

Department of the Prime Minister and Cabinet







## Electricity information to fit the bill

December 2018

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The trial was pre-registered with BETA's Academic Advisory Panel. The pre-analysis plan is published alongside this report.

# Who?

#### Who are we?

We are the Behavioural Economics Team of the Australian Government, or BETA. We are the Australian Government's first central unit applying behavioural economics to improve public policy, programs and processes.

We use behavioural economics, science and psychology to improve policy outcomes. Our mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.

#### What is behavioural economics?

Economics has traditionally assumed people always make decisions in their best interests. Behavioural economics challenges this view by providing a more realistic model of human behaviour. It recognises we are systematically biased (for example, we tend to satisfy our present self rather than planning for the future) and can make decisions that conflict with our own interests.

## What are behavioural insights and how are they useful for policy design?

Behavioural insights apply behavioural economics concepts to the real world by drawing on empirically-tested results. These new tools can inform the design of government interventions to improve the welfare of citizens.

Rather than expect citizens to be optimal decision makers, drawing on behavioural insights ensures policy makers will design policies that go with the grain of human behaviour. For example, citizens may struggle to make choices in their own best interests, such as saving more money. Policy makers can apply behavioural insights that preserve freedom, but encourage a different choice – by helping citizens to set a plan to save regularly.

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## **Executive summary**

#### Most consumers can choose their electricity retailer. But many consumers are not shopping around for the best offer.

Part of the reason for this is the difficulty in comparing offers, with many consumers reporting they are not confident making choices in the electricity market. The ACCC's recent *Electricity supply and prices inquiry* highlights there is unnecessary complexity in the way electricity plans are communicated. The Australian Energy Market Commission's *2018 Retail Energy Competition Review* similarly finds consumers have reached record-low levels of trust in the industry.

In our previous work, BETA found re-designing electricity price fact sheets could increase consumer confidence when it comes to engaging in the electricity market. But a range of behavioural traits still contribute to consumer inertia: the time and effort needed to seek out, compare offers and choose a plan can seem like it's just not worth the hassle; and many consumers fear something will go wrong if they switch.

Electricity bills are a key way to inform consumers about their plan and usage, but bills are typically confusing and not useful to help consumers navigate the electricity market. Given all electricity consumers receive bills, the bill itself presents a useful vehicle to communicate the information consumers need to engage confidently in the electricity market.

In partnership with the Department of the Environment and Energy, we drew on behavioural insights to design and test six electricity bills. We focussed on simplifying bill design to draw attention to key information, and including a 'ways to save' box encouraging consumers to search for and switch to a better plan.

We tested electricity bills with around 4,200 Australians through an online survey experiment focussing on two key outcomes:

- confidence using the electricity bill to help look into finding a better plan; and
- stated intention to look into options for switching plans in the next year.

We found simplified bills with 'ways to save' information increased consumers' confidence by up to 13 per cent. But this did not translate into intention to look for a better offer.

Increasing consumer confidence in a market facing record-low levels of trust is important. For this reason alone, making bills clearer and more accessible for consumers makes sense and should be considered by electricity retailers.

# Why?

#### **Policy context**

Over the past decade, the price of electricity for Australian consumers has increased by around 56 per cent. High electricity bills have tightened household budgets and placed strain on businesses (ACCC, 2018).

Electricity bills help consumers manage electricity costs by communicating how much electricity is consumed and how much consumers are paying for electricity.

The National Energy Retail Rules require energy retailers to include certain information on customer electricity bills in New South Wales, Queensland, South Australia, Tasmania and the Australian Capital Territory. These include:

- the household's average daily consumption during the billing period; and
- an energy consumption benchmark, comparing quarterly energy use against similar sized households.

The Australian Government also maintains an energy price comparison website, <u>Energy</u> <u>Made Easy</u>, designed to help consumers find a suitable offer in retail electricity and gas markets.

#### The problem

The Australian retail electricity market is a complex environment for consumers to navigate. Changes in technology and new product offerings present consumers with more choices, whether it be which electricity plan, how to consume less electricity or how to become electricity generators themselves.

In most States and Territories, consumers can choose their electricity retailer, with around 300 retail plans available for consumers in central Sydney. Although competition exists, there is significant inertia in the electricity market with many consumers failing to shop around for the best plan. In 2017, around 50 per cent of Australian consumers reported they had not switched electricity retailer or plan in the last five years. This is despite the significant cost savings many Australians could make by switching (AEMC, 2017).

Consumers who do engage actively and switch tend to pay less on average for electricity. This means less actively-engaged customers tend to bear retailers' costs associated with attracting and retaining customers (ACCC, 2018).

A range of behavioural traits contribute to consumer inertia: the time and effort needed to compare and choose a plan can make it seem like it's just not worth the hassle; and many consumers fear something will go wrong if they switch (ECA, June 2017).

Driving good consumer outcomes is no easy task. As a starting point, electricity information needs to be accessible to consumers. Consumers need to have the skills or assistance to assess information. Finally, consumers need to be motivated to act on information.

The two most common reasons consumers cite as their motivation for switching provider are dissatisfaction with the value for money they are receiving, and finding a better value plan elsewhere even though they weren't dissatisfied with their current provider (ECA, June 2017). This project is focused on monetary incentives for switching, although we note dissatisfaction with customer service, faults and other reasons are also motivators for a minority of consumers to switch (ECA, June 2017).

Electricity bills are a key tool to inform consumers about their electricity plan and usage. However, bills can be difficult to understand and currently aren't designed to help consumers search the electricity market (ACCC, 2018). Given all electricity consumers must receive a bill, the bill itself presents a useful vehicle to communicate the information consumers need to engage confidently in the electricity market.

## What we did

We conducted a three-stage investigation into consumer behaviour, culminating in new electricity bill designs. We rigorously tested the new designs to see if they supported greater consumer engagement in the electricity market.

#### **Overview**

This project was exploratory in nature and aimed at providing insights into whether electricity bills are a useful tool for prompting Australian consumers to engage in the electricity market. Our goal was to design an electricity bill which would increase consumer confidence and stated intention to engage in the market to find the most suitable plan for them.

In partnership with the Department of the Environment and Energy, we conducted a three-stage design process. As shown in Figure 1, we first reviewed existing literature to understand what is already known about how consumers interact with electricity bills. We then talked to consumers in focus groups to understand their experience using existing electricity bills. Finally, we created several different bill design prototypes and sought feedback through user testing interviews with consumers.

To find out what changes to the bills help consumers, we used what we learned from the first three stages to design six bills. We then tested these designs in a framed field experiment.

#### Figure 1. Project sequence



A summary of the method and findings for each of these stages is set out below. The findings of the framed field experiment are detailed in the Results section.

#### Literature review

Electricity bills are the primary touch point between consumers and their electricity provider. However, the complexity and presentation of information on electricity bills can be hard for consumers to digest, leading them to ignore much of the information (Gigerenzer G et al., 1999; Roberts and Baker, 2003). When consumers face 'cognitive overload', they are more likely to make poor choices (Jacoby et al., 1974) or give up on making a decision altogether (Gardner and Nilsson, 2017).

Simplification can increase bill comprehension (BEworks, 2016) and peer comparisons can lead consumers to reduce their electricity use (Andor and Fels, 2018). But there is little evidence on whether electricity bills can work as a vehicle to promote switching to a better plan.

Importantly, if the potential benefits of switching are unclear, uncertain or seem small, consumers are less likely to act. Presenting information in a clear and attractive way can help (Roberts and Baker, 2003), as does standardising the way energy information is presented (Fletcher, 2016; European Commission, 2016).

We also know conversational language with limited jargon is more likely to be well received and understood (BEworks, 2016). This is because certain concepts like 'kilowatt hours' (Karjalainen, 2011) and 'supply charges' can be difficult to understand.

Even consumers who do learn of a better electricity plan may still stick with their current retailer because of status quo bias and loss aversion – consumers fear something will go wrong if they switch. However, research in the UK and Australia finds while most consumers perceive switching to be difficult and risky, those who did switch found it easier than expected (OFGEM, 2008; Newgate Research, 2016).

Further considerations we took into account from literature during the design process are in **Appendix A**.

#### Box 1: Behavioural factors affecting electricity consumers

**Cognitive overload** is a tendency to become overwhelmed by large amounts of information. Cognitive overload may lead us to forget things and delay decisions.

**Loss aversion** is encapsulated in the expression 'losses loom larger than gains' as the pain of a loss is psychologically about twice as powerful as the pleasure of an equivalent gain. Loss aversion can result in not switching if the losses (such as the time to search) weigh more heavily than the potential financial gains.

**Salience** is the quality of being noticeable or prominent. Disclosure documents can make certain products or features more or less salient.

**Status quo bias** is a tendency to stick with a chosen option or default, even where a better option may be available.

#### Focus groups

We ran four focus groups in three locations across the country to understand consumers' experience with existing electricity bills. We asked questions to gauge how consumers interact with their electricity bill and how they engage in the electricity market more broadly. Overall, we found varying levels of comprehension around key energy concepts, but broad consensus electricity bills could be much simpler. There was also a strong emphasis on discounts as a measure for whether a plan was good or not. This is concerning as some

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retailers "increase discounts to gain customers, and then inflate the underlying tariffs that discounts are taken from" (ACCC, 2018).

Further detail on our focus group work is in Appendix B.

#### **User testing**

We used the feedback from focus groups to design a number of bill prototypes for further testing. We used eye-tracking technology to see how consumers interact with electricity bills in various formats – paper, computer-based and on mobile devices. Overall, most participants in the user-testing sessions appreciated simplified bills. They were also drawn to 'ways to save' information, with most participants reporting it would motivate them to visit the energy comparison site Energy Made Easy (though this was not corroborated in our framed field experiment. See Results section for further detail). This stage helped us refine our bill designs.

Further detail on our user testing work, including our prototype bills, is in Appendix C.

#### The six bill designs

We created six bills which were all two pages. Figure 2 outlines the design elements of each of the six bills, which were:

- 1. A control bill, modelled on exemplar bills from retailer websites. This bill served as a benchmark for our trial.
- 2. A control bill with a generic 'ways to save' box, encouraging consumers to shop around for a better plan based on average savings.
- 3. A simple bill, which presented key information up front, but did not explicitly encourage consumers to shop around.
- 4. A simple bill with a generic 'ways to save' box.
- 5. A simple bill with a personalised 'ways to save' box, encouraging consumers to shop around for a better plan based on how much they could personally save.
- A simple bill with a personalised 'ways to save' box and unique Energy Made Easy code, providing consumers the option to skip entering their own data into Energy Made Easy and go straight to a personalised comparison page.

#### Figure 2. Design elements included in each of the six bills

	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6
Simple design					V	
Ways to save						
Personalised estimate of savings						
Unique Energy Made Easy Code						

One design element involved simplifying the overall layout of the bill. Four of the six bills used the simplified design (Bills 3-6) and two used a design modelled on exemplar bills sourced from retailer websites (Bills 1-2). An example of how they differed, using the bill summary information, is included in Figure 3.

