurisdiction/victoria#looking-forward>>.

<sup>13</sup> AEMC, *Retail energy competition review 2019: Victoria* <<https://2019.aemc.gov.au/competition-review/jurisdiction/victoria#looking-forward>>.

<sup>14</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018), p 135.

<sup>15</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018), p 147.

<sup>16</sup> The Herfindahl-Hirschman Index (HHI) measures market concentration by summing the squares of the market share (by customer numbers) of all firms competing in a market. A lower score reflects a less concentrated and more competitive market.

<sup>17</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 34.

<sup>18</sup> AEMC, *Retail energy competition review 2019: Victoria* <<https://2019.aemc.gov.au/competition-review/jurisdiction/victoria#looking-forward>>.

<sup>19</sup> ACCC, 'Merger Guidelines' (2008, updated in 2017), p 35.

<sup>20</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), Table 4.1, p 55.

consistently been the lowest across all NEM-based jurisdictions. Victorian consumers also have the highest switching rates for both electricity (28.95%, 2018) and gas (24%, 2018).<sup>21</sup>

In Victoria, there is a high penetration of gas networks to households. This combined with the preference for consumers to have a single retailer to supply electricity and gas, and the potential for economies of scope in supply, has resulted in bundled gas and electricity, or dual offers, in Victoria. The AEMC has noted that in Victoria a few retailers consider being able to supply retail gas (usually as a dual fuel) is essential to be competitive in supplying retail electricity.<sup>22</sup>

Prior to the introduction of the VDO on 1 July 2019, Victoria appeared to have higher levels of price dispersion than retail markets in other jurisdictions.<sup>23</sup> As noted in **Question 1**, price dispersion may be an indicator of effective competition.<sup>24</sup> However, in Victoria, and in other markets, the higher levels of dispersion is due to pricing strategies involving higher percentage discounts off an increasing rate base, rather than tailoring tariff structures to consumer preferences. Results based on the market offers available also do not provide clear indications of the type of offers that customers are actually on.

Victorian retailers have historically had the highest percentage price discounts,<sup>25</sup> and highest discount levels across all the regions.<sup>26</sup> In the Victorian energy market in 2017-18:<sup>27</sup>

- 80% of energy market offers for residential customers had discounts – 76% of electricity offers and 83% of gas offers
- 69% of small business electricity market offers<sup>28</sup> applied discounts – 64% of electricity offers and 75% of gas offers
- more than two-thirds of electricity offers had conditional discounts, such as pay-on-time conditions, dual fuel and direct debit payments.

Further, data from Big 3 retailers across regions shows that the Victorian retail electricity offers in 2016-17 and 2017-18, had the:<sup>29</sup>

- greatest number of customers receiving discounts of greater than 25% – 53% in 2016-17 and 60% in 2017-18 (the next highest being South East Queensland with 18% in 2017-18)
- least number of Big 3 retailer customers receiving no discounts – 22% in 2016-17 and 7% in 2017-18 (the next lowest being South Australia with 18% in 2017-18).

The practice and growth in marketing discounts and the use of conditional discounts has been criticised by both the ACCC and AEMC as increasing confusion and complexity for customers.<sup>30</sup> The AEMC notes that price dispersion arising from discounting rather than effective segmentation, suggests retailers are differentiating price offers based on customer inertia rather than customer preferences.<sup>31</sup> Concerns have also been raised that higher discounts over time have not equated to lower customer bills and the practice of conditional discounts – for example, pay-on-time discounts

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<sup>21</sup> AEMC, *Retail energy competition review 2019: Victoria* <<https://2019.aemc.gov.au/competition-review/jurisdiction/victoria#looking-forward>>. This shows that switching for electricity in Queensland in 2018 was also at 28.95%, while the next highest switching rate for gas was NSW at 16.11% in 2018.

<sup>22</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 44, 51.

