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Victorian Tariff Innovation: Let's compare the price of progress.

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Abstract

The introduction of smart meters in Victoria has created opportunity for retailers and distributors to create efficiencies and provide value-add services for customers. In particular, having smart meters installed in every household and small business opens the door for tariff progress through the creation of innovative pricing structures that can be applied at 30 minute intervals – This has led to some cutting edge electricity offers in recent time, such as Dodo's 'Hour of power' (free electricity from 6-7am every day) and AGL's 'Free Saturdays'.

Whilst innovative tariffs are a great example of progress in the Victorian electricity market, they also highlight an inherent obstacle in the lack of consumer awareness and industry knowledge – Whilst the savvy, well-educated consumers can find great deals, the rest of the consumers don't have enough general knowledge of the industry to understand the difference between one offer and the next. Because most Victorian consumers are unable to identify or understand simple elements of their bill, such as supply charge and usage rates, they are in no position to understand the impact of 'flexible pricing' tariffs on their overall costs. To that end, the more innovative a tariff is, the more difficult the task of assessing and comparing offers is.

So whilst tariff progress is greatly improved through the use of smart meters, broad consumer benefit of that progress can be hampered.

To combat these issues, the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) has created an online price comparison website ('Victorian Energy Compare') which simplifies the comparison process for all Victorian consumers. With a recent bill and answers to a few simple questions, users of the Victorian Energy Compare website can easily navigate the electricity market to receive a recommendation of the best offers for their individual needs – often demonstrating a significant benefit in switching, to the tune of around twenty five percent or hundreds of dollars!

Introduction

In July 2013 Victoria introduced Flexible Pricing tariffs¹ to allow retailers and distributors to charge variable prices across the forty eight, thirty minute intervals of each day. This pricing structure was introduced to allow a more even distribution of costs for consumers and allow them to take advantage of lower prices during 'off-peak' and 'shoulder' periods when those prices would be an advantage to them.

Research completed in July 2012 showed that there was an equal distribution between consumers who would be better off with a flexible pricing tariff and consumers who would wouldn't be.² Without changing usage habits, many consumers in Victoria have an electricity profile that is well suited to innovative structures. For example, for those who use a disproportionate amount of electricity overnight or on weekends, instant savings can be experienced from switching to a Flexible Pricing offer.

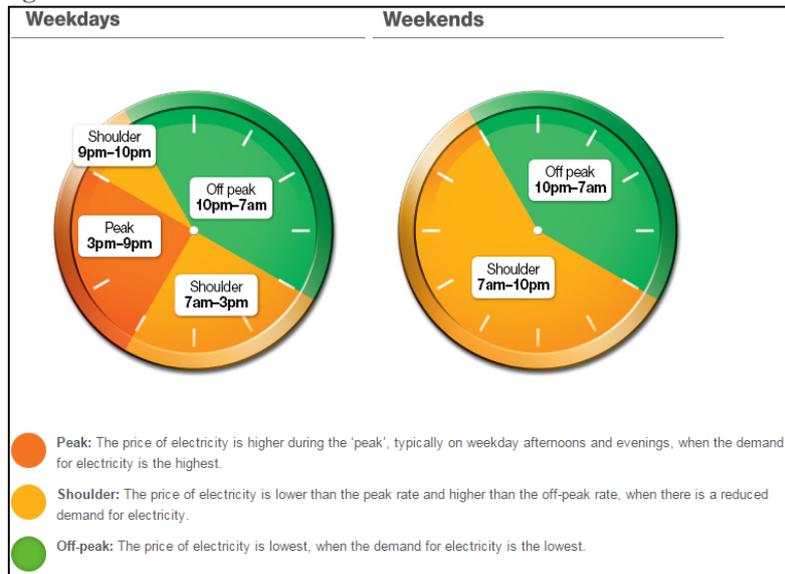
Flexible Pricing

When Flexible Pricing tariffs were introduced, a 'common-form' structure was agreed on in an effort to help consumers understand how flexible prices work before they became too complex. To meet the common-form structure, an offer had to match the time bands shown in figure 1 below and there were conditions surrounding when and how the prices could change.

¹ Advanced Metering Infrastructure (AMI Tariffs) Order, Victorian Government Gazette, 19 June 2013.

² Advanced Metering Infrastructure Customer Impacts Study – Stage 2, Deloitte, July 2012.

