Energy Efficiency: **Awareness to action**

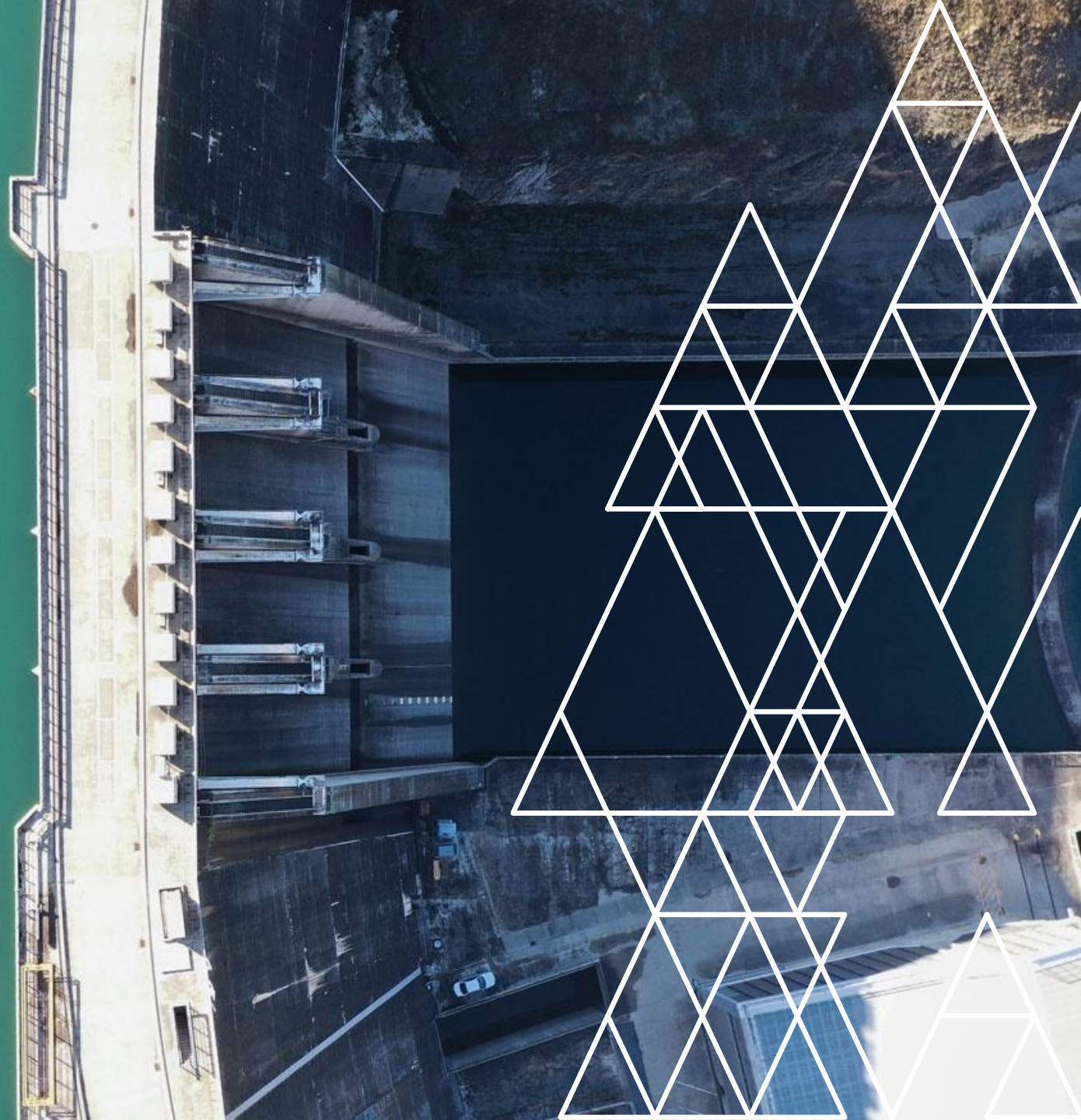
Consumer research report

Research conducted by Verian

September 2025

EECA