<sup>23</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018)

<sup>24</sup> For a discussion of how price dispersion is consistent with an effectively competitive market outcome see, P. Simshauser and P. Whish-Wilson, 'Price discrimination in Australia's retail electricity markets: An analysis of Victoria & Southeast Queensland' (2017) 62(C) *Energy Economics*, p 92-103.

<sup>25</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018), p 57-58.

<sup>26</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 84.

<sup>27</sup> ESC, 'Victorian Energy Market Report 2017-18' (26 February 2019).

<sup>28</sup> Flat and block tariff offers only.

<sup>29</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 83.

<sup>30</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018); ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018).

<sup>31</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018), p vi.

– particularly penalises those consumers that can least afford the penalty of not achieving a discount.<sup>32</sup>

In June 2019, 65% of Victorian households reported they were confident (i.e. a rating of 7 or higher on a scale of 1 to 10) in their ability to make choices about energy products and services in the market – an improvement of 6% from the six months prior. This was compared to a national average of 62%.<sup>33</sup>

In terms of **performance** and some key outcomes for consumers:

- Consumer satisfaction with the provision of gas and electricity services in Victoria in June 2019 was 69% (unchanged from June 2018), and ranked equal fifth with ACT, behind Queensland (74%), Western Australia (78%), South Australia (71%) and South East Queensland (75%).<sup>34</sup>
- Consumer satisfaction with the level of competition in the energy market in Victoria in June 2019 was 52% (up 2% on June 2018), which was the second highest customer satisfaction rating with competition behind South East Queensland (59%).<sup>35</sup>
- Confidence that the energy market is working in their long term interests in Victoria in June 2019 was 30%, which ranked fifth behind NSW (31%), Queensland (36%), Western Australia (35%) and South East Queensland (38%).<sup>36</sup>
- The average number of complaints per 100 residential customers in Victoria stayed unchanged for electricity (2.9) and gas (2.2) from 2016-17 to 2017-18, but has decreased measurably since 2013-14.<sup>37</sup>

In terms of performance for retailers the ACCC's most recent (August 2019) electricity monitoring report found that across the NEM-based regions the gross margins (EBITDA<sup>38</sup> and operating costs) were highest in Victoria (21%) and NSW (17%). Similarly, EBITDA profit margins on an average residential bill were highest in NSW (8%) and Victoria (7%), with margins in other regions examined (South Australia, South East Queensland and Tasmania) being less than 2%.<sup>39</sup>

Some caution needs to be exercised in assessing retail margins in energy markets. The ACCC notes that a positive net margin may reflect expenditure related to innovation or managing risk, among other factors, which does not indicate uncompetitive behaviour, and as such, margins should be assessed at an industry rather than an individual level.<sup>40</sup> Further, the AEMC highlights that the margins must compensate retailers for non-trivial risks associated with extreme events: these risks being analogous to the risks faced by banks and financial institutions.<sup>41</sup>

It is generally understood that an effectively competitive market should provide incentives for retailers to efficiently spend funds and earn revenue such that excess margins are minimised. Therefore, questions have been raised as to how Victoria has the most competitive market structure, yet has consistently over time generated the highest gross margins across the regions. While Tier 2 providers have greater market shares in Victoria, the ACCC has also noted such retailers do not seem to have pricing strategies focused on aggressively undercutting the Big 3 retailers.<sup>42</sup>

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<sup>32</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018), p 253.

<sup>33</sup> Consumers are asked: "How confident do you feel in your ability to make choices about energy products and services?". Energy Consumers Australia, *Energy Consumer Sentiment Survey* (June 2019).

<sup>34</sup> ECA, 'Energy Consumer Sentiment Survey' (June 2019), p 16

<sup>35</sup> ECA, 'Energy Consumer Sentiment Survey' (June 2019), p 12

<sup>36</sup> ECA, 'Energy Consumer Sentiment Survey' (June 2019), p 19

<sup>37</sup> ESC, 'Victorian Energy Market Report 2017-18' (26 February 2019), p 30. In 2013-14, the average number of residential complaints per 100 customers was 10 for electricity and 5.2 for gas.

