

Bringing our customer segments to life

Knowledge sharing session

Q&A

1. **Will AusNet be introducing residential tariffs that incentivise EV charging in the middle of the day / at might to avoid the morning and evening peaks?**

Funnily enough we have a tariff trial starting on 1 July! It is for EV customers specifically and pays them a small amount (1c per kwh) for charging during a solar sponge period (10am to 3pm daily). If successful, we are looking to roll this into the next Tariff Structure Statement.

2. **Given the pace of change in the sector, do you think you'll run this project again? If so how often?**

Definitely interested in running this project again as we've found it a really useful study. We can track how the segments are changing really easily as we already have this data, so will do this periodically. The primary customer research component is the more expensive and more time-consuming part so we'll take a steer from the model as to when the segments have materially shifted, and re-do the customer research (no timeline on it yet though).

3. **Seems like energy efficiency upgrades – especially for Time Surfers – could be a real network benefit. What can AusNet do to support better EE regs/programs?**

Totally. We think sharing information (such as this study) with government is a good contribution to supporting energy efficiency programs and encourage government departments to reach out to us if they are looking for customer insights – there are a lot we can share! We also see a role for us in ensuring our regular communications campaigns include the right messages.

4. **Any consumption data for EV drivers and their charging habits? Taking advantage of solar or off peak (night-time charging)?**

We do have consumption data for these EV owners from smart meter data. From our survey, we also know the tendency to charge EV at nighttime (vs daytime) across segments, which we have showed in the presentation today. Unfortunately, we don't have usage data for all EVs on our network, as there is no requirement at the moment for customers to let us know if they have an EV. We only know for customers that are part of this study.

Due to this group being such a small cohort (71 EV owners in total, with sample size between 6 and 21 owners across individual segments), we are not drawing any definitive conclusions from this group at the moment.

5. **How good a fit was the segment model? Are most households captured?**

Yes! 96% of households fit neatly into the segments – it's a very strong fit.

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- 6. The average age of houses seems quite young. Is this because first connection data is after privatisation? Or is there another explanation?**

Great pick-up - our database of connection age was established in 2001 so the oldest connections are recorded as 22 years old. We have no visibility of the true age for connections that were established pre-2001.

We should also note that the connection dates we hold are time since last connection. This means they are a combination of first-ever connections (i.e. greenfield connections), knock-down/rebuilds (brownfield connections), and houses that have undergone major renovations (often homes are disconnected during major works).

- 7. Any insights around electricity and gas bills as a % of disposable income? How this has changed over time (particularly with increased bills recently)?**

While the segmentation survey does provide some insights on how much energy our customers are using against their income bracket, these insights do not directly address this question.

Fortunately, we do have insights from our other research projects (particularly our bi-annual Energy Sentiments survey) that could shed light on both parts of this question.

In our latest wave (Autumn 2023), 35% of all households indicated the rising cost of living is "majorly impacting" them, consistent across income brackets. We have also observed a positive correlation between household income and bills – with bills tending to rise with income. Note this is customer-reported data on overall bill so is not adjusted for concession or pay-on-time discounts, e.g.

- 8. What was the sample size for EV ownership segment?**

There was a total of 71 EV owners participating in this Segmentation's quantitative survey, ranging from 6 to 21 in individual segments. While this is a modest sample size, the insights from this cohort certainly have provided us with a better understanding of EV owners and their behaviours than we had previously given we don't have visibility of EV ownership on our network. These EV insights are also congruent with the other findings/learning from the Segmentation research, and with our other research projects.

- 9. If another network wanted to run a similar study, what lessons would you share, based on your experience?**

Great to hear other networks are interested in running similar studies. Some advice (which can be applied to any energy research project!):

- Be really clear about what you want to find out. You can't cover everything in a single study so think

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- carefully about what customer insights you'd like to have linked to usage pattern
- Leave plenty of time for survey design and test it with customers to make sure they understand what you're asking. We tested some technical concepts (e.g., flexible exports, third-party management of consumer energy resources) and thought is needed on how these are presented in a way that's easy to cognitively process.

10. Is this segmentation work going to be replicated for businesses?

We don't currently have plans to do this but it is a great suggestion. We excluded business customers from the initial study, but will take another look at their usage patterns and decide whether it's worthwhile replicating the study with the business group.