TE TARI TIAKI PŪNGAO
ENERGY EFFICIENCY & CONSERVATION AUTHORITY

verian



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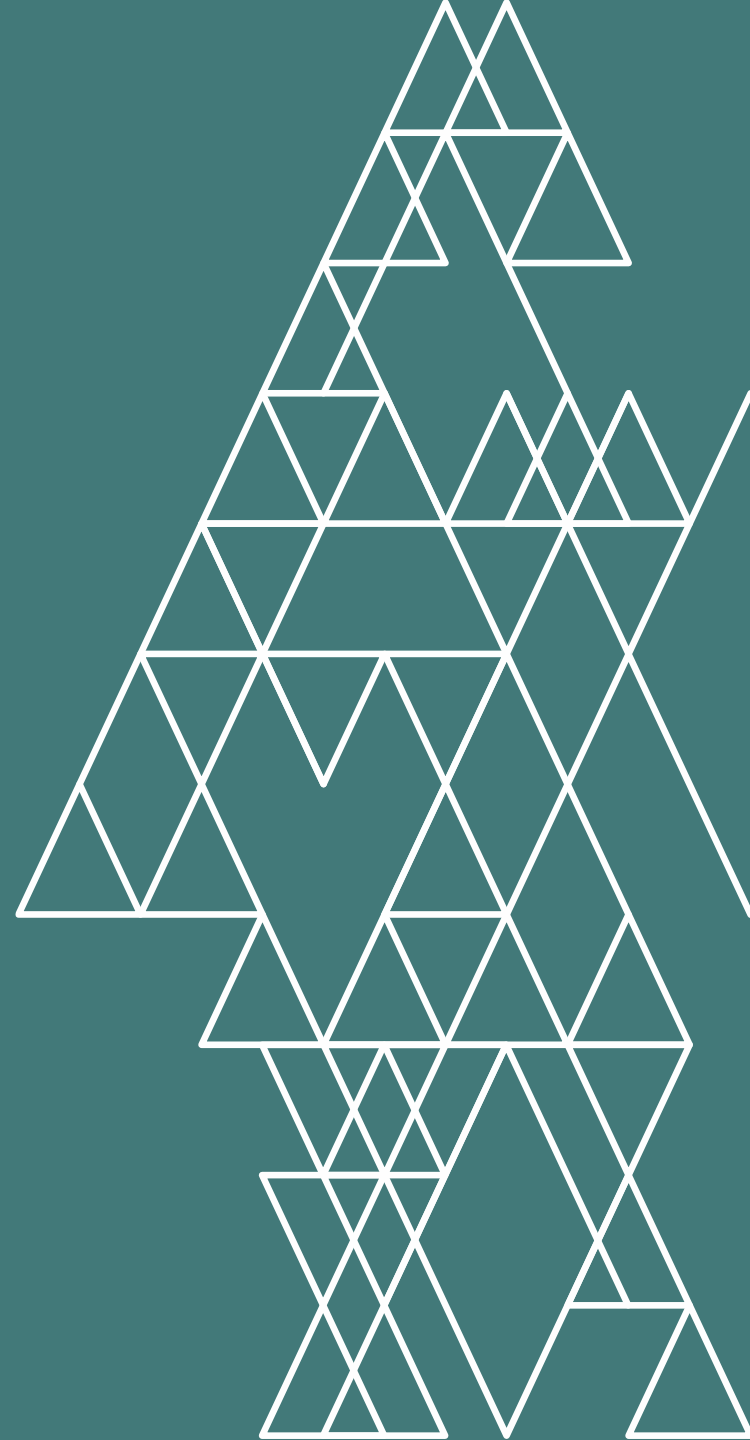