Figure 1



With the common-form approach to flexible pricing, consumers were able to get a sense of how the new tariff structure was applied, and how it would impact the way they pay for (and potentially use) their electricity if they adopted such a tariff. However, whilst the common form approach helps consumers to understand Flexible Pricing from a conceptual standpoint, there is still a requirement for consumers to have a deep knowledge of their household usage and usage patterns to make any meaningful assessment as to whether they can benefit from a flexible pricing offer. As such, the value of this tariff innovation is hampered by a users' ability to compare new tariffs to their current tariff.

Innovative offer structures

In 2014, retailers started to innovate further with their tariff offerings to consumers. Two prime examples are Dodo's 'Hour of Power' offer and AGL's 'Free Saturdays' offer. Both of these offer types are only possible thanks to the implementation of smart meters and rely upon usage data at thirty minute interval granularity.

Dodo's 'Hour of Power' offer was centred around the concept of charging users zero cents per kilowatt hour between 6am and 7am every day. For many standard households, this is likely to be a busy period when many electricity appliances are in use. To users who meet that profile, the hour of power offer could be quite attractive, and quite advantageous.

AGL's 'Free Saturdays' offer is another innovative tariff offer and it is exactly as it sounds. For consumers on this structure, there will be no charges applied to any electricity usage on a Saturday in the first year of their contract. Additionally, there would be no supply charge applied to Saturdays in the first year either. Again, this is likely to be a reasonably attractive offer to anyone who uses a lot of electricity on a Saturday. Even consumers who just use a standard amount of electricity on a Saturday may still find this an attractive offer on the grounds that it appears to be a discount in the vicinity of 1/7th of the weekly costs.

Whilst innovative tariffs like common-form flexible pricing, Dodo's Hour of Power, and AGL's Free Saturdays are all great examples of the opportunity to create new offers, attract and reward new customers, and increase the level of competition, they all include an inherent difficulty that consumers may or may not realise – they cannot be compared to a current offer, or against each other, without a thorough understanding of usage habits and consumption rates.

Tariff innovation leads to complexity

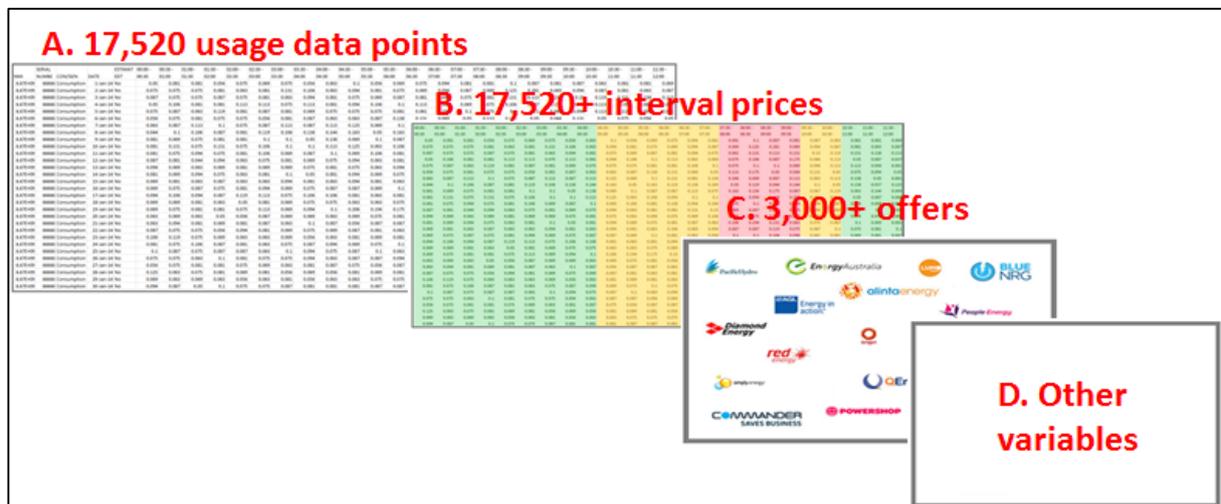
In isolation, tariff innovation in Victoria has both opened up the market and drawn attention to the willingness of some retailers to create unique offers to attract new customers. However, this progress comes at a price, the trade-off for that progress is that consumers can no longer look at the rates on their bill and easily compare them against a new offer – even if the numbers are similar, the application of those numbers may vary significantly. This is very important to address as research shows that having the ability to understand energy offers for the purpose of making the right energy decision is a top issue for consumers.³ To that end, the price of progress by way of tariff innovation is a sacrifice in simplicity for consumer decision making. Hopefully, the sacrifice is only a short term one - over time the industry will develop strategies and tools to aid consumers in their decision making needs...And that is where the Victorian Government's online price comparison tools come in to the picture.