#### Figure 3: Bill design

Typical bill design (Bills 1-2)

Summary	Including GST
Your last bill	
Amount	\$390.46
Payment received	\$390.46 CR
Balance carried forward	\$0.00
Your current bill (see over for details)	
New charges	\$453.04
Credits, rebates and discounts	\$48.67 CR
Balance	\$404.37
Total due by 27 April 2018	\$404.37
GST included in new charges \$36.76	

Amount Due: \$404.37 Due date: 27 April 2018 Plan: Simple saver





The primary element encouraging consumers to search for and switch to a better plan was the 'ways to save' box. This box was on the front page and included a call-to-action to visit the Australian Government energy price comparison website, Energy Made Easy. Existing regulation requires a link to Energy Made Easy to be included on all energy bills, however it is not typically framed as a way to help consumers save money. The different 'ways to save' boxes for each of the bill designs is set out in Figure 4, including the unique code in Bill 6.

#### Figure 4: 'Ways to Save' boxes from BETA designed bills

Bill 2 (generic)



Ways to save Ways to save Your yearly electricity bill will be \$1687 on your A typical household in NSW could save current plan but could be as low as \$1387 by switching to a better offer Would you shop around to save \$300? You could save The Government estimates a typical \$300 household in NSW could save \$300 next \$300 year by switching to a better electricity offer \$1,387 \$1,896 \$1,687 Your pl Based on your usage over the past 12 months and current offer To see how you can save: To see how you can save: Visit the Australian Government's comparison website energymadeeasy.gov.au Contact your provider to see Visit the Australian Government's comparison website Contact your provider to see if they'll improve your plan S-And the comparison website energymadeeasy.gov.au C: if they'll improve your plan

Bill 6 (personalised + unique code)



Note: Bills 1 and 3 did not contain a 'ways to save' box.

Full versions of all six electricity bill designs are in Appendix D.

#### Framed field experiment

We conducted a framed field experiment involving 4,224 Australian adults with experience choosing an electricity retailer, who were asked to complete an online survey. Participants in our survey came from deregulated National Electricity Market states (South Australia, New South Wales, South-East Queensland and Victoria),<sup>1</sup> and met demographic quotas for age, gender and geographic location.

Participants were asked to have their most recent electricity bill on hand while completing the survey. In the first part of the survey, participants were asked questions about themselves, their household and their most recent bill. Participants were then randomly split into six subgroups of approximately 700 people and shown just one of the six BETA-designed bills. Participants were asked questions about the bill, such as which parts of the bill were important to them, how clear the information was, and how it affected their confidence and intention to engage in the electricity market. All bills were based on the same hypothetical provider, customer, plan and usage.

#### Box 2: What is a framed field experiment?

A framed field experiment is a type of randomised control trial conducted with a sample of people drawn from the population of interest (in this case, electricity consumers). Framed field experiments are designed to mimic features of naturally occurring settings in a controlled environment, to better understand how people respond to different types of stimuli. Framed field experiments generally ask participants to make choices in settings which approximate how they make decisions in real life (for example, sitting in front of their own computer in their own office or home).

We identified and tested for two primary outcomes. These were a participant's:

- 1. confidence using the electricity bill to help look into options for switching to a better plan; and
- 2. stated intention to look into options for switching to a better plan.

We hypothesised each additional component added to the bill would lead to an increase in both primary outcomes.

A copy of the questions asked in the experiment is in **Appendix E** and more detail on the trial design is in **Appendix F**.

<sup>&</sup>lt;sup>1</sup> In New South Wales, Victoria, South-East Queensland and South Australia energy retailers set their own prices. In the ACT, Tasmania and some parts of Queensland, consumers can ask for a contract with a regulated electricity price which is set by government (see the AER's website for information on tariff and fees at: <u>https://www.aer.gov.au/consumers/my-energy-bill/tariff-and-fees-explained</u>). Behavioural Economics Team of the Australian Government

## Results

#### BETA's simplified bills increased participants' confidence. This did not translate into intention to look for a better offer.

#### Were the changes BETA made to the bills valued by participants?

We asked participants to rate clarity and comprehension of their most recent bill as well as the bill with which they were presented in the survey on a seven-point scale. As shown in Figure 5, we found bills in the survey were rated as being clearer and more comprehensible than participants' existing bills (0.37 to 0.48 points greater than 5.12). The bills with a simplified design (Bills 3-6) were rated more highly than the bills with the typical design (Bills 1 and 2) (p=0.002).<sup>2</sup>



#### Figure 5: Clarity and comprehension of the bill designs

Secondary outcome, n=4,224. The bills in the survey were rated clearer and more comprehensible than participants' existing bills. Survey bills with the simplified design (Bills 3-6) were rated more highly than survey bills without the simplified design (Bills 1 and 2) (p=0.002).

<sup>&</sup>lt;sup>2</sup> We are aware there is a lively academic debate about the merits of testing for 'statistical significance', the appropriateness of conventional thresholds such as p<0.05 (or any thresholds at all), and even the use of p-values generally. See, in particular, the 'The American Statistical Association Statement on Statistical Significance and P-Values' (Wasserstein and Lazar, 2016). See Appendix G for further discussion of the statistical significance of these effects. Behavioural Economics Team of the Australian Government

We also found participants indicated the link to Energy Made Easy was important to them more frequently when a 'ways to save' box was included on the bill contextualising the link's purpose. As illustrated in Figure 6, less than one per cent of the participants selected the Energy Made Easy link as being important to them when shown a bill without the 'ways to save' box (Bills 1 and 3). In bills with a 'ways to save' box framing the link (Bills 2, 4-6), between 7.0 and 45.8 per cent of participants selected this component as being important to them. Relative to the control bill, these increases were all statistically significant (p<0.001). Participants who viewed the personalised ways to save information were the most likely to endorse this information as important. Only three components of the bill were rated as important by more participants: the amount due and when, the bill breakdown, and bill history.





Secondary outcome, n=4,224. Bill with 'ways to save' box contextualising the Energy Made Easy link (Bills 2, 4-6) led to a statistically significant increase in the proportion of participants reporting that component of the bill was important to them (p<0.001).

#### Did the BETA-designed bills increase confidence?

After viewing one of the bill types, we asked participants how the bill affected their confidence to engage in the electricity market to find a better plan. Participants scored their confidence on a seven-point scale, with a score of four indicating the participant felt just as confident using the experimental bill as their existing electricity bill.



Figure 7: Participant confidence in ability to use the bill to look into switching

Primary outcome, n=4,224. Increases in confidence, relative to the control bill, were statistically significant. See Appendix G for relevant p-values, confidence intervals and a discussion of the statistical significance of these effects.

As shown in Figure 7, all bills received a higher confidence rating than the participants' *existing* bills and all of the re-designed bills led to increased confidence relative to the control bill. The largest improvement was a 13 per cent increase in confidence, which came from the two bills which included a simplified design and personalised savings information (Bills 5 and 6). These differences were both statistically significant (p<0.001). The bill with a simplified design and generic savings information (Bill 4) also led to a statistically significant increase in confidence of six per cent.

We also ran an overall test for the effect of each component we added to the bill (that is, simplified design, 'ways to save' information, personalised estimate of savings, or a unique code). We found all components to be statistically significant predictors of increased confidence, with the exception of the unique code. Further detail is provided in **Appendix G**, which contains full results of analyses undertaken, including effect sizes, p-values and confidence intervals.

#### Did the alternative bills affect intention to look into switching?

We found no difference in the impact of the different bills on participants' stated intention to look into their options for switching to a different plan in the next 12 months. Across all six experimental groups, approximately 57-60 per cent of participants stated they were planning to look into their options, as shown in Figure 8. None of these groups differed by a substantial or statistically significant amount from the control.



Figure 8: Intention to look into switching in the next 12 months

Primary outcome, n=4,224. There was no statistically significant difference between the control bill and any other of the bills in their impact on participants' intention to look into switching in the next 12 months.

#### Did the alternative bills affect switching-related behaviour?

At the end of the survey, we drew participants' attention to the Australian Government energy price comparison website, Energy Made Easy, and provided a noticeable link to the website. We tracked whether participants clicked on the link. We found no statistical difference between the experimental groups in the proportion of people who clicked on the link. This is consistent with the pattern of results regarding stated intention to look into switching. In all groups, only two per cent of participants clicked on the link.

## Why didn't increased confidence lead to changes in intention or behaviour?

Going beyond the bill, we asked participants about their expectations of switching. We found on average, participants expected it would take a little over two hours looking into their options to find a better plan. To make this time spent worthwhile, they wanted to save at least \$237 annually.

Given a typical household in New South Wales could save around \$300 by switching to the best available market offer (AEMC, 2017) (as was stated in bills with 'ways to save' Behavioural Economics Team of the Australian Government

information), it appears there is a gap between what consumers say they would do and what they actually do. In support of this, we found a majority of participants (56 per cent) stated they were at least somewhat concerned switching could lead them to end up on a worse plan. When asked what might prompt them to look into their options, one participant described how an offer exceeding their desired savings could be insufficient to prompt action.

"The plans all seem to be the same or [so] similar that it does not matter. It would have to be a good discount but then I would probably believe that it was too good to be true."

Other participant feedback similarly highlighted trust issues in the market and the difficulty in trying to compare offers. Some participants suggested ways to overcome these issues. In summary, they pointed towards easy-to-use, trusted and objective comparison tools, with Government having a role to play in their design and delivery.

## Limitations

The framed field experiment component of this study measured participants' intention to switch, rather than whether participants actually switched provider or plan after viewing the electricity bill. Unlike a naturally occurring situation, participants did not actually receive the bill in the mail or online. It is possible participants spent more time examining the bills than they would have in real life and, as a result, responded differently to how they would have in practice.

In addition, there may be limitations in how far we can generalise the findings from this study because the focus groups, user testing sessions and the framed field experiment all involve voluntary participation. We designed each component of the study with demographic quotas to ensure our results could be as representative as possible of the broader population. However, the focus group, user testing and survey participants were incentivised to engage in the research so it is possible the study attracted participation by people who were more motivated by financial incentives. A field experiment conducted among the broader Australian population could help reduce this potential response bias.

We conducted multiple tests on our primary outcomes, which could inflate our risk of false-positive findings (for example, incorrectly concluding the difference between the bills is a real effect and not just a result of chance). We did not adjust our statistical thresholds for multiple testing but we did take this into account when interpreting our results. For further discussion, see **Appendix G**.

# Discussion and conclusion

#### Clear and accessible information improves consumers' confidence in making decisions in the electricity market. But complementary measures may be required to prompt action.

This is the second BETA study looking at increasing consumer engagement in the electricity market. The first, which involved redesigning electricity price fact sheets, found very similar results to the current study. That is, simplifying content and product design led to a clear increase in consumer confidence, but had no impact on intentions to engage in the market (BETA, 2017).

Increasing consumer confidence is a necessary step towards promoting engagement in the electricity market. Fact sheets and bills are the most obvious channels through which we could do so. Increasing confidence through these channels is a good start. Even though a one-off viewing was not sufficient to increase intentions to switch, it is possible repeated viewing could be. Over time, familiarity may develop and promote greater confidence. Further research could consider whether repeated exposure to such information included in regular bills would increase switching.

There are currently record-low levels of consumer trust in the retail energy sector (AEMC, 2018). In this context, even small improvements in consumer confidence are worthwhile. BETA notes other steps the Government is taking to improve trust in the electricity market and improve competition. The ACCC's recent *Electricity supply and prices inquiry* (2018) highlighted there is unnecessary complexity in the way electricity plans are communicated. The ACCC found retailers have made pricing structures confusing and have developed a practice of discounting which is opaque.