11. Did you capture data around whether customers were home during the day?

Yes, we did collect this information as part of our survey and can overlay this with the segments.

12. Your method seems pretty robust, so to what extent could your findings be applied across other networks in the southern states e.g., Vic, Tas, Southern NSW?

Thanks! We know there are some things that are unique about AusNet's customers (larger homes, older population, our metro/regional mix and others) and about Victoria compared to other states (particularly re: high rates of gas use), though many of the finds would likely be similar for customers of other networks. Analysis of their own usage patterns and comparing them to ours would give a good indication of how similar/dissimilar they might be!

13. Given AusNet's gas and electricity networks don't geographically overlap, what will be impact on total customer numbers if EVERYONE electrifies?

We don't expect electricity customer numbers to rise due to electrification, though we do expect usage per customer to rise with electrification (and probably some upgrades to capacity of their connection).

14. Would it be worth pulling out renters because there is so much they can't change about the structure of their homes?

Yes we can and have looked at renters, who do have less agency when it comes to features of the home. We take this into account when interpreting some insights, such as likelihood to invest in rooftop solar, by excluding those who are unfortunately unable to do so.

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15. What method did you use to identify these 5 patterns?

We used a clustering procedure that gathered and examined patterns from our smart meter data and meta-data from our own customer database, which include information on solar capacity, connection age, location and so on. The outcome is a 5-segment output that explains 96% of all residential connections within the AusNet electricity network.

16. Profiles shown were average. Did you look at maximum demand days and minimum demand profiles too?

We haven't yet but are really keen to do this analysis (along with seasonal variations), so we can see how our 5 segments behave in a range of conditions.

17. Do you have information on housing type (home versus unit)?

Yes, we did collect this information as part of our survey.

18. Re solar customers not electrifying, is this electrification of the entire house? Imagine a lot of people may change one appliance but not fully electrify.

Correct, we know that for most customers, electrification will be a journey that takes some time. The segmentation data also shows us a breakdown of which appliances are run on gas in the household, so we can identify if certain appliances are electric despite a gas main connection. We are also tracking electrification trends through our bi-annual Energy Sentiments program.

19. It will be interesting to see if this segmentation applies to other networks, and opportunities networks collaboration on strategies around energy efficiency.

Totally. Further to Q3 and Q12 we'd be very happy to work collaboratively with the industry on energy efficiency strategies and what does/doesn't shift the dial.

20. With the owner segment do you have an indication of what percentage are second/holiday homes and not occupied often?

There were 2% of second/holiday homes in the survey data.

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- 21. Does AusNet have any influence over building codes to increase energy efficiency as a means of load control?**

This is a government role but we've very keen to help if/as useful with their work on building codes ... e.g. by providing data and insights like these!

- 22. Not a question but a comment: interesting that the highest peak demand is from (a subset of) solar households**

Agree!

- 23. Did you consider taking away the hot water and solar and then comparing the profiles?**

We could do some adjustments for this but don't have full visibility over the impact of different appliances. We only record the total power going in/out of the connection point through our smart meters. The exception is with Nighttime Water Warmers, where we control the hot water through the smart meter (and therefore know what is driving the night-time peak).

- 24. Can we have a breakdown of customers surveyed based on location. There appears to be more Metro customers surveyed than rural customers. Is this correct?**

The metro/regional location data attached the segments is network actuals – i.e. the real split of metro/regional households. While we service a large regional area, the urban sprawl and boundary reclassifications means AusNet-connected households are skewed more metro these days.

- 25. Big assumption about tariff switching barrier being financial. Busy households with low energy literacy might not switch for other reasons.**

Agree that we need to understand better what the real barriers to tariff switching are. We will be addressing this and more through our Electricity Distribution Price Review 2026-31 engagement over the next 12-ish months, in preparation for the Tariff Structure Statement for 2026-2031.

- 26. Any sense that dual fuel customers who have experienced extended outages recently (e.g. due to the big storm events) are becoming less likely to switch off gas?**

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We didn't cover this in the Segmentation study though we have been having a lot of conversations with customers impacted by extended outages. We can't say whether they are less likely to be thinking of leaving the gas network but we do know diversity of energy streams is important to many customers who see this as a barrier to full electrification. We will continue to engage on this trade-off with customers during our Electricity Distribution Price Review 2026-31 engagement.