Online price comparison tools – My Power Planner

Prior to launching Flexible Pricing, the Victorian Government assured consumers that they would provide them with a tool to help make informed decisions about choosing to adopt such a tariff. Off the back of that assurance, the government launched a website in September 2013 called 'My Power Planner'. The My Power Planner website was a comprehensive tool which housed all generally available electricity offers in Victoria (3,000+).

To provide accurate comparisons in a smart meter and flexible pricing environment, the underlying maths can become quite complex. The My Power Planner website was underpinned by a complex algorithm which mapped a year's worth of usage data against 3,000+ offers and then accounted for the many variables present in the calculation such as discounts, concessions, and GST. Figure 2 below is an example of what the My Power Planner website calculated for each and every user, but more importantly, it shows what is really required to derive a comprehensive and meaningful comparison for individual consumers.

Figure 2



As part of the development of the My Power Planner website, research was conducted to ensure the website had the capacity to categorise different user types and accurately estimate their electricity usage – a process that would be necessary for anyone who wasn't able to get their hands on their own smart meter data from their retailer or distributor. During development of the website, a survey was completed of nearly 1,000 Victorians, mapping their answers to a range of energy behaviour questions against their actual smart meter data. After the data was collected, a clustering approach was taken to analyse the data and create a decision tree capable of allocating users to their relevant clusters. The research found that most users fit into one of three or four different energy profiles each season of the year – leading to 54 profile variations.

³ *Consumer Priorities*, Australian Energy Market Commission, December 2014,

The 54 profiles were coded into the website and the users could be assigned their annual profile by answering 12 questions each with a variety of multiple choice responses. Once assigned an annual profile, the website would use energy usage information from a users' bill to scale the profile up or down, allowing the website to generate an annual usage profile with 17,520 estimated data points – emulating the accuracy of an actual smart meter data file.

With the sheer volume of offers, and the complex task of accurately estimating household energy usage to the required granularity, there is an inherent difficulty in tariff comparison which cannot be overcome by most users.

Whilst tariff progress can lead to both simpler and more complex options for consumers, at any point where both exist at the same time, independent and trustworthy tools will need to be readily available to ensure consumers are equipped to understand how they are affected by them. If those tools don't exist, it will be very difficult for the average consumer to engage with the market.

Online price comparison tools – *Victorian Energy Compare*

After operating the My Power Planner website for two years, an enhanced website was launched by the Government which expanded on its functionality and usability. Taking on board feedback relating to the complexity of My Power Planner and the areas users sought greater support, a new website (Victorian Energy Compare) was launched in October 2015. Victorian Energy Compare was redesigned to provide a much simpler user interface as well as include a broader comparison function which included solar feed-in tariffs and gas offers.

In two years of operation, the My Power Planner website received over 280,000 unique visitors. In the first three months of operation, the Victorian Energy Compare website has received over 90,000 unique visitors. Whilst the percentage of users who reported a positive experience for both websites was above seventy percent, there was also a significantly high percentage of users who reported they were 'not sure' the website helped them find a retail tariff that better meets their needs.⁴ What these figures (and the associated comments left by users) indicate, is that even when presented with balanced, independent information and a ranked list of energy offers, consumers can still feel like they don't know what is best for them when there is so much to choose from or when they lack confidence in their understanding of the market.

The Victorian Energy Compare website does as much to simplify offer information as possible. The primary approach to achieve this is to provide users with a ranked lists of offers that focuses on price. An underlying principle of the Victorian Energy Compare system is that users should be focussed on finding the most cost-efficient offers for their circumstances irrespective of the associated tariff structure.

Figure 3 below is a view of the Victorian Energy Compare ranked offers screen, it shows how the website seeks to draw users to compare offers at the annual price level and only investigate offer structure at the detailed level (figure 4). Due to the comprehensive calculation that occurs to generate the list for each user, the results that are returned come with a very high degree of confidence. Users of the website can then drill down into all the offer information as they wish, but the first impression is relative to finding the best deal.

⁴ Taken from a user survey applied to the website. This includes approximately 4,500 responses to the My Power Planner website, and over 1,000 responses to the Victorian Energy Compare website.