The ACCC recommended making regulatory changes to the way plans could be structured. In particular, the ACCC recommended discounts be quoted with reference to a consistent base rate. The Government has accepted this recommendation. BETA's work complements the ACCC's findings by confirming electricity bills and fact sheets form part of reducing market complexity.

Our designs may assist retailers seeking to improve the experience of their customers and give them confidence in their ability to engage in the market. In light of underlying market changes, it is timely that simple changes to electricity bill design be given consideration.

## Appendices

#### Appendix A: Designing the electricity bills

We considered a number of behavioural factors in designing the BETA electricity bills. Using bills to drive switching behaviour takes advantage of consumers being most aware of their electricity use and costs when they have to pay. This makes the bill a natural catalyst to help consumers consider switching (Gourville, J.T. and Soman, D., 1998.)

Key design elements derived from our review of the existing literature are set out below.

#### Addressing cognitive overload by making electricity bills simpler

To make it easier for consumers to understand their plan and feel confident searching for a better one, our research suggested electricity bills should:

- Be no longer than two pages and include key information (such as bill amount and date due) on the front page. The second page should include more detailed plan information for consumers who seek more detail (SSE, 2016).
- Use conversational language (with limited jargon) as it is more likely to be well received and understood (BEworks, 2016). Certain concepts like 'kilowatt hours' (Karjalainen, 2011) and 'supply charges' can be difficult to understand, so it can help to put these terms into more everyday language.
- Use a combination of text, diagrams and tables. This is more effective than single-format presentations when providing information on electricity bills (Roberts and Baker, 2003).
- Order information carefully and draw out key facts. Decisions can be influenced by the way information is structured (Simon, 1956). To draw people towards information on getting a better plan, it helps if information stands out on the front page and is visually appealing.
- Present comparisons using simple visuals. For benchmarks or comparisons, bar charts are easy to interpret and provide a quick way for consumers to understand how their electricity use compares (Karjalainen, 2011.)
- Only include one 'amount due' figure. Existing discounts are particularly difficult for consumers to navigate, with many participants in our focus groups confused about from where the underlying tariff discounts are taken, and the impact of pay-on-time discounts. To minimise confusion, our bill designs do not include any contingent discounts. Adopting Recommendation 32 from the ACCC's Retail Electricity Price Inquiry - quoting discounts with reference to a standard reference bill - would also assist consumers, allowing them to 'compare apples with apples'.

#### Addressing status quo bias by encouraging consumers to consider switching

To motivate switching behaviour, we considered a number of ways to encourage consumers to think about whether they were on the best plan for them, including:

- Prompting consumers by making it salient there are other plans which could save them money and providing suggestions on how easily to go about initiating the process.
- Making the potential savings personal or making them social, by drawing comparisons with others getting a cheaper plan for the same electricity. Evidence from electricity usage comparisons suggests they can be effective in driving behavioural change (Andor and Fels, 2018).
- Presenting the potential savings over a year-long horizon, so consumers can clearly see the benefits to them over time (Gourville, 2003).

#### **Appendix B: Focus groups**

#### Focus group goals

We ran four focus groups in South Australia, New South Wales and Queensland, each containing between five and eight participants. The focus groups included a cross section of household electricity consumers, with one group specifically targeting regional consumers, and one group targeting low-income consumers. The purpose of our focus groups was to seek views from electricity consumers about their understanding of and engagement with existing electricity bills.

#### Focus group methodology

The two-hour focus groups compared three existing electricity bills, drawing out views on content, format, comprehension, awareness of alternative plans and barriers to switching.

Each focus group responded to the same set of semi-structured questions intended to guide discussion, including questions designed to gauge participants' current engagement in the electricity market. We collected each group's set of preferences for the electricity bill design comparisons and articulated areas of agreement and disagreement among participants.

After discussing elements of existing bills participants found most/least easy to understand, participants created their own 'ideal bill', informed by guiding questions:

- What layout helps you find the most useful information?
- What information would you include on your bill to help you find the best plan?
- What information would you include on your bill to make it easier to understand?

#### Focus group results

For their ideal bill, we found:

- All participants prefer bills no longer than two pages.
- Participants generally preferred different information in clearly separated areas, with colour in headings to break up sections of the bill.
- Participants wanted key information up front, including: bill period (date and/or days), due date, amount due and discounts.
- Participants generally wanted extra detail on the back including: contact details, detailed usage information, payment options.
- Many participants found a historical comparison graph helpful for understanding their own electricity use.
- Many participants found discount information attractive, without properly understanding the tariff rate the discount applied to. While some participants understood they couldn't make direct comparisons between discount numbers, they were still confused by the array of discounts and tariffs.

With regard to engaging in the electricity market, we found mixed views on the challenges of switching. The main barrier was the perceived time required to switch. However, many participants reported they proactively look for better plans based on price, or they could be encouraged to shop around by hearing about discounts or experiencing 'bill shock'.

#### **Appendix C: User testing**

#### User testing goals

Following our focus groups, we created several prototype electricity bills for further testing. User testing (including eye-tracking) helped us determine which design was most useful for helping consumers understand information on the bills and supporting consumers to make better energy choices. The user testing results informed the final design of the bills we used in the framed field experimental survey.

#### User testing methodology

Sixteen user testing sessions were conducted, each for 90 minutes with a single participant per session. Eleven one-on-one sessions took place in Sydney and five were conducted in Brisbane. We recruited a variety of participants with the aim of broadly covering a cross-section of household electricity consumers. Participants were recruited via a panel maintained by research partners Farron Research and AccessHQ.

Participants were presented with five bill variations in one of three media: paper; computer; or mobile device. Bills were presented to participants in a random order to minimise bias. Participants were eye-tracked throughout the entire session to allow the research team to gain deeper insights into bill engagement and the areas of the bills where participants focused most.

Each participant was asked the same set of semi-structured questions intended to guide discussion. Participants were first asked general questions about engagement with their existing bills and the electricity market, such as how much information they typically read when they get their electricity bill. They were then asked to find key pieces of information on the new bills such as the bill amount, due date and any discounts. Further discussion focussed on comprehension of specific components of the bill, and how confident and likely participants would be to use the bill to find a better electricity plan.

#### Figure C1. User testing bill designs and key design differences (front page)

	203	·9·· / ·
🚯 EnergyCo		
Jane Williams 13 Bridge Road Carlingted NSW 21 Australia	15	energyoo.com.au Enquiries 1800 581 362 Emergencies: 1800 641 483
Electricity account summa	ry	
Zustomer number 2 Account number 3 Bervice address 1 Tax Invoice Id	101 6836 51 932 3 Bridge Road Carlingford NOW 2118 sue date 1 April 2018	Amount Due: \$404.37 Due date: 27 April 2018 Plan Simple www
Summary Your last bill Amount Payment received Balance carried forward Your current bill (see over for de New charges Credits, recabes and discounts Balance Total das by 27 April 2018	Including G37 5390.45 5390.45 50.00 50.00 5455.04 5465.04 5465.7 CR 5404.37 5404.37	
GST included in new charges \$3	0.70	
Total usage: 1352 kWh Usage per day: 15 kWh Average cost per day: 34.40 Greenhouse gas emissions: 1	122 tonnes	
Ways to pay		
securely at Call 1200 30 90 99 energyco.com.au* Mastercard	Centreply Centrepay is the easy way to pay your bills. Arrange regular deductions from your Centrelink payment through your Centrelink Account online.	MAI     Mai     Mai     Cheque payable to EnergyCo.     annange regular automatic payments.     Post with this portion to: Looked     Dag 899     OPO Systemy NEW 2001
Billier code: 1254 Ref: 0000 0000 0000	DEOST Billpay code: 6878 Billpay Ret: 6466 6666 6666	
Telephone and Informet Danking - DFAVE Contact your bank or financial institution to make this payment from your cheque, savings, delta, credit card or transaction account. More info: www.bpay.com.au/ Biligenewich: DFAY Pry Let Abh. 40 (2019) 157 116	POST billipay Pay in person at any Post Office, phone 13 10 10 or go to postilitized com.au*	0123456789012345679
Transode User code	Cuclomer reference number	Amount due

<image><image><image><text><text>

**Energy**Co Θ 1800 581 392 1800 941 463 0 Your plan Your bill Your electricity use Simple Saver 1352<sup>kWh</sup> 404.3 Period \$48.67 \$0 Switch to a cheap You paid \$1687 for electricity in 2017, but you have paid as little as \$1378 by moving to a c Last ye ng to a cheaper \$309 \$1,378 To see how much you could save this year use your unique code at energymadeeasy. 2043789159

**Design C** 

Control without Energy Made Easy module; bill comparison on page 1

Control with Energy Made Easy module; bill comparison on page 2

Horizontal circles with Energy Made Easy module and piggy bank icon



Horizontal modules with Energy Made Easy module and arrow icon





Vertical circles with Energy Made Easy module

#### Design A Design B

#### Figure C2. User testing bill designs and key design differences (back page)

Your electricity supply details	1
<section-header></section-header>	Important information           Payment assistence, These and a number of the New South Welss Generation with end of the New South Welss Generation with Payment Assistence (1994), Lowey Co Mark and South Welss Generation with Payment Assistence (1994), Lowey Co Mark and South Welss Generation with Payment Assistence (1994), Cal 1900 307 245 (1994), Cal 1990 307 (1994),
Giving you more po Take control of your energy with netarel access to your account and all our popular services online Sign up now at energy co.com au Control with bill comp Design C	wer for the second seco
Your bill tracker       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100       100     100     100	1000         Payend A caulance           1000         The State
This can graph and transport on the owner of the owner of the owner of the owner own	es of a particular meter and a particular second resonance of the second second second s

#### **Design A**

Design B





Control with bill comparison on page 2

#### Design D



#### Simplified design with familiar table presenting breakdown of charges

Simplified design with novel ways of presenting breakdown of charges

Contact your participating Phancial institution for information on BPay.

Call 131 816 to pay by credit card or go to www.postbilipay.com.au to pay on the internet.

41 483

Behavioural Economics Team of the Australian Government

payable to theregyCo and post to PO Box 4136, East Richmond

#### User testing results

Our qualitative analysis of user testing sessions revealed a number of key findings.

Bill preference

• Bills C, D and E were substantially more engaging and more likely to motivate participants to consider options to save than control bills A and B.

Energy Made Easy

- Overall, participants voluntarily indicated on bills C, D, and E visiting Energy Made Easy would be their first step towards seeking energy option alternatives.
- Participants unanimously found control bills A and B to be highly unlikely to motivate them to take any action towards finding a better plan, let alone visiting the website.
- All participants stated they would trust a government website over any third party comparison website.
- The piggy bank icon helped to capture participants' attention, and was distinctly preferred over the arrow icon.
- The unique code was appreciated as a nice personal touch, and indicated to participants that clicking on the energymadeeasy.gov.au link would provide a personalised service regarding finding a cheaper plan.

Switching providers

- Although participants were not immediately inclined to switch, the Energy Made Easy module was highly motivating.
- Many participants stated if they could get a better plan, they would first contact their existing provider to see if they would match the better plan to save the effort of switching.

Information presented on back page of bill

- Participants were unanimous in stating they rarely used the detailed information on the bill (typically found on page 2).
- Participants mentioned they would only ever use this information where their bill didn't align with what they expected each billing cycle.
- For participants who did refer to information on the back page, they preferred it in a familiar table form. Novel ways of presenting usage and supply information was not helpful as participants often struggled with understanding what usage and supply charges are.