The research challenge…

To identify and characterise…

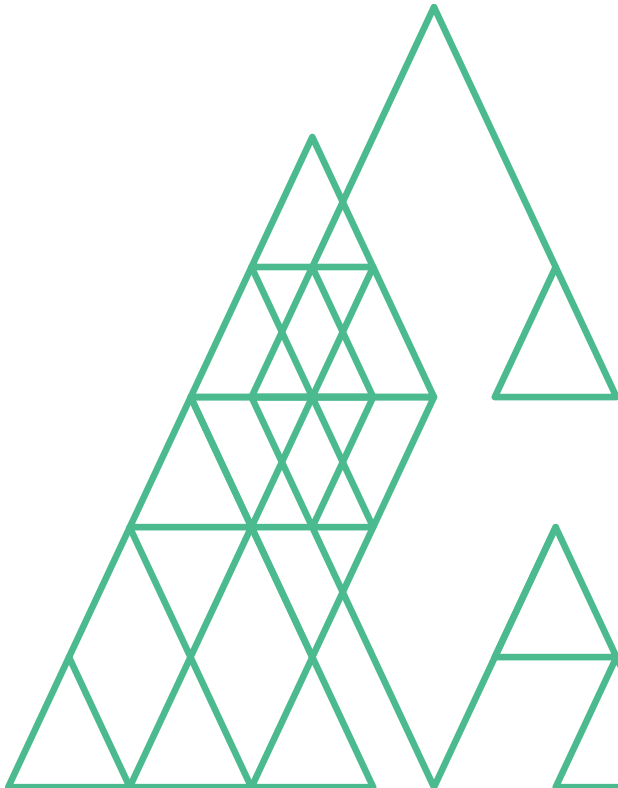
the key practical, attitudinal and contextual barriers that prevent New Zealanders from acting on energy efficiency opportunities they are aware of.

So that we can understand…

when, where and how EECA can most effectively intervene to address these barriers and encourage people to move from awareness to action.

Enabling EECA to…

focus on efforts behind the activities that will drive the greatest positive change on New Zealanders' energy efficient behaviours.



Research methodology in summary

Target audience – New Zealanders.

Fieldwork dates – 21st July 2025 – 18th August 2025.

Method

1. Pre-task capturing real life energy use moments and behaviours at home.
2. 75 min online interviews.

Sample size

n= 24

Sample composition

Household income was used as the core sample stratification:

Low household income (<$70,000)	Mid household income ($70,000-150,000)	High household income (>$150,000)
n=10	n=7	n=7

Within each sub-group we ensured a demographic mix based on:

- Age
- Ethnicity
- Home owners vs renters
- Family/household composition
- Geographic spread (ensuring a mix of North Island vs South Island, as well as rural vs urban)

2. Executive summary

Five things you will discover as you read this report

1
Heating dominates thinking.

Heating dominates New Zealanders' thinking when considering their energy use.

Most assume that the majority of their energy cost is driven by their use of heating appliances.

2
Home energy literacy is low.

Most people have very little understanding about how much it costs to run different appliances or how to use them most efficiently.

3
Cost intangibility is driving inertia.

The savings associated with energy efficiency behaviours are unclear, delayed and difficult to attribute.

This reduces motivation to act when there are other more obvious and immediate ways to save money.

4
Keeping the house warm in winter is a big motivator.

Cold evenings during winter are a time when home energy use is particularly front of mind.

Being cold at home is a persistent, motivating trigger to thinking about doing more to heat the home more effectively.

5
Routine and habit can block new behaviours.

Households run on autopilot; small frictions and routines can block long term behaviour change.

If new behaviours don't provide an obvious pay-off, they are easy to forget.

'One and done' behaviours that don't require routine change can be appealing.

Three actions to consider as a result of these insights

1
Help people to better understand the cost of using appliances.

Making the costs of using appliances more tangible, and providing specific dollar savings associated with different energy saving behaviours will support greater engagement with home energy use.

People feel that this is a key information gap and anything that can help to demystify how much money is being spent on different appliances will be valuable.

Providing or directing people to tools that help to track or estimate the energy use and cost of appliances in real time would create a powerful behavioural feedback loop that would encourage people to persist with behaviours that they can see are reducing their energy use.

2
Create a suite of ‘warmer for winter’ behaviours.

Collating a group of actions together under a single idea of ‘getting warmer for winter’ is likely to be salient, memorable and motivating. Grouping as a suite of activities that work together to make your house warmer is likely to have a multiplier effect, making the actions more memorable.