<sup>38</sup> EBITDA stands for earnings before interest tax and amortisation. For an extensive discussion of this measure of profit, see: AEMC, '2017 Retail Energy Competition Review' (25 July 2017), Chapter 10.

<sup>39</sup> ACCC, 'Inquiry into the National Electricity Market: August 2019 Report' (20 August 2019), p 83.

<sup>40</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018).

<sup>41</sup> AEMC, '2017 Retail Energy Competition Review' (25 July 2017), p 22.

<sup>42</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018), p 147.

In future, the SCP outcomes in the electricity market in Victoria and other regions are likely to be influenced by the regulated electricity prices introduced on 1 July 2019. The ACCC in the September 2019 report noted that while it was early days, it had observed, since the introduction of regulated prices, the standing offer prices of customers had fallen significantly and retailers were moving away from advertising conditional discounts based on inconsistent rates.<sup>43</sup> Further, given the different policy objectives that the VDO and the DMO aim to achieve, and the different estimates of the regulated prices, there is the possibility of future divergence in SCP outcomes between Victoria and the other regions.

#### **Mobile telecommunications and the Victorian retail energy market**

Compared to other jurisdictions, Victoria is an example of a more mature deregulated energy market and the SCP measures generally reflect that. Nevertheless, the Victorian retail energy market and retail energy markets across jurisdictions are relatively immature when compared with deregulation in the telecommunications market. In telecommunications, fixed line telephony was subject to managed competition between two providers from 1991 and managed competition between three mobile telephony providers from 1993, while the market was opened to full competition in 1997.<sup>44</sup>

There are clearly differences in the services provided by energy retailers and mobile operators. Mobile services were not considered the same essential service as energy back in the 1990s – but arguments can be made today that mobile services and coverage are essential for the community. Nevertheless, it is interesting to compare the features of the mobile and retailer energy markets using a SCP framework.

- The mobile sector in Australia was deregulated more than two decades ago, and has not been subject to the same type of retail price regulation, (which is now being re-introduced across jurisdictions in the retail energy sector).<sup>45</sup> It has though had wholesale price regulation of interconnection services.
- In terms of structure, there are higher levels of market share among the big three mobile providers (i.e. the three mobile network operators, Telstra, Optus and Vodafone Hutchinson Australia (VHA)) compared to the Big 3 energy retailers in Victoria, and higher levels of market concentration. The three mobile network operators currently have 87% of the market share, and the HHI for the mobile market is close to 3,000.<sup>46,47</sup> The results are summarised in Figure 3 and Figure 4.

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<sup>43</sup> ACCC, 'Inquiry into the National Electricity Market: August 2019 Report' (20 August 2019), p 2.

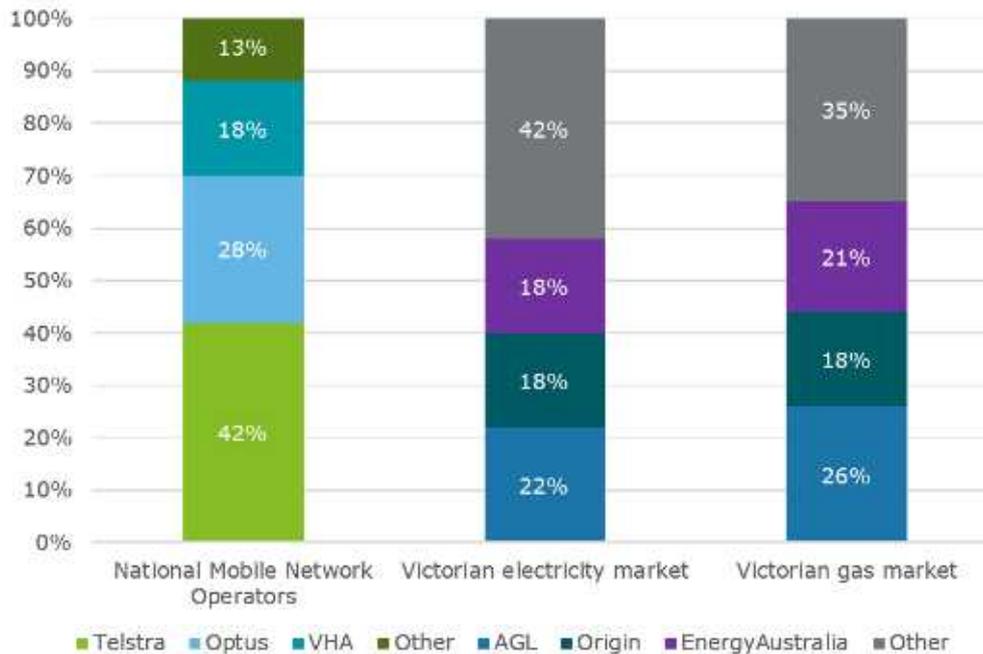
<sup>44</sup> Productivity Commission, 'Telecommunications Economics and Policy Issues: Staff Information Paper', (March 1997)