Platform considerations

• Key platform differences are outlined in Table C1.

Printed	Desktop PDF	Mobile PDF
Participants were very familiar with this process based on prior usage and the key benefit of the printed bill allows for an easy overview of all content and an easy, almost instinctual desire to turn over to page 2.	The larger screen of the desktop made accessing the bill relatively easy. However, participants struggled taking in all details as a result of having to scroll to content hidden from the initial view. However, overall participants were able to make good use of PDF bills on a computer screen.	The ability to access the entire bill is dramatically reduced on a mobile device. This highlights a need to explore future options for mobile specific PDF bills. At present the PDF platform does not allow for designs which respond to device size. Electricity providers may need to provide web based bills rather than PDF based bills. One key thing with mobile PDF consumptions is the natural bias towards content down the left side of the bill as the user scrolls down a narrower screen. From this standpoint, design E performed best due to the vertical orientation of the circles.

#### Table C1. Key differences in user testing findings based on testing platform

#### **Appendix D: BETA electricity bills**

#### Bill 1 – Control (front)

🎸 EnergyCo	
Jane Williams	energyco.co
13 Bridge Road	

Carlingford NSW 2118 Australia

m.au Enquiries 1800 581 392 Emergencies: 1800 941 463

#### Electricity account summary

Customer number	2043789159
Account number	351932
Service address	13 Bridge Road Carlingford NSW 2118
Tax invoice	Issue date 1 April 2018
Summary	Including GST
Your last bill	
Amount	\$390.46
Payment received	\$390.46 CR
Balance carried forward	\$0.00
Your current bill (see over for de	etalls)
New charges	\$453.04
Credits, rebates and discounts	\$48.67 CR
Balance	\$404.37
Total due by 27 April 2018	\$404.37
GST included in new charges \$3	36.76

#### Amount Due: \$404.37

Due date: 27 April 2018

Plan: Simple saver

#### How you compare

#### Compare your usage to other households in your area 1800 -1600 U 1400 1200 1000 800 800 -K 600 400 -200 0 2 people 4 people 1 person 3 people

Average usage data supplied by Australian Energy Regulator, based on homes with no gas and no pool during summer. Visit energymadeeasy.gov.au for more information.

#### Ways to pay

#### Online: Pay securely at



Biller oode: 1234 Ref: 3333 3333 3333





Telephone and Internet Banking – BPAY Contact your bank or financial institution to make this payment from your cheque, savings, debit, credit card or transaction account. More info: www.bpay.com.au\* @Registered to BPAY Pty Ltd ABN 69 079 137 518

8	POST bilipay Pay in person at any Post Office
	phone 13 18 16 or go to postbilipay.com.au*

"A payment processing fee of 0.45% (including GST) will apply if you pay via credit or debit card. This fee will appear on your next bill.

Tranoode User oode Customer reference number 01234586789123456789

999	0123456

Direct Debit Visit energyco.com.au/directdebit to arrange regular automatic payments.

## Mail Cheque payable to EnergyCo. Post with this portion to: Looked Bag 989 GPO Sydney NSW 2001



Amount due \$404.37

Behavioural Economics Team of the Australian Government

#### Bill 1 – Control (back)

#### Your electricity supply details

Supply address:			13 Bridge Road, Carlingford NSW 2118				
Supply period:			1 Jan	1 Jan 2018 to 31 Mar 2018 (90 days)			
NMI:	MI: 204378915				43789159		
Energy	Energy plan: Simple Save					nple Saver	
Meter No:	Read date	Read type	Rate decoription	Start read	End read	kWh	
1234	31 Mar 18	Actual	Peak	19808	21160	1352	
Your next meter read is due between 22 Jun - 30 Jun 18. Please ensure easy access to your meter on these days.							

#### How we've worked out your bill

Previous balance and payments					Total
Previous balance			\$390.46		
1 Feb 18 payment			\$390.46 c	r	
Balance brought forward					\$0.00
New charges and credits					
Usage and supply oredits	Units	Price	Amount		
Peak	1352 kWh	\$0.24	\$324.48		
Supply charge	90 days	\$1.02	\$91.80		
Other charges					
Payment processing fee			\$0		
Total charges				+	\$416.30
Credits					
15% guaranteed usage discount			\$48.67 cr		
Total credits				-	\$48.67
Total new charges and credits				-	\$367.61
Total GST				+	\$36.76
Total due (Includes GST)				=	\$404.37

#### Usage

Total usage: 1352 kWh Usage per day: 15 kWh Average cost per day: \$4.49 Greenhouse gas emissions: 1.122 tonnes

#### Important information

Payment assistance. There are a number of options available to eligible customers, including the New South Wales Government energy concessions and rebates, Energy Account payment Assistance (EAPA), EnergyCo payment plans and the Centrepay scheme. To find out more, visit energyco.com.au/ concessions

Need an interpreter? Call 1300 307 245

¿Necesita un intérprete? دل کنت بحاجة إلى مترجم؟ 你需要翻译吗?

Avete bisogno di un interprete? 通訳が必要なのですか? आप बिंबी में किसी से बात करना चाहेंगे?

Hearing impaired (TTY). Call 133 677 and quote 1300 664 358

If you don't wish to receive marketing information about EnergyCo products and services, visit energyco.com.au/DoNotContact

Moving? Visit energyco.com.au/Move to arrange a connection at your new premises.

#### Your electricity usage



#### Giving you more power

Take control of your energy with instant access to your account and all our popular services online

Sign up now at energyco.com.au



#### Bill 2 - Control + savings (front)



Jane Williams 13 Bridge Road Carlingford NSW 2118 Australia

energyco.com.au Enquiries 1800 581 392 Emergencies: 1800 941 463

#### Electricity account summary

Customer number	2043789159					
Account number	351932					
Service address	13 Bridge Road Carlingford NSW 21	13 Bridge Road Carlingford NSW 2118				
Tax invoice	Issue date 1 April 2018					
Summary	Including GST					
Your last bill		-				
Amount	\$390.46					
Payment received	\$390.46 CR					
Balance carried forward	\$0.00					
Your current bill (see over for	r detalls)	_				
New charges	\$453.04					
Credits, rebates and discour	ts \$48.67 CR					
Balance	\$404.37					
Total due by 27 April 2018	\$404.37	-				
GST included in new charges	\$30.70					

Amount Due: \$404.37

Due date: 27 April 2018

Plan: Simple saver

#### How you compare

#### Would you shop around to save \$300? The Government estimates a typical household in NSW could save \$300 next year by switching to a cheaper electricity offer

To see how you can save:

- Visit the Australian Government's comparison website energymadeeasy.gov.au
- · Contact your provider to see if they'll improve your plan

Every household's energy use is different. Find tips to reduce your usage at <u>energy nov, au</u> Average usage data suplied by the Australian Energy Regulator based on homes with no gas and no pool during summer.

Centrepay

#### Compare your usage to other households in your area



#### Ways to pay

Online: Pay securely at

energyco.com.au\*

BAY

ORegiste

Mastercard bills. Arrange regular deductions from your Centrelink payment through your Centrelink Account online.

Call 1300 30 90 99



Centrepay is the easy way to pay your

Telephone and Internet Banking – BPAY® PO3T bilipay Contact your bank or financial institution to make this payment from your cheque, savings, debit, credit card or transaction account. More info: www.bpay.com.au\*

Customer reference number

"A payment processing fee of 0.45% (including GST) will apply if you pay via credit or debit card. This fee will appear on your next bill.

Trancode User code 999 0123456

red to BPAY Pty Ltd ABN 69 079 137 518

Biller oode: 1234 Ref: 3333 3333 3333 Visit energyco.com.au/direct/debit to arrange regular automatic payments.

Direct Debit

01234586789123456789

Mail to Cheque payable to EnergyCo. ts. Post with this portion to: Looked Bag 989 GPO Sydney NSW 2001



Amount due \$404.37

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#### Bill 2 – Control + savings (back)

#### Your electricity supply details

Supply address: 13 Bridge Road, Carlingford NSW 21							
Supply period: 1 Jan 2018 to 31 Mar 2018 (90 days							
NMI:	NMI: 2043789159						
Energy	plan:				Sim	ple Saver	
Meter No:	Read date	Read type	Rate decoription	Start read	End read	kWh	
1234	31 Mar 18	Actual	Peak	19808	21160	1352	
Marrie and a	online panel in size i	And a second sec	hun 90 hun 10 Eller		ant and an and the second	and standard	

Your next meter read is due between 22 Jun - 30 Jun 18. Please ensure easy access to your meter on these days

#### How we've worked out your bill

Previous balance and payments					Total
Previous balance			\$390.46		
1 Feb 18 payment			\$390.46 c	r	
Balance brought forward					\$0.00
New charges and credits					
Usage and supply oredits	Units	Price	Amount		
Peak	1352 kWh	\$0.24	\$324.48		
Supply charge	90 days	\$1.02	\$91.80		
Other charges					
Payment processing fee			\$0		
Total charges				+	\$416.30
Credits					
15% guaranteed usage discount			\$48.67 cr		
Total credits				-	\$48.67
Total new charges and credits				-	\$367.61
Total GBT				+	\$36.76
Total due (includes GST)				=	\$404.37

#### Important information

Payment assistance. There are a number of options available to eligible customers, including the New South Wales Government energy concessions and rebates, Energy Account payment Assistance (EAPA), EnergyCo payment plans and the Centrepay scheme. To find out more, visit energyco.com.au/ concessions

Need an interpreter? Call 1300 307 245

¿Necesita un intérprete? الى مترجع 你需要翻译吗? Avete bisogno di un interprete? 通訳が必要なのですか? आप 龍君 并 命祀 से बात करना चाहेंगे?

Hearing impaired (TTY). Call 133 677 and quote 1300 664 358

If you don't wish to receive marketing information about EnergyCo products and services, visit energyco.com.au/DoNotContact

Moving? Visit energyco.com.au/Move to arrange a connection at your new premises.