27. What are your thoughts on tariff re-design?

Further to Q25, in preparation of the Tariff Structure Statement for 2026-2031, we are taking a detailed look at our approach to tariffs over the next 12 or so months, to design tariffs that enable the energy transition in a way that improves outcomes for all customers over time. Our EV tariff trial is an example of a tariff that will hopefully incentivise more charging during the day to reduce impact on the network, reducing network costs for all customers.

28. Can you share a bit more about what topics you covered off in the qual and how you used it to compliment your quant component?

There were 2 parts of our qualitative phase – an electricity usage diary followed by one-on-one interviews.

We used the diary task to capture the timing and usage of major electric appliances in the household throughout the day. We asked participants to record their usage across 4 days, weekdays and weekend included, in the week leading to the one-on-one interview. In this diary task, we also asked participants whether they would consider not using any of these major appliances and/or moving their usage to a different time period. Findings from the diary task provided us with more granular understanding of when our customers use major appliances. It also gave us additional insights into the intention to change or shift usage of major appliances.

One-on-one interviews were conducted with the same group of participants who had completed the diary task. The discussion in these interviews aimed to obtain further understanding of customers' energy usage habits disclosed through the diary task and in the quantitative survey. The interview included discussion points that clarified participants' approach to energy usage, what is driving those patterns, barriers to changing, and attitudes on a range of other things we wanted to get more detail on after seeing the results of the quantitative survey. We also delved further into participants' intention to change or modify their behaviour now and in the near future (when their household composition and life/work situation may change, and whether they are thinking of electrifying). The final purpose of these interviews was to seek qualitative views on some of the more complex topics or propositions, including solar, batteries, flexible exports, peak demand, how the grid works, third-party management of solar and batteries, and time-of-use tariffs.

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Insights from these interviews enriched the findings from the quantitative survey on several fronts, including shedding light on the reasons our customers use electricity when they do, their intention to change, shift or modify behaviours, and their unfiltered views on different energy issues and energy propositions. We were also able to observe many of the interviews which meant we could put faces to segments and get a better understanding of the trends we were observing in the data.

- 29. I hate 'energy literacy' because it suggests ordinary people are illiterate. We are all learning. The 'facts' change as the system changes. We need to be humble.**

Really good point. We'll think more about the language we use here.

- 30. What are your levers you could pull to change or influence behaviours: you mention tariffs and rebates, and education...what else is there?**

Tariffs, rebates (incentives) and education are key levers, however, as customer appliances and network smart become more sophisticated, there is a role for more management and orchestration of customers' devices in the future, in a way that allows customers to 'set and forget' without changing their overall experience. This will be a key opportunity for less engaged customers, like our Time Surfers segment.

- 31. Is communications the answer for time-poor, low-interest customers? What comms will cut through?**

Great question with no easy answer! While we accept getting through can be hard, we think customer education and understanding will be paramount to getting people on board the energy transition. So we are working with the government and other networks to continuously find new ways to reach customers and improve communications and information sharing.

- 32. You mentioned that customers hadn't electrified yet. Was there any insights regarding their plans to electrify/degasify and the timing associated?**

We tested electrification of transport (timeline for purchasing electric vehicles) but didn't test timelines for disconnecting gas through this segmentation study. But we do track electrification trends extensively through our bi-annual Energy Sentiments survey, and we may consider expanding the segmentation study in the future to include plans around segmentation.

- 33. Are you also doing any complementary research with electricians / solar installers?**

Not in this study but we do some research with solar installers. We'd love to hear what value you think installers' insights would add to this study as that is something we could explore.

- 34. Query re claim "EVs are the highest-energy-using item in a home. EVs will use about 3kWh/day (have vehicle travel + EV efficiency). Lower than HWS, pools, HVAC.**

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Great point. This will be true for many but not all customers. We have updated our slide pack to reflect this.

35. Have you looked into the load profile those on a flat tariff/no PV reporting "cheaper for me to use energy at certain times" - do they shift load?

Great question – we could tell from our survey data that people who are on single-rate tariffs with no PV and who believe that it's cheaper for them to use energy at certain times of the days, are cutting down their energy usage during peak's winter and summer times more often than those who did not. While we cannot be sure the retailer doesn't offer a time-of-use tariff if the network tariff is a single rate, it is likely that some of these customers are changing behaviour without being on a time of use tariff.