<sup>45</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018).

<sup>46</sup> ACCC, 'ACCC Communications Market Report 2017-18' (February 2019).

<sup>47</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018).

Figure 3: Market shares of the Big 3 retailers in Victoria for gas and electricity compared to the market shares for Mobile Network Operators nationally, 2018



Source: ACCC<sup>48</sup> and ESC.<sup>49</sup>

Notes: The ESC calculates market share by the number of customers. The data presented for the Victorian energy market is for residential consumers only. The ACCC calculates market share on the basis of services in operation.

- In the mobile market the operators face complex cost structures and initially pricing of mobile plans was opaque and involved discounting and handset subsidies to promote take up. Over time, relatively simple fixed pricing plans have become the predominant pricing strategy, even where there is a lot of complexity behind the offer. For example, the value a consumer receives can vary depending on factors such as handset choice, contract term, and the data and voice allowances. In contrast, the volumetric price model in the retail energy market with discounts has been described by the AEMC as hard to understand and compare.<sup>50</sup> The AEMC has suggested that energy retailers, in an attempt to manage risk, have in contrast to the mobile market, priced in such a way that passes on the complexity of the structure of the energy sector to consumers. This has required consumers to interpret more complex tariff structures and discounts.<sup>51</sup>
- A 2017 survey comparing customers who switched electricity companies over the past five years with those switching mobile plans, indicated that fewer consumers found offers in energy easy to compare (62% versus 76%), and more consumers found offers difficult to compare (21% versus 9%).<sup>52</sup>
- Despite high levels of market concentration, the competition on pricing and non-price products in the mobile market has led to conclusions that it is an effectively competitive market. There has been both decreasing prices for customers and innovation through the adoption of new mobile technologies over time, such as the moves from 3G to 4G, and now 5G technologies. In contrast, despite much lower levels of concentration in the Victorian retail energy market,

<sup>48</sup> ACCC, 'ACCC Communications Market Report 2017-18' (February 2019), p 27.

<sup>49</sup> ESC, 'Victorian Energy Market Report 2017-18' (26 February 2019).

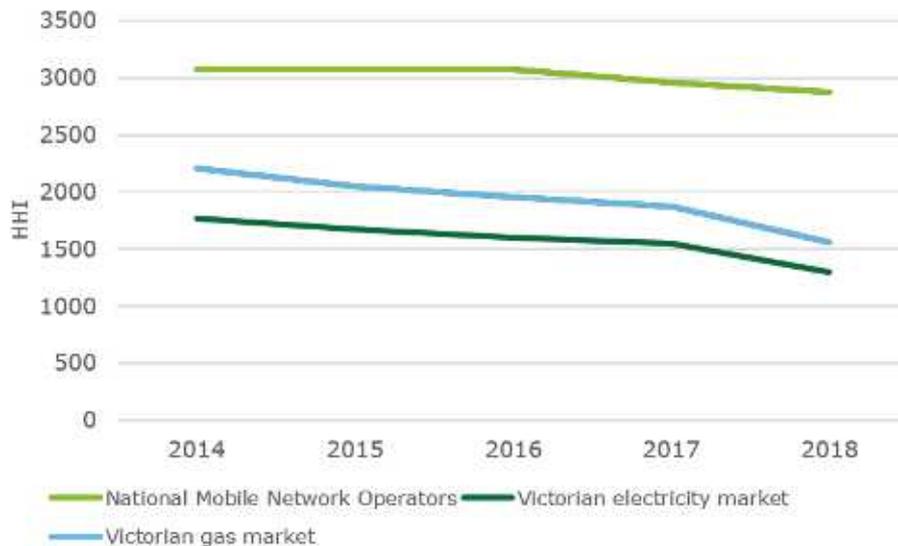
<sup>50</sup> AEMC, '2017 Retail Energy Competition Review' (25 July 2017), p 81.