#### Usage

Total usage: 1352 kWh Usage per day: 15 kWh Average cost per day: \$4.49 Greenhouse gas emissions: 1.122 tonnes

#### Your electricity usage



#### Giving you more power

Take control of your energy with instant access to your account and all our popular services online

Sign up now at energyco.com.au



#### Bill 3 – Simple (front)







www.energyco.com

Enquirles: 1800 581 392 Emergencies: 1800 941 483

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#### Bill 3 – Simple (back)

Electricity charges Based on actual meter read									
Payment owing from previous bills: \$0 Last meter read: 31 March 18 Next meter read: Between 22-30 June 18									
Your plan NMI From	Simple Saver 2043789159 1 January – 31 I	March 2018 (90 (	days)						
Tariff Description	Previous Reading	Current Reading	Units Used	Rate	Charges				
Usage charge	19808	21160	1352 kWh	0.24c/kWh	\$324.48				
Usage charge (a	fter 15% guaranteed disc	ount applied)		·	\$275.81				
Supply charge (f	for 90 days)			1.02c/day	\$91.80				
Total new charge	6			·	\$367.61				
GST					\$36.76				
Total bill					\$404.37				

Your usage charge is the cost of electricity you use Your daily supply charge is the cost of getting electricity to your place, even if you don't use any



www.energyco.com

Enquiries: 1800 581 392 Emergencies: 1800 941 463

#### Bill 4 – Simple + savings (front)



#### Ways to save



#### Bill 4 – Simple + savings (back)





#### Electricity charges Based on actual meter read

Payment owing from previous bills: \$0

Last meter read: 31 March 18

Next meter read: Between 22 - 30 June 18

Simple Saver Your plan

NMI From 2043789159 1 January - 31 March 2018 (90 days)

Tartff Current Units Used Rate Charges Previous Description Reading Reading Usage charge 19808 21160 1352 kWh 0.24c/kWh \$324.48 Usage charge (after 15% discount applied) \$275.81 Supply charges (for 90 days) 1.02c/day \$91.80 Total new charges \$367.61 GST \$36.76 \$404.37 Total bili

Your usage charge is the cost of electricity you use Your daily supply charge is the cost of getting electricity to your place, even if you don't use any



Behavioural Economics Team of the Australian Government

#### Bill 5 – Simple + personal savings (front)









#### Electricity charges Based on actual meter read

Last meter read: 31 March 18 Next meter read: Between 22 - 30 June 18

Payment owing from previous bills: \$0

Your plan NMI From

Simple Saver 2043789159 1 January - 31 March 2018 (90 days)

Tar <del>iff</del> Description	Previous Reading	Current Reading	Units Used	Rate	Charges		
Usage charge	19808	21160	1352 kWh	0.24c/kWh	\$324.48		
Usage charge (after 15% discount applied)							
Supply charge (for 90	Supply charge (for 90 days) 1.02c/day						
Total new charges					\$367.61		
GST							
Total bill							

Your usage charge is the cost of electricity you use

Your daily supply charge is the cost of getting electricity to your place, even if you don't use any



Behavioural Economics Team of the Australian Government

#### Bill 6 – Simple + personal savings + code (front)









Your bill

#### Electricity charges Based on actual meter read

```
Last meter read: 31 March 18
Next meter read: Between 22 - 30 June 18
```

Payment owing from previous bills: \$0

- Your plan Simple Saver
- NMI From

2043789159 1 January - 31 March 2018 (90 days)

Previous Reading	Current Reading	Units Used	Rate	Charges			
19808	21160	1352 kWh	0.24c/kWh	\$324.48			
Usage charge (after 15% discount applied)							
Supply charge (for 90 days) 1.02c/day							
				\$367.61			
GST							
Total bill							
	Previous Reading 19808 5% discount applied) days)	Previous Reading 19808 2116D 5% discount applied) days)	Previous Reading     Current Reading     Units Used       19808     21160     1352 kWh       5% discount applied)	Previous Reading         Current Reading         Units Used         Rate           19808         21160         1352 kWh         0.24c/kWh           5% discount applied)         1.02c/day         1.02c/day			

Your usage charge is the cost of electricity you use

Your daily supply charge is the cost of getting electricity to your place, even if you don't use any



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#### **Appendix E: Online survey questions**

Note - each of the six survey groups was shown a different bill.

#### Part 1

The following questions ask about information that can be found on your most recent electricity bill.

Q1 Do you have your most recent bill on hand?

- No

- Yes

If no, then include a follow-up prompt: 'It's preferable you have your most recent bill on hand while you conduct this survey as questions will relate to specific details about energy bills.'

Q2 What is your postcode?

- Free text response (Must be a four digit number)

Q3 Which electricity company are you with?

- AGL

- EnergyAustralia
- Origin
- Alinta
- Lumo
- Red
- Momentum
- Simply
- Other please specify

Q4 How many months does the bill cover?

- 1 month
- 2 months
- 3 months
- Other- please specify

Q5 What is the total cost of the bill (including discounts)?

- Sliding scale

Q6 How much electricity did your household use (total kWh)?

- Free text response (must be a number)

Q7 Do you know what electricity plan you are on? Click here if you want more information on what we mean by 'plan'. [Include a pop-up box when respondents click on the link with this text: 'By 'Plan' we mean the electricity offer you are on including the usage and supply charges, discounts and other fees and conditions.']

- No

- Yes

#### The following questions are about you.

Q8 What is your age?

- Ten year age brackets: 21-30, 31-40, 41-50, 51-60, 61-70, 70+

Q9 What is your gender?

- Female
- Male
- Other
- Prefer not to say

Q10a How many adults (persons aged 18 years and over) live in your household?

- 1
- 2
- 3
- 4 or more

Q10b How many children (persons aged under 18 years) live in your household?

- 0
- 1
- 2
- 3
- 4 or more

Q11 In the last year, have you have you borrowed money to pay a bill on time or not paid on time because you did not have enough money?

- No

- Yes

Q12 Have you looked into or researched your options for switching electricity companies or electricity plans in the last year?

- No

- Yes

Q13 [If answered 'yes' to Q12] Did you switch electricity companies or electricity plans?

- No

- Yes

Q14 *[If answered 'yes' to Q13]* Which of the following best explains the reason for switching electricity companies or electricity plans? (*Respondents can select multiple responses*)

- I was dissatisfied with the value for money I was receiving. It was too expensive.

- I was dissatisfied with the customer service I was receiving (such as billing issues or communication issues)

- I was dissatisfied with the number of faults, interruptions and outages of the energy supply I was experiencing and/or how quickly these problems were resolved

- I was satisfied, but found a better value plan elsewhere

- I was satisfied and there was another reason for changing

Q15 [If answered 'no' to Q12 OR Q13] Which of the following statements best describes your reason not to switch or look into switching electricity companies or electricity plan in the last year? (*Respondents can select multiple responses*)

- Too time consuming to research

- Too difficult to organise (disconnection and reconnection)

- The information available is too complex and difficult to understand

- I'm happy with the plan I have now

- I was concerned I would end up with a worse plan

- No particular reason

- Couldn't be bothered/ too lazy

- They're all the same/makes no difference

- There are no other alternatives available as far as I know Behavioural Economics Team of the Australian Government

- Other (please specify)
- Don't know

#### Thinking about your current bill, please answer the following question

Q16 To what extent are the following things clear to you from looking at the bill?

- What makes up the total cost of my bill
- How discounts affect the total cost of my bill
- How the cost of my current bill compares to previous bills
- How your electricity usage compares to other households
- Why each component has been included on the bill

[Scale: very unclear / moderately unclear / slightly unclear / neutral / slightly clear / moderately clear / very clear]

#### Part 2

On the next screen, you will be given the opportunity to look at an electricity bill. Please look at it as if it was a bill you had to pay. There will be questions about it afterwards.

Q17 Please click on the parts of the bill that are most important to you.

#### Part 3

### Please answer the following questions about the bill you have just seen. If you want to look at the bill again, you can do so by selecting the "View bill" button.

Q18 To what extent do agree/disagree with the following statements?

- The most important information is easy to find.
- The most important information is easy to understand.
- The other information on the bill is easy to understand.
- The other information on the bill is helpful.

[Scale: Strongly disagree / moderately disagree / slightly disagree / neutral / slightly agree / moderately agree / strongly agree]

Q19 To what extent are the following things clear to you from looking at the bill?

- What makes up the total cost of the bill
- How the discounts affect the total cost of the bill
- How the cost of the current bill compares to previous bills
- How your electricity usage compares to other households

- Why each component has been included on the bill

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[Scale: very unclear / moderately unclear / slightly unclear / neutral / slightly clear / moderately clear / very clear]

Q20 Imagine if your electricity bill changed to be like this one. It would look similar and have all the same components. But the usage, costs and details would be specific to your household and your electricity plan.

Would this new bill make you feel more or less able to use your bill to:

- Help work out whether your household could be on a cheaper electricity plan?
- Look in to your options for switching to a cheaper electricity plan?
- Look into your options to reduce your energy use?

[Scale: Much less able / moderately less able / slightly less able / about the same / slightly more able / moderately more able / much more able]

Q21a Using this bill, how concerned would you be that by switching plans your household might end up worse off?

- [Scale: Extremely concerned / moderately concerned / somewhat concerned/ slightly concerned / not at all concerned]

- Plus check box option: "Don't know"

Q21b How much time do you think it would take to look into your options and make a switch you were confident would make you better off?

- [Scale: 0 - 1 hours, 1 - 2 hours, 2 - 3 hours, 3 - 4 hours, 4 - 5 hours, 5 - 6 hours, 7 - 8 hours, 8 + hours]

Q21c How much money would that alternative electricity offer have to save you over a year to make it worth you taking this time?

- Scale: 0 to 1000+ with options in \$50 increments]
- Plus check box option: "Don't know"

Q22 In the next year, do you intend to look into options for switching plans to find a cheaper offer?

- No

- Yes

Q23 [If yes to Q22] How likely is it that you will do each of the following things?

- Visit my electricity company website
- Call my electricity company Behavioural Economics Team of the Australian Government

- Look at a third party comparison website (e.g. CHOICE, iSelect)
- Speak to a friend, family member or work colleague about what plan they are on
- Look at the government's comparison website "Energy made easy"

[Scale: Definitely won't / highly unlikely / somewhat unlikely / 50-50 / somewhat likely/ highly likely / definitely will]

Q24 [If no to Q22] What if anything would prompt you to look into options for switching plans to find a cheaper offer?

- [open ended response]
- Plus check box option: "Nothing would prompt me"

Q25 Like your current bill, this new bill provides a comparison of your energy use to other households in your local area. To what extent do you agree/disagree with the following statements:

- I understand how this comparison is calculated.
- I trust the chart provides accurate information about how my household compares.
- This chart helps my household make a choice about how much energy to use.
- I would know where to find information about ways to reduce energy use.

[Scale: Strongly disagree / moderately disagree / slightly disagree / neutral / slightly agree / moderately agree / strongly agree]

#### Thank you. You have now completed the survey

If you would like to compare your options for electricity companies or electricity plans, you may find the following website helpful:

https://www.energymadeeasy.gov.au/

#### **Appendix F: Technical details**

#### Pre-registration, pre-analysis plan and ethics

This trial was not publically pre-registered. As a substitute, we supplied pre-registration and pre-analysis plan documentation to BETA's Academic Advisory Panel prior to completion of the trial and receipt of any data. The pre-analysis plan is published as supplementary materials to this report. All of our analysis was consistent with our pre-analysis plan.

The project was approved through BETA's ethics approval process, with risk assessed in accordance with the guidelines outlined in the National Statement on Ethical Conduct in Human Research.

#### **Population and sampling**

Our population of interest was Australian electricity consumers residing in deregulated National Energy Market states (New South Wales, Victoria, South Australia and South East Queensland). We sought participants who were aged 18+ and identified as being at least jointly responsible for making decisions about household electricity. Participants were asked to have their latest bill in front of them while conducting the survey however we could not enforce this.

Our sample was drawn from the 300,000-person Online Research Unit (ORU) survey panel. ORU recruits a nationally representative sample of the Australian population through online and offline (telephone and post) methods. Our survey included age, gender, and postcode location quotas to help ensure we had a representative sample in each state. Survey participants received a financial incentive of approximately \$1.50.

To address the possibility of missing data, participants were replaced if they did not complete the survey. In total, we drew a sample of 4,224 participants.

#### **Randomisation and balance checks**

The ORU survey panel randomly allocated participants with a fixed probability of assignment to each of the six experimental groups. Specifically, allocation took place by: 1) selecting the least-filled experimental group, and 2) using a random sequence instrument to allocate among groups of equal least-filled sample sizes. Following this procedure, the sample size of each experimental group comprised 702-705 participants (see Table F1).