Figure 3

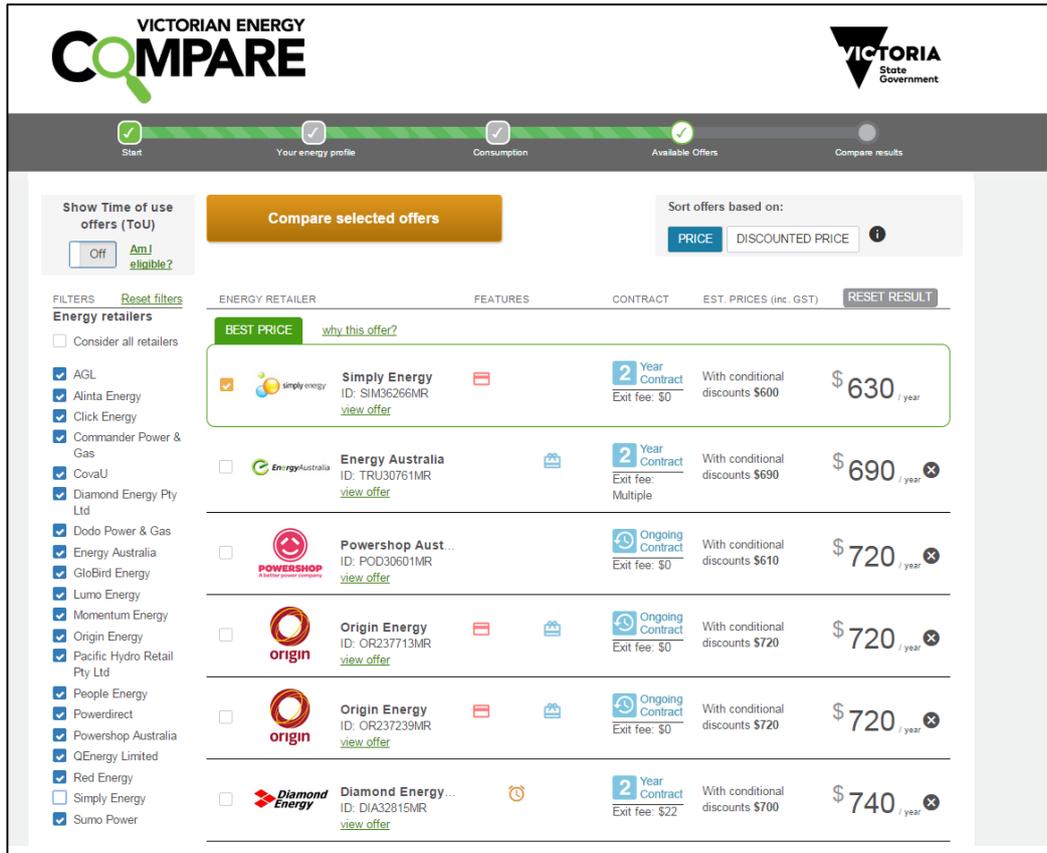


Figure 4

VICTORIAN ENERGY COMPARE

VICTORIA State Government

Start Your energy profile Consumption Available Offers Compare results

Provider	Offer Name	Annual Price	Rate Type
Simply Energy	VIC Simply Guaranteed 27 eBilling/Direct Debit	\$630 /year	Single rate
EnergyAustralia	Rate Fix Home - Time of Use	\$730 /year	Time of use
Origin Energy	Origin Maximiser (Flexible Pricing)	\$750 /year	Flexible Pricing

Offer Specifics for all offers:
 Cooling off period: 10 days
 Green Power: 0%
 Contract term: 2 year
 Exit Fee: \$0

Actions: View rates and details, View this offer, What's next?

email these results print these results

Part of the difficulty for consumers wanting to compare offers is that each offer has a large volume of information supporting it. A standard energy price fact sheet is generally two or three pages long and the average Victorian user has between 100 and 300 offers available to them. Based on that, to compare just two or three offers against each other, a consumer has to be willing and able to absorb as much as ten pages of information, which of course is far more effort than an average consumer expects (or wants) to invest.

Conclusion

In simple terms, the price of progress in the tariff space comes down to complexity. As tariffs progress and become more innovative, consumers need to increase their understanding and engagement in the market as well as have tools and third parties at their disposal to reduce the complexity of the information and the difficulty of the decision to move from one tariff to another. For most consumers, price is the commanding factor in any decision about tariff change. Whilst many varied elements play a role in the decisions of each consumer, the average consumer will be most interested in the impact on the cost of running their household energy. For tariff innovation to progress at a strong rate, more time needs to be spent considering how to encourage and help consumers engage. Tools like the Victorian Energy Compare website play a role in responding to market changes in this space, however they can only be useful if communication and engagement is high and consumers are willing to learn more about energy and engage more with the energy industry - Progress needs to exist not just with industry participants but with all energy users.