<sup>51</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018).

<sup>52</sup> AEMC, '2017 Retail Energy Competition Review' (25 July 2017), p 80.

concerns were raised in the review of the Victorian energy market completed in August 2017<sup>53</sup> that there were market failures arising due to the high cost of competition, the structure of the market - with few retailers having the bulk of customers - and confusing practices.

Figure 4: Market concentration (as measured by HHI) 2014 to 2018 National Mobile Network Operators versus Victorian energy market



Source: ACCC<sup>54</sup> and AEMC<sup>55</sup>.

Note: The ACCC calculates market share on the basis of services in operation at the end of each financial year. The market shares for the three mobile networks operator has been used to estimate the HHI, as there was no breakdown provided of the other providers. The estimated HHI in this chart is therefore likely to slightly underestimate the true HHI. The AEMC calculates the HHI for electricity at the end of the calendar year, and for gas at the end of the financial year.

### Question 3

#### **What sort of innovation would we hope to encourage in a competitive market?**

The transformation occurring across the energy sector with more distributed energy resources, moves towards decarbonisation, and increased digitalisation across the economy, presents opportunities and challenges for the retail energy sector. In particular, the evolution of the 'internet of things' (IoT) along with more connected devices, and consumers with access to smart meters, smart phones and better access to their energy data, enables new ways for energy services to be provided.

The innovation that effectively competitive retail energy markets should deliver, and it would be hoped are encouraged, are those that are consumer-focused and address the current 'pain points' or issues identified with conduct or performance outcomes in the market. It is hoped that new technologies and innovations would deal with the following interrelated issues:

- empower consumers and reduce the complexity identified with engaging with the retail energy market. This would in turn reduce confusion and increase consumer confidence in their ability to make decisions on the best energy plans for them.
- enhance affordability, through providing consumers with greater ability to better control their bills. This could go as far as retailers providing home energy management products and

<sup>53</sup> Independent Review Panel, 'Independent Review into the Electricity and Gas Retail Markets in Victoria' (13 August 2017).

<sup>54</sup> ACCC, 'ACCC Communications Market Report 2017-18' (February 2019).

<sup>55</sup> AEMC, 'Retail energy competition review 2019: Victoria' <<https://2019.aemc.gov.au/competition-review/jurisdiction/victoria#looking-forward>>.

services that allow consumers to utilise remote management and automation for 'smart homes' to do such things as automated irrigation, remote lighting, as well as electricity self-generation and consumption.

- result in tariff structures and product and service offerings that are more clearly aligned with consumer preferences – for example in relation to renewable energy.

#### **Empowering consumers and enhancing affordability – the consumer data right**

In attempts to reduce complexity and get consumers on the best bill for their needs, consumers have engaged with both public and private comparator sites.

In the first three months after the introduction of the Victorian Energy Compare website, it was observed that switching rates rose compared to the previous quarter, from 7.9% to 9.1% for electricity and from 6.5% to 7.7% for gas.<sup>56</sup> While these sites are useful for providing consumers with information about more suitable offers for their needs, there are known limitations in terms of the number of offers on some private comparator sites.<sup>57</sup> Seeking and comparing alternative offers also still involves some time investment by consumers.