We performed a balance check to determine whether the randomisation worked as intended. We did this by conducting a multinomial logistic regression analysis using four variables – gender, age, state and status regarding switching in the last 12 months – as predictors of experimental group allocation. If the groups were randomly allocated, these variables should fail to predict how participants were allocated to experimental groups and, as expected, we found the model was not a better fit than an intercept-only model (p=0.97). Thus, we inferred that the randomisation worked as intended.

#### **Baseline characteristics**

Table F1 summarises the baseline characteristics of the sample.

		Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6
		N=705	N=704	N=702	N=705	N=705	N=703
Gender	Female	344 (48.8%)	354 (50.3%)	355 (50.6%)	344 (48.8%)	356 (50.5%)	381 (54.2%)
	Male	361 (51.2%)	350 (49.7%)	347 (49.4%)	361 (51.2%)	349 (49.5%)	322 (45.8%)
Age	18-30	149 (21.1%)	183 (26.0%)	163 (23.2%)	181 (25.7%)	163 (23.1%)	172 (24.5%)
	31-40	160 (22.7%)	142 (20.2%)	146 (20.8%)	146 (20.7%)	162 (23.0%)	147 (20.9%)
	41-50	93 (13.2%)	78 (11.1%)	94 (13.4%)	88 (12.5%)	91 (12.9%)	84 (11.9%)
	51-60	107 (15.2%)	106 (15.1%)	105 (15.0%)	114 (16.2%)	106 (15.0%)	119 (16.9%)
	61-70	117 (16.6%)	113 (16.1%)	111 (15.8%)	107 (15.2%)	106 (15.0%)	118 (16.8%)
	71+	79 (11.2%)	82 (11.6%)	83 (11.8%)	69 (9.8%)	77 (10.9%)	63 (9.0%)
Provider	AGL	195 (27.7%)	197 (28.0%)	177 (25.2%)	188 (26.7%)	207 (29.4%)	185 (26.3%)
	Energy- Australia	147 (20.9%)	133 (18.9%)	141 (20.1%)	123 (17.4%)	144 (20.4%)	133 (18.9%)
	Origin	156 (22.1%)	165 (23.4%)	173 (24.6%)	186 (26.4%)	151 (21.4%)	177 (25.2%)
	Alinta	32 (4.5%)	19 (2.7%)	32 (4.6%)	31 (4.4%)	22 (3.1%)	37 (5.3%)
	Lumo	17 (2.4%)	19 (2.7%)	27 (3.8%)	20 (2.8%)	19 (2.7%)	20 (2.8%)
	Red	42 (6.0%)	58 (8.2%)	46 (6.6%)	53 (7.5%)	49 (7.0%)	46 (6.5%)
	Momentum	15 (2.1%)	11 (1.6%)	12 (1.7%)	6 (0.9%)	7 (1.0%)	17 (2.4%)
	Simply	25 (3.5%)	35 (5.0%)	32 (4.6%)	28 (4.0%)	27 (3.8%)	29 (4.1%)
	Other	76 (10.8%)	67 (9.5%)	62 (8.8%)	70 (9.9%)	79 (11.2%)	59 (8.4%)

#### Table F1: Baseline characteristics of participants

		Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6
		N=705	N=704	N=702	N=705	N=705	N=703
State	NSW	286 (40.6%)	292 (41.5%)	293 (41.7%)	286 (40.6%)	277 (39.3%)	271 (38.5%)
	VIC	231 (32.8%)	214 (30.4%)	234 (33.3%)	225 (31.9%)	236 (33.5%)	221 (31.4%)
	SE QLD	123 (17.4%)	133 (18.9%)	117 (16.7%)	128 (18.2%)	132 (18.7%)	134 (19.1%)
	SA	65 (9.2%)	65 (9.2%)	58 (8.3%)	66 (9.4%)	60 (8.5%)	77 (11.0%)
Bill period	1 month	122 (17.3%)	121 (17.2%)	136 (19.4%)	122 (17.3%)	117 (16.6%)	103 (14.7%)
	2 months	33 (4.7%)	25 (3.6%)	24 (3.4%)	23 (3.3%)	35 (5.0%)	30 (4.3%)
	3 months	524 (74.3%)	528 (75.0%)	520 (74.1%)	531 (75.3%)	522 (74.0%)	531 (75.5%)
	4+ months	26 (3.7%)	30 (4.3%)	22 (3.1%)	29 (4.1%)	31 (4.4%)	39 (5.5%)
Adults	1	164 (23.3%)	136 (19.3%)	158 (22.5%)	162 (23.0%)	143 (20.3%)	140 (19.9%)
	2	407 (57.7%)	428 (60.8%)	398 (56.7%)	415 (58.9%)	429 (60.9%)	413 (58.7%)
	3	83 (11.8%)	77 (10.9%)	89 (12.7%)	89 (12.6%)	84 (11.9%)	85 (12.1%)
	4+	51 (7.2%)	63 (8.9%)	57 (8.1%)	39 (5.5%)	49 (7.0%)	65 (9.2%)
Children	0	531 (75.3%)	546 (77.6%)	535 (76.2%)	526 (74.6%)	533 (75.6%)	525 (74.7%)
	1	90 (12.8%)	81 (11.5%)	80 (11.4%)	100 (14.2%)	90 (12.8%)	97 (13.8%)
	2	63 (8.9%)	60 (8.5%)	71 (10.1%)	59 (8.4%)	67 (9.5%)	62 (8.8%)
	3	18 (2.6%)	12 (1.7%)	13 (1.9%)	18 (2.6%)	10 (1.4%)	18 (2.6%)
	4+	3 (0.4%)	5 (0.7%)	3 (0.4%)	2 (0.3%)	5 (0.7%)	1 (0.1%)

#### Table F1 continued: Baseline characteristics of participants

		Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6
		N=705	N=704	N=702	N=705	N=705	N=703
Know what plan	No	329 (46.7%)	325 (46.2%)	327 (46.6%)	320 (45.4%)	303 (43.0%)	286 (40.7%)
they are on	Yes	376 (53.3%)	379 (53.8%)	375 (53.4%)	385 (54.6%)	402 (57.0%)	417 (59.3%)
Looked to switch in	No	329 (46.7%)	345 (49.0%)	372 (53.0%)	342 (48.5%)	330 (46.8%)	328 (46.7%)
last 12 months	Yes	376 (53.3%)	359 (51.0%)	330 (47.0%)	363 (51.5%)	375 (53.2%)	375 (53.3%)
Switched last 12	No	566 (80.3%)	591 (83.9%)	572 (81.5%)	574 (81.4%)	577 (81.8%)	566 (80.5%)
months	Yes	139 (19.7%)	113 (16.1%)	130 (18.5%)	131 (18.6%)	128 (18.2%)	137 (19.5%)
Vulnerable (Unable to	No	643 (91.2%)	635 (90.2%)	644 (91.7%)	652 (92.5%)	630 (89.4%)	630 (89.6%)
afford bill)	Yes	62 (8.8%)	69 (9.8%)	58 (8.3%)	53 (7.5%)	75 (10.6%)	73 (10.4%)
Mean bill cost/mth		\$120	\$117	\$126	\$119	\$118	\$120
Mean kWh/mth		305 kWh	319 kWh	335 kWh	326 kWh	347 kWh	316 kWh

#### Table F1 continued: Baseline characteristics of participants

Note: We have low confidence in the accuracy of the kWh usage per month statistic. It is unclear how many respondents were able to provide reliable information.

#### Sample size and power calculations

With a planned sample of 4,200, this trial had power to detect a minimum effect size of 0.15 (Cohen's h) between any two groups, assuming 80 per cent power and 95 per cent confidence. See pre-analysis plan for further details.

#### **Outcome measures**

Our primary outcome measures were:

- Confidence in ability to use the bill to look into switching (construction of this variable is described below); and
- (ii) Intentions to look in switching in the next 12 months (Binary: Yes/No).

#### **Construction of primary outcome: Confidence**

As specified in our pre-analysis plan, the primary outcome 'confidence' was constructed by taking the mean response for each participant on two items in the survey. These were:

Would this new bill make you feel more or less able to use your bill to:

- Help work out whether your household could be on a cheaper electricity plan?

- Look into your options for switching to a cheaper electricity plan?

[Scale: 1 = Much less able / 2 = moderately less able / 3 = slightly less able / 4 = about the same / 5 = slightly more able / 6 = moderately more able / 7 = much more able]

#### Construction of secondary outcome: Clarity and Comprehension

We also constructed a secondary outcome we call 'clarity and comprehension' out of five items in the survey asked twice; first in relation to their existing bill and second in relation to the bill they viewed in the survey. These items were:

To what extent are the following things clear to you from looking at the bill?

- What makes up the total cost of the bill.
- How the discounts affect the total cost of the bill.
- How the cost of the current bill compares to previous bills.
- How your electricity usage compares to other households.

- Why each component has been included on the bill.

[Scale: 1 = very unclear / 2 = moderately unclear / 3 = slightly unclear / 4 = neutral / 5 = slightly clear / 6 = moderately clear / 7 = very clear]

For each participant we calculated the mean score across the five items for both their existing bill and the survey bill. We then turned this into a 'difference score' by subtracting the existing bill score from the survey bill score. Our inferential analyses were conducted on this difference score.

#### **Hypotheses**

In our pre-analysis plan, we specified three hypotheses in relation to our two primary outcomes:

H1: Confidence and stated intentions to switch will be higher among respondents who view a bill with a call-to-action intervention than respondents who view the same style bill without a call to action.

H2: Confidence and stated intentions to switch will be higher among respondents who view the generic call-to-action on the alternative design bill than the typical design bill.

H3: Confidence and stated intentions to switch will increase with the addition of each intervention.

In hindsight, we recognise the first and second hypotheses specify detail which is implied by the third. Moreover, the analyses associated with the first and second hypotheses are redundant with the analyses specified for the third hypotheses. Thus, we only report the analyses for the third hypothesis.

Behavioural Economics Team of the Australian Government

#### Method of analysis

All survey data processing and analysis was performed using STATA script and involved manual checks at each stage to ensure no errors were introduced. We did not analyse any data until after the survey reached the 4,224-person target.

As stated in our pre-analysis plan, all analyses used ordinary least squares regression with robust standard errors. None of our analyses involved covariate adjustment.

For each of the two primary outcomes (confidence and stated intention to look into switching), we conducted two sets of analyses. First, we conducted pairwise comparisons between the control group bill and each of the other bills. In each of the pairwise comparisons, the only predictor included in the model was the experimental manipulation. Second, we created a model using data from all six groups which isolated the effect of each of the components on the bill (simplified design, generic savings, personalised savings and unique code). We did this by creating a dummy variable representing the presence of each component on each of the bills and entering them simultaneously as predictors of the outcome.

As per our pre-analysis plan, we did not make any adjustments to our statistical significance thresholds due to multiple comparisons. See Appendix G for further discussion.

#### **Appendix G: Statistical Tables**

The following statistical tables provide the inferential statistics underpinning the findings presented in the main report, as well as descriptive statistics for responses to other questions in the survey not reported in the main body of the report.

#### Primary outcome: Confidence

Analyses of the primary outcome 'confidence' are presented in Table G1 and Table G2. Table G1 shows the results of pairwise comparisons between the control and each of the other bills.