The consumer data right (CDR) for energy is likely to be implemented in 2020.<sup>58</sup> By improving access to energy data and allowing consumers to more easily authorise third parties to access the data for the purposes of providing energy analysis and offers, the CDR creates the opportunity for consumers to work with providers of software platforms with smart comparison algorithms – i.e. the next generation of price comparators. It is foreseeable that the CDR will enable customers with just a few clicks on their smart phones, to find the best market offer for them and be switched immediately. Such apps may also go further, as they could potentially use the consumer's usage profile to inform them about the financial viability of investment in distributed energy resources, such as solar and/or batteries.

In such a frictionless energy market where consumers are empowered and can easily switch to the best offer for them, to remain competitive, retailers will need to respond by supplying the best pricing offers to consumers or considering additional value they can provide. This will enhance affordability as it would improve the likelihood that consumers are matched to an energy offer that best suits their needs. Vulnerable consumers particularly stand to benefit from a CDR as, if they are on the best plan for their needs, it will reduce the risk of being under financial hardship.<sup>59</sup>

#### **Consumer interest in new products**

In the Energy Consumers Australia (ECA) June 2019 survey, it was found that Victoria is the jurisdiction with the highest uptake of digital smart meters (79%) due to a State Government program, but only 21% of consumers use them to control energy costs. Further, there is strong interest in Victorian households of adopting new technologies such as batteries, solar, home energy management systems - although less so in the next 12 months. That is:

- 56% who have solar panels have an interest in adding battery storage systems
- 32% who do not have solar panels are considering installing them
- 14% are interested in installing home energy management systems
- 29% who do not have a battery storage system are considering installing one.<sup>60</sup>

The greater take up and interest in technologies across the NEM that help to control usage coincided with an increase in consumer bills. High electricity prices and falling costs of supplying solar and batteries are leading to significant growth in the consumer adoption of distributed energy

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<sup>56</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019).

<sup>57</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018), p 275.

<sup>58</sup> COAG Energy Council, *Meeting Communiqué* (19 December 2018) <<http://coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/21st%20COAG%20Energy%20Council%20Communique.pdf>>.

<sup>59</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018).

<sup>60</sup> Energy Consumers Australia, *Energy Consumer Sentiment Survey* (June 2019).

resources (DER) across the NEM.<sup>61</sup> Over the last year Victoria has experienced the largest growth in rooftop PV installations of all jurisdictions.<sup>62</sup>

In the past, concerns have been raised that retailers do not have the right incentives to provide services that decrease usage and revenues and potentially increases costs. However, this is increasingly not the case. Not only are the costs of both batteries and solar decreasing rapidly,<sup>63</sup> but the combination of solar and battery now has the potential to provide retailers that are vertically-integrated behind the meter with additional revenue streams.

A fleet of batteries and solar is a virtual power plant (VPP) that can provide a financial hedging product in the wholesale electricity market, frequency control services to stabilise the grid, and a congestion management service for distribution networks. Further, with increasing consumer interest in such services, retailers that fail to provide these product offerings in the future risk losing a large segment of the customer base. There are also new energy service providers that are adopting these technologies and providing them to consumers, which means existing retailers need to develop or partner with these new providers to remain competitive.<sup>64</sup>

If batteries are increasingly attractive for retailers to offer because of the additional revenue streams they create in other markets or the costs electricity retailers avoid (e.g. wholesale contracting through providing a physical hedge for a retailer), is there the potential for future tariff models to evolve that mimics the handset subsidies that were used in the mobile market to acquire customers? That is, would retailers eventually subsidise batteries, with some of the cost being built into the price of supplying electricity services.

#### **Some innovation is occurring**

There is some innovation currently occurring in the market by retailers to address the challenges identified with the sector.

The AER has identified a range of new technologies and programs developed by retailers to improve the delivery of services to customers, including:

- payment assistance methods outside of hardship plans such as bill smoothing
- technology to increase ease of making payments such as Simply Energy adopting PayPal to manage energy bills, and AGL using SMS responses to prompt bill payments.<sup>65</sup>

Retailers are also now providing assistance and/or information to empower customers to manage their energy usage. The focus on affordability appears to have created a new need for retailers to compete over how they address the concerns of their customer bases. Examples of retailers assisting customers with their energy consumption include:

- ActewAGL holding free energy saving workshops to assist customers in energy efficiency to reduce energy costs.<sup>66</sup>
- Aurora Energy in Tasmania sending energy home efficiency experts and financial counsellors to the homes of financially vulnerable customers to assist them in adopting new innovations, taking account of their financial situation and energy usage.<sup>67</sup>
- Powershop Australia introduced a behavioural demand response program entitled 'Curb Your Power' in Victoria in 2017, under which consumers are paid a fee for reducing power usage at

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<sup>61</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018).

<sup>62</sup> Australian Energy Council, 'Solar Report: Quarter 1 2019' (2019), which suggests this is due to the Victorian Government's Solar Home Program rebate introduced in August 2018.

<sup>63</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018). This highlights that based on 2017 estimate by the International Energy Agency (IEA) the costs of new solar PV systems has fallen by 70% since 2010, and the cost of batteries has fallen by 40% over same timeframe.

<sup>64</sup> AEMC, '2018 Retail Energy Competition Review' (15 June 2018).

<sup>65</sup> AER, 'Annual report on compliance and performance of the retail energy market 2017-18' (December 2018).

<sup>66</sup> AER, 'Annual report on compliance and performance of the retail energy market 2017-18' (December 2018).

<sup>67</sup> ACCC, 'Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry – Final Report' (June 2018).

certain times specified by Powershop. 'Curb Your Power' utilises a smartphone app to contact customers and is estimated to have attracted more than 10,000 customers to Powershop.<sup>68</sup>

A number of retailers, such as AGL, Simply Energy, Energy Locals, ActewAGL, Origin Energy, EnergyAustralia, Red Energy and Powershop are all now offering solar and battery products to residential customers. The AEMC indicated that some of the retailers interviewed said they feel obligated to offer these products to retain specific customers, while other retailers are focused on this area in light of their future strategy and retail offers.<sup>69</sup>

While there is the potential for competition to result in an increase in the number of innovative devices, there are concerns that new products and services may also add complexity to the already difficult task of choosing an energy plan. In particular, there may be barriers to adopting smart devices, including digital/energy illiteracy and limited benefits. A recent trial of household adoption of smart lighting devices found that only a quarter of households actually used them regularly, a quarter were unable to install them and a quarter did not try.<sup>70</sup>

#### Question 4

##### **What measures would you use to undertake your assessment?**

To measure and assess the effectiveness of competition in the retail energy market, as noted in **Question 1**, the SCP framework, along with the measures, provides a useful starting point. As also identified, a complete assessment involves examining the measures in combination, along with trends over time.

As the example in **Question 2** highlights with the mobile market, a sole focus on one measure can result in incorrect conclusions being drawn about the competitiveness of a market. In the mobile market, despite high levels of concentration, the conduct and how the mobile network operators have competed with each other on pricing plans and product offerings has led to a market that has often been characterised as effectively competitive.

The typical measures that have been used in the SCP framework by the ACCC and AEMC, are summarised in Table 1 below and are generally measures that should be adopted to undertake an assessment of the competitiveness of the retail energy market.

In addition to the traditional measures used, the Essential Services Commission should also consider:

- to assess conduct, and pricing strategies and consumer conduct and outcomes – gathering information on the **number of consumers on each type of contract**. This information would also be useful in assessing the impact that price regulation via the VDO has had on offers. While the introduction of the VDO in 1 July has resulted in some low market offers being withdrawn, it is unclear what proportion of active customers were on those lower price plans.
- to assess conduct and innovation – monitoring how many retailers are **bundling solar and batteries with an energy offer**, and what new business models arise from the CDR for energy.
- as a performance measure - assessing **affordability** of electricity and gas bills using a framework similar to that adopted by the AER, which examines the share of household income spent on an annual energy bills by Victorian customers across different income classes. However, as noted in **Question 1**, this measure should not necessarily be considered a measure of the effectiveness of competition. The result may in fact highlight a broader issue with an economy that is slowing down and a greater need for more consumers to access assistance.