Table G2 presents the effect contributed by each of the intervention components (simplified design, generic savings, personalised savings, or unique code) across the bills. The intercept coincides with the average confidence rating in the control group (4.6). Thereafter, the coefficient for each intervention represents an estimate for the effect it contributes to increasing confidence. The pattern of findings is consistent with that of the pairwise comparison of groups: confidence increase with the addition of each component, with the exception of the addition of the unique code. Personalised savings contributed the largest effect on confidence, of around 0.3 points or 6.5 per cent (p<0.001).

	Ν	Mean (SD)	Difference from control (95% Confidence interval)	P value
Bill 1 (Control)	705	4.6 (1.2)		
Bill 2	704	4.7 (1.2)	0.1 (0.00 to 0.24)	0.06
Bill 3	702	4.7 (1.2)	0.1 (0.01 to 0.25)	0.04
Bill 4	705	4.9 (1.2)	0.3 (0.17 to 0.42)	<0.001
Bill 5	705	5.2 (1.2)	0.6 (0.47 to 0.71)	<0.001
Bill 6	703	5.2 (1.3)	0.6 (0.44 to 0.69)	<0.001

### Table G1: Pairwise comparisons between control and each bill for participant confidence in ability to use the bill to look into switching

	Coefficient	SE	P value	95% Confidence Interval
Simplified design (Bills 3-6)	0.15	0.05	0.001	0.07 to 0.24
Generic savings (Bills 2 and 4)	0.14	0.05	0.001	0.05 to 0.23
Personalised savings (Bills 5 and 6)	0.30	0.06	<0.001	0.19 to 0.42
Unique code (Bill 6)	-0.02	0.06	0.760	-0.15 to 0.11
Intercept (Control)	4.6	0.04	<.001	4.5 to 4.7

## Table G2: Effect of each intervention component on confidence in ability to use the bill to look into switching

We note the pairwise comparisons between Bill 1 (Control) and each of Bill 2 and 3 produced p-values which were marginally significant at conventions levels (p=0.05). If we had adjusted our statistical significance threshold to account for conducting multiple tests, these values would not be regarded as statistically significant. However, we did not adjust our significance threshold because we felt that we could account for the multiple comparisons in a different way, by looking for clear and consistent patterns across the various tests that we conducted. This is the approach that we specified in our pre-analysis plan.

Our judgement is the results for consumer confidence follow a pattern that is consistent with our prior expectations. Moreover the results of the model presented in Table G2, which had more power than the pairwise comparisons, are consistent with there being statistically significant effects. That is, both the simplified design and the generic savings information were found to be highly statistically significant when taking into account data from across all the bills. Given the addition of these components were the only differences between Bill 1 and each of Bills 2 and 3, we infer the differences we observed reflect real underlying effects, as opposed to chance findings. However, we note the effect sizes are insubstantial.

#### **Primary outcome: Stated Intention**

The analysis of the primary outcome 'intention to look into switching' follows the same approach as the analysis of 'confidence'. Table G3 presents the difference between the control group and each of the groups that viewed one of the other bills for the proportion of participants who indicated they would look into switching. Table G4 presents estimates of the effects of each intervention component.

	Ν	Proportion yes % (No.)	Difference from control (95% Confidence interval)	P value
Bill 1 (Control)	705	58.9% (415)		
Bill 2	704	56.7% (399)	-2.2 (-7.4 to 3.0)	0.41
Bill 3	702	57.6% (404)	-1.3 (-6.5 to 3.8)	0.62
Bill 4	705	58.3% (411)	-0.6 (-5.7 to 4.6)	0.83
Bill 5	705	59.7% (421)	0.9 (-4.3 to 6.0)	0.75
Bill 6	703	60.3% (424)	1.4 (-3.7 to 6.6)	0.58

## Table G3: Pairwise comparisons between control and each bill for intention to look into switching in the next 12 months

## Table G4: Effect of each intervention component on intention to look intoswitching in the next 12 months

	Coefficient	SE	р	95% CI
Format	0.2	1.9	0.93	-3.5 to 3.8
Generic savings	-0.7	1.9	0.70	-4.4 to 2.9
Personalised savings	2.2	2.5	0.38	-2.7 to 7.0
Unique code	0.6	2.6	0.82	-4.5 to 5.7
Intercept	58.1	1.6	<.001	55.0 to 61.3

#### Secondary outcomes

Table G5 presents results of tests comparing clarity and comprehension ratings between bills with and without the simplified design. The first two rows are based on a pairwise comparison of Bill 1 (the control) with Bill 3 (the simplified bill). The last two rows are based on pooled results comparing all groups with and without the simplified design. These pooled results correspond with the results presented in the main body of the report.

#### Table G5: Clarity and comprehension

	Ν	Mean (SD)	Difference from control (95% Confidence interval)	P value
Control (Bill 1)	705	0.36 (0.93)		
Simplified design (Bill 3)	702	0.50 (1.1)	0.14 (0.03 to 0.24)	0.01
Without simplified design (Bills 1-2)	1,409	0.37 (0.93)		
With simplified design (Bills 3-6)	2,815	0.48 (1.1)	0.11 (0.03 to 0.18)	0.005

Table G6 shows the results of pairwise comparisons between the control and each of the other bills for the proportion of people who selected the Energy Made Easy/ 'ways to save' information on the bill as important.

	N	Proportion selected % (No.)	Difference from control (95% Confidence interval)	P value
Bill 1 (Control)	705	0.3% (2)		
Bill 2	704	7.0% (49)	6.7 (4.8 to 8.6)	<0.001
Bill 3	702	0.6% (4)	0.3 (-0.4 to 1.0)	0.41
Bill 4	705	20.4% (144)	20.1 (17.1 to 23.1)	<0.001
Bill 5	705	45.8% (323)	45.5 (41.8 to 49.2)	<0.001
Bill 6	703	44.0% (309)	43.7 (40.0 to 47.4)	<0.001

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#### Other outcomes

The following tables provide descriptive statistics for responses to questions that have not been presented above.

#### Table G7: Reasons for switching

Question 14: Which of the following best explains the reason for companies or electricity plans?	switching electricity
	Participants who looked and switched in the last 12 months N=778
I was dissatisfied with the value for money I was receiving. It was too expensive	345 (44.3%)
I was dissatisfied with the customer service I was receiving (such as billing issues or communication issues)	73 (9.4%)
I was dissatisfied with the number of faults, interruptions and outages of the energy supply I was experiencing and/or how quickly these problems were resolved	17 (2.2%)
I was satisfied, but found a better value plan elsewhere	340 (43.7%)
I was satisfied and there was another reason for changing	95 (12.2%)

Results are presented as the count of people who selected the reason followed by the proportion in parentheses. Respondents were able to select multiple responses.

#### Table G8: Reasons not to switch

Question 15: Which of the following statements best describes your reason not to switch or look into switching electricity companies or electricity plan in the last year?							
	Participants who looked but didn't switch	Participants who neither look nor switched					
	N=2,046	N=1,400					
Too time consuming	376 (18.4%)	167 (11.9%)					
Too difficult to organise (disconnection and reconnection)	249 (12.2%)	145 (10.4%)					
The information available is too complex	293 (14.3%)	270 (19.3%)					
I'm happy with the plan I have now	810 (39.6%)	512 (36.6%)					
I was concerned I'd end up on a worse plan	246 (12.0%)	299 (21.4%)					
No particular reason	168 (8.2%)	44 (3.1%)					
Couldn't be bothered / too lazy	294 (14.4%)	77 (5.5%)					
They're all the same / makes no difference	371 (18.1%)	259 (18.5%)					
There is no other alternative as far as I know	78 (3.8%)	68 (4.9%)					
Other	114 (5.6%)	225 (16.1%)					
Don't know	90 (4.4%)	16 (1.1%)					

Results are presented as the count of people who selected the reason followed by the proportion in parentheses. Respondents were able to select multiple responses.

#### Table G9: Clarity and comprehension of existing bill

Question 16: Thinking about your current bill, please answer the for extent are the following things clear to you from looking at the bill	ollowing question. To what ?
	Mean (Standard deviation)
What makes up the total cost of my bill	5.1 (1.6)
How discounts affect the total cost of my bill	5.2 (1.6)
How the cost of my current bill compares to previous bills	5.5 (1.5)
How your electricity usage compares to other households	4.9 (1.8)
Why each component has been included on the bill	4.8 (1.6)

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = very unclear, 2 = moderately unclear, 3 = slightly unclear, 4 = neutral, 5 = slightly clear, 6 = moderately clear and 7 = very clear. Question 16 was asked in relation to the most bill participants has received.

#### Table G10: Median amount of time spent viewing bill in survey

Time viewing the bill in the survey									
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6			
Median	31 seconds	31 seconds	32 seconds	32 seconds	31 seconds	35 seconds			

#### Table G11: Importance of each component of the bill

Question 17: Please click on the parts of the bill that are most important to you.									
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6			
Energy Made Easy/ 'ways to save' information	2	49	4	144	323	309			
	(0.3%)	(7.0%)	(0.6%)	(20.4%)	(45.8%)	(44.0%)			
Peer comparison chart	263	257	266	275	248	246			
	(37.3%)	(36.5%)	(37.9%)	(39.0%)	(35.2%)	(35.0%)			
Energy.gov.au	3	7	7	6	3	2			
	(0.4%)	(1.0%)	(1.0%)	(0.9%)	(0.4%)	(0.3%)			
Usage/bill history	287	289	360	372	326	316			
	(40.7%)	(41.1%)	(51.3%)	(52.8%)	(46.2%)	(45.0%)			
Ways to pay	100	125	104	129	119	101			
	(14.2%)	(17.8%)	(14.8%)	(18.3%)	(16.9%)	(14.4%)			
Further information	5	4	11	11	5	10			
	(0.7%)	(0.6%)	(1.6%)	(1.6%)	(0.7%)	(1.4%)			
Customer details	84	83	34	21	27	19			
	(11.9%)	(11.8%)	(4.8%)	(3.0%)	(3.8%)	(2.7%)			
Amount due and when	553	558	543	528	506	514			
	(78.4%)	(79.3%)	(77.4%)	(74.9%)	(71.8%)	(73.1%)			
Usage/ over time period	128	123	234	235	221	213			
	(18.2%)	(17.5%)	(33.3%)	(33.3%)	(31.3%)	(30.3%)			
Your last bill	188	178	20	17	23	10			
	(26.7%)	(25.3%)	(2.8%)	(2.4%)	(3.3%)	(1.4%)			
Plan	61	62	139	137	156	139			
	(8.7%)	(8.8%)	(19.8%)	(19.4%)	(22.1%)	(19.8%)			
Discount	288	278	104	131	101	105			
	(40.9%)	(39.5%)	(14.8%)	(18.6%)	(14.3%)	(14.9%)			
Supply period	44	34	64	81	66	50			
	(6.2%)	(4.8%)	(9.1%)	(11.5%)	(9.4%)	(7.1%)			
NMI	28	22	23	15	19	6			
	(4.0%)	(3.1%)	(3.3%)	(2.1%)	(2.7%)	(0.9%)			

Results are presented as the count of people who indicated the component was important followed by the proportion in parentheses. Components with NA were not included in the simplified bill designs.