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<sup>68</sup> Australian Renewable Energy Agency, *Powershop Australia's Demand Response Program* <<https://arena.gov.au/projects/powershop-australias-demand-response-program/>>.

<sup>69</sup> AEMC, '2019 Retail Energy Competition Review' (28 June 2019), p 44.

<sup>70</sup> L. Nicholls, Y. Strengers and S. Tirado, 'Smart Home Control: Exploring the potential for off-the-shelf enabling technologies in energy vulnerable and other households' (August 2017) <[https://gallery.mailchimp.com/b38874b25e686137780eb836e/files/5d00ecfb-2098-4148-89dc-49b72b98d0aa/ECA\\_SHC\\_Final\\_Report\\_CURRENT.pdf](https://gallery.mailchimp.com/b38874b25e686137780eb836e/files/5d00ecfb-2098-4148-89dc-49b72b98d0aa/ECA_SHC_Final_Report_CURRENT.pdf)>.

- interviews with retailers to understand where they are seeing issues in the market, and with new technology service providers, who have the potential to disrupt the structure of the market in the future.
- accounting for the introduction of any new regulation or reforms that might impact on how businesses will compete in the market and the prices, products and services they will offer. The most recent example being the VDO.
- the extent to which businesses that are well-established in other sectors choose to participate in the retail energy sector, and what is their market share? For example, if an established bank, supermarket or battery owner are actively selling retail energy, then this should be a sign of healthy competition.
- the capacity of technology changes in generation to assist with hedging by stand-alone retailers, and erode any possible advantage the Big 3's hedged coal portfolios deliver.

Table 1: Measures to assess competition and efficiency in the Victorian energy market

Structure	Conduct	Performance
<ul style="list-style-type: none"> <li>• Market concentration including:                             <ul style="list-style-type: none"> <li>- the number of firms operating in the market</li> <li>- their respective share of total production</li> <li>- HHI measures</li> </ul> </li> <li>• The structure of firms; specifically, the degree of vertical and horizontal integration within the market.</li> <li>• Ownership structure: in particular, whether firms are government-owned or privately-owned.</li> <li>• The ease of entry, expansion and exit to the sector – how this is influenced by ownership</li> <li>• The number and the types of consumers in the market, and their demand for services</li> </ul>	<ul style="list-style-type: none"> <li>• Pricing and product strategies including:                             <ul style="list-style-type: none"> <li>- price levels</li> <li>- discounting behaviour</li> <li>- price dispersion</li> <li>- service offerings, <b>bundling of solar and/or batteries</b></li> <li>- <b>number of consumers on each type of contract</b></li> </ul> </li> <li>• Expenditure on research and development.</li> <li>• Expenditure on advertising/marketing.</li> <li>• Customer engagement with the market, including:                             <ul style="list-style-type: none"> <li>- switching behaviour</li> <li>- the proportion on the VDO</li> <li>- consumer confidence in their ability to make decisions in the market</li> <li>- interest in new technologies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Overall retail profit margins (EBITDA)</li> <li>• Levels of customer satisfaction with the service provided, the quality of service, value for money.</li> <li>• Number of customer complaints.</li> <li>• Number of disconnections and the processes followed prior to disconnection.</li> <li>• Number of customers on hardship programs.</li> <li>• Level of customer debt.</li> <li>• <b>Affordability</b> as measured through the share of household income spent on an annual energy bill.</li> </ul>
<p><b>New regulations or reforms (for example, the VDO and Payment Difficulty Framework)</b></p>		

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Deloitte Access Economics  
225 George Street  
Sydney NSW 2000

+61 2 9322 7000

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