Question 17: Please click on the parts of the bill that are most important to you.								
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6		
Next meter read	18	9	20	22	24	21		
	(2.6%)	(1.3%)	(2.8%)	(3.1%)	(3.4%)	(3.0%)		
Back page cost breakdown	397	402	388	357	331	328		
	(56.3%)	(57.1%)	(55.3%)	(50.6%)	(47.0%)	(46.7%)		
Enquiries	13	18	26	24	30	22		
	(1.8%)	(2.6%)	(3.7%)	(3.4%)	(4.3%)	(3.1%)		
Logo	0	2	6	8	10	5		
	(0.0%)	(0.3%)	(0.9%)	(1.1%)	(1.4%)	(0.7%)		
Selected no components	42	44	49	57	57	48		
	(6.0%)	(6.3%)	(7.0%)	(8.1%)	(8.1%)	(6.8%)		
Average cost per day	126 (17.9%)	117 (16.6%)	NA	NA	NA	NA		
Greenhouse gas	67 (9.5%)	61 (8.7%)	NA	NA	NA	NA		
App advertisement	7 (1.0%)	2 (0.3%)	NA	NA	NA	NA		

#### Table G11 continued: Importance of each component of the bill

Results are presented as the count of people who indicated the component was important followed by the proportion in parentheses. Components with NA were not included in the simplified bill designs.

#### Table G12: Ease and helpfulness

Question 18: To what extent do agree/disagree with the following statements?								
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6		
The most important information is easy to find.	5.7	5.7	5.8	5.8	5.7	5.7		
	(1.3)	(1.3)	(1.2)	(1.3)	(1.2)	(1.2)		
The most important information is easy to understand.	5.6	5.6	5.8	5.7	5.7	5.7		
	(1.3)	(1.3)	(1.2)	(1.3)	(1.3)	(1.2)		
The other information on the bill is easy to understand.	5.3	5.4	5.5	5.5	5.5	5.5		
	(1.4)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)		
The other information on the bill is helpful.	5.3	5.4	5.4	5.4	5.4	5.5		
	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)		

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = moderately agree and 7 = strongly agree. Question 18 was asked in relation to the bill viewed in the survey.

Question 19: To what extent are the following things clear to you from looking at the bill?								
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6		
What makes up the total cost of the bill	5.6	5.6	5.7	5.6	5.6	5.6		
	(1.4)	(1.4)	(1.4)	(1.3)	(1.3)	(1.3)		
How the discounts affect the total cost of the bill	5.4	5.7	5.5	5.4	5.5	5.5		
	(1.5)	(1.3)	(1.4)	(1.5)	(1.4)	(1.4)		
How the cost of the current bill compares to previous bills	5.8	5.7	5.9	5.8	5.8	5.9		
	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)		
How your electricity usage compares to other households	5.5	5.6	5.6	5.7	5.6	5.6		
	(1.5)	(1.4)	(1.4)	(1.3)	(1.3)	(1.4)		
Why each component has been included on the bill	5.2	5.3	5.3	5.4	5.4	5.4		
	(1.5)	(1.5)	(1.4)	(1.4)	(1.3)	(1.3)		

#### Table G13: Clarity and comprehension of the bill viewed in the survey

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = very unclear, 2 = moderately unclear, 3 = slightly unclear, 4 = neutral, 5 = slightly clear, 6 = moderately clear and 7 = very clear. Question 19 was asked in relation to the bill viewed in the survey.

#### Table G14: Options to reduce energy use

Question 20: Would this new bill make you feel more or less able to use your bill to:							
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	
Look into your options to reduce your energy use?	4.5 (1.3)	4.6 (1.2)	4.7 (1.2)	4.8 (1.2)	4.9 (1.2)	4.9 (1.3)	

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = much less able, 2 = moderately less able, 3 = slightly less able, 4 = about the same, 5 = slightly more able, 6 = moderately more able and 7 = much more able. Question 20 was asked in relation to the bill viewed in the survey.

#### Table G15: Concern over switching

Question 21a: Using this bill, how concerned would you be that by switching plans your household might end up worse off?							
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	
Mean (Standard deviation)	1.4 (1.2)	1.4 (1.3)	1.4 (1.3)	1.4 (1.3)	1.3 (1.2)	1.4 (1.3)	
Proportion at least 'slightly concerned'	56%	56%	54%	55%	58%	58%	

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 0 = not at all concerned, 1 = slightly concerned, 2 = somewhat concerned, 3 = moderately concerned, 4 = extremely concerned. Additionally, the response 'Don't know' was selected by 18% of respondents. Question 21a was asked in relation to the bill viewed in the survey.

#### Table G16: Expected time commitment required to switch

Question 21b: How much time do you think it would take to look into your options and make a switch you were confident would make you better off?							
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	
Mean (Standard deviation)	2.3 (2.0)	2.4 (2.1)	2.4 (2.1)	2.5 (2.2)	2.1 (1.9)	2.2 (1.9)	

Results are mean response and standard deviation in parentheses. Responses were scored as 0.5 hours for response 0-1 hours, 1.5 hours for response 1-2 hours and so on up to 8.5 hours for response 8+ hours. Additionally, the response 'Don't know' was selected by 18% of respondents. Question 21b was asked in relation to the bill viewed in the survey.

#### Table G17: Desired saving

Question 21c: How much money would that alternative electricity offer have to save you over a year to make it worth you taking this time?							
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	
Mean (Standard deviation)	227 (200)	232 (185)	227 (212)	238 (200)	251 (211)	248 (191)	

Results are mean response and standard deviation in parentheses. Responses were scored on a scale between \$0 and \$1,000+ dollars in \$50 increments. Additionally, the response 'Don't know' was selected by 5% of respondents. Question 21c was asked in relation to the bill viewed in the survey.

#### Table G18: Looking into switching

Question 23: How likely is it that you will do each of the following things?							
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	
Visit my electricity company website	5.0 (1.4)	5.0 (1.4)	5.1 (1.3)	5.0 (1.3)	5.2 (1.4)	5.2 (1.3)	
Call my electricity company	4.5 (1.6)	4.5 (1.6)	4.4 (1.5)	4.5 (1.6)	4.6 (1.6)	4.6 (1.6)	
Look at a third party comparison website (e.g. CHOICE, iSelect)	4.9 (1.4)	4.9 (1.4)	4.9 (1.4)	4.9 (1.4)	4.9 (1.4)	4.9 (1.4)	
Speak to a friend, family member or work colleague about what plan they are on	4.3 (1.5)	4.4 (1.5)	4.2 (1.4)	4.5 (1.4)	4.4 (1.4)	4.4 (1.5)	
Look at the government's comparison website "Energy made easy"	5.2 (1.3)	5.3 (1.3)	5.1 (1.3)	5.3 (1.3)	5.3 (1.3)	5.3 (1.3)	

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = definitely won't, 2 = highly unlikely, 3 = somewhat unlikely, 4 = 50-50, 5 = somewhat likely, 6 = highly likely, 7 = definitely will.

#### Table G19: Peer comparison

Question 25: Like your current bill, this new bill provides a comparison of your energy use to other households in your local area. To what extent do you agree/disagree with the following statements:

	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6
I understand how this comparison is calculated.	4.4 (1.5)	4.4 (1.5)	4.4 (1.6)	4.6 (1.4)	4.6 (1.4)	4.5 (1.4)
I trust the chart provides accurate information about how my household compares.	4.7 (1.5)	4.7 (1.4)	4.7 (1.5)	4.8 (1.4)	4.8 (1.4)	4.7 (1.4)
This chart helps my household make a choice about how much energy to use.	4.5 (1.5)	4.6 (1.5)	4.5 (1.5)	4.6 (1.4)	4.6 (1.4)	4.7 (1.4)
I would know where to find information about ways to reduce energy use.	4.8 (1.4)	4.8 (1.4)	4.7 (1.5)	4.9 (1.4)	4.9 (1.4)	4.8 (1.4)

Results are mean response and standard deviation in parentheses. Responses were given on sevenpoint scale: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = moderately agree and 7 = strongly agree.

#### Table G20: Clicked on Energy Made Easy link

Proportion of participants who clicked on the 'Energy Made Easy' link at the end of the survey								
	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6		
	N=705	N=704	N=702	N=705	N=705	N=703		
Count and proportion who clicked	13	18	10	10	20	14		
	(1.8%)	(2.6%)	(1.4%)	(1.4%)	(2.8%)	(2.0%)		

Results are presented as the count of people who clicked on the link followed by the proportion in parentheses.

## References

ACCC 2017. Retail Electricity Pricing Inquiry Final Report, 11 July 2018. Canberra.

AEMC, 2017. Retail Energy Competition Review, Final Report, 25 July 2017. Sydney.

AEMC, 2018. Retail Energy Competition Review, Final Report, 15 June 2018, Sydney

ANDOR, M.A. AND FELS, K.M., 2018. Behavioral Economics and Energy Conservation–A Systematic Review of Non-price Interventions and Their Causal Effects. *Ecological Economics*, *148*, pp.178-210.

BETA, 2017. Saying more with less: Simplifying energy fact sheets. Canberra.

BEWORKS 2016. Introduction to Behavioural Economics for CDM, Applications and Best Practices for Bill Design. Toronto.

ECA 2017. Energy Consumers Sentiment Survey, Key findings for households, December 2017. Sydney.

ECA 2017. Energy Consumers Sentiment Survey, Key findings for households, June 2017. Sydney.

EUROPEAN COMMISSION, 2016. Second consumer market study on the functioning of the retail electricity markets for consumers in the EU Final Report, September 2016, Brussels

FLETCHER, A., 2016. The role of demand-side remedies in driving effective competition. *A review for Which*. Norwhich.

GARDNER, J. & NILSSON, D. 2017. Exploring the drivers and barriers of consumer engagement in the Victorian retail energy market. CSIRO, Australia.

GIGERENZER G, TODD PM & ABC RESEARCH GROUP 1999. Simple heuristics that make us smart. Oxford University Press.

GOURVILLE, J.T., 2003. The effects of monetary magnitude and level of aggregation on the temporal framing of price. *Marketing Letters*, *14*(2), pp.125-135.

GOURVILLE, J. T. & SOMAN, D. 2011. The consumer psychology of mail-in rebates. *Journal of Product & Brand Management*, 20, 147-157.

JACOBY, J., SPELLER, D. E. & KOHN, C. A. 1974. Brand choice behavior as a function of information load. *Journal of Marketing Research*, 11, 63-69.

KARJALAINEN, S. 2011. Consumer preferences for feedback on household electricity consumption. *Energy and buildings*, 43, 458-467.

NEWGATE RESEARCH 2016. AEMC 2016 Retail Competition Review: Understanding Vulnerable Customer Experiences and Needs, Consumer Research Report. Australia.

OFGEM. 2008. Energy Supply Probe - Initial Findings Report, 6 October 2008. London

ROBERTS, S. & BAKER, W. 2003. Towards effective energy information. *Improving Consumer Feedback on Energy Consumption, Centre for Sustainable Energy, Bristol, UK.* 

SIMON, H. A. 1956. Rational choice and the structure of the environment. *Psychological review*, 63, 129.

SSE, 2016 *New SSE bill design aims to end energy bill confusion.* [online] Available via the SSE website: <u>http://sse.com/newsandviews/allarticles/2016/02/new-sse-bill-design-aims-to-end-energy-bill-confusion/</u> [Accessed 10 October 2018].

WASSERSTEIN, R.L. and LAZAR, N.A. (2016). 'The ASA's Statement on p-Values: Context, Process, and Purpose, The American Statistician, 70(2), pp129-133.

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