Anchoring behaviours to staying warm rather than saving money could help to drive behavioural persistence, as being cold every evening during winter acts as trigger to remember to do the actions.

Using imagery that calls to mind the idea of warmth escaping is likely to be a powerful visual cue to drive engagement.

3
Provide a ‘how to’ for setting hot water to 60ºC.

This action stood out amongst the set of behaviours that were tested. Almost all participants were immediately drawn to it when reviewing the list.

Most hadn’t considered it before, but the potential for cost savings felt intuitive, there didn’t appear to be an obvious downside, and the action was expected to be a very simple ‘one and done’ fix that wouldn’t require any ongoing changes.

Motivation to try this was high, the key barrier was not feeling confident in how to make the change.

And…

One overarching principle to keep in mind.

Home energy consumption is more salient in winter.

During the colder winter months, power bills are more painful. Chilly evenings at home spent feeling uneasy about persistent use of heating appliances creates increased motivation to take action.

Being conscious about the timing of interventions, initiatives and campaigns is likely to have an impact on success.

2. What is New Zealand’s relationship with energy use at home?

Heating dominates thinking when people consider their energy use.

We frequently observe the following heuristic:

Power bill
=
How long I had the heat pump on for this month.

Heating appliances are perceived to be the most expensive to run while also presenting the greatest opportunity for choice about how much energy is used.

People have a sense of money being spent whenever the heat pump is switched on.

- With the exception of the dryer, **this sense of 'in the moment cost' is quite unique**. Most other appliances don't have such a strong mental link with the power bill during day-to-day usage.
- For some, using the heat pump can create a low level sense of guilt or anxiety about money being spent.
- **NOTE:** This perception of heat pump cost is not evidence-based knowledge and most don't really know how much it costs to run their heat pump. It is just a common belief that is supported by the fact that the power bill is always higher during months where the heat pump is used more frequently.
- The heating being expensive is a truism that most people grow up with… many people have stories from their childhood of being told to put on a jumper or use a blanket when it was cold.

Using the heating feels like a choice whereas other appliances feel like unavoidable necessities.

- "Laundry needs doing, dishes need to be cleaned, food needs refrigerating and cooking… but I could choose to be a bit colder or wear an extra layer."

When people think about changes, they could make to save money on their energy bill, their first thought is cutting down their heating use…

…although most feel this would also mean making an unacceptable compromise with their warmth, comfort and health.

“One month it [power bill] was really high and then we just stopped using the heat pump or making sure that we wear more clothes before using the heat pump”

Balancing warmth with cost is top of mind for many during winter.

For the majority...

There is a (sometimes reluctant) willingness to accept the cost of having a warm house.

In the overall scheme of the household finances, a couple of hundred extra dollars per month during the winter seems like a tolerable expense to keep the house warm, comfortable and healthy.

There are other ‘luxuries’ in the household that can be cut if necessary (e.g. entertainment, eating out, takeaways).

This attitude is particularly prevalent amongst people with dependents in the house (esp. parents with children) – where a healthy home is a big priority.

> “I would cut personal things like buying coffee before I cut anything back from my family”.

But for a minority...

There can be quite intensive rationing of heating appliances.

This is common amongst people with lower incomes, living alone or in shared accommodation.

> “I’ll just layer up on thermals and blankets.”

The desire to keep the house warm and healthy is particularly strong amongst parents with children at home. For many parents, saving money on power is secondary to ensuring the house is warm.

> “My kids need to be warm and healthy, you know, so that's important. I'll just sacrifice other things. So even if it's $500 a month, but if I have to, I can save $100 on the food bill a month, that's something like 25 bucks a week. ”

Despite the focus on the cost of heating during winter months… there is a lot of guesswork, assumption and uncertainty around the costs associated with heating appliances.

Across New Zealand, there are a lot of conflicting ideas about the most cost efficient way to heat the home.

During the research, we heard all of the following perspectives:

"The gas fire is cheaper to run than the heat pump so we only use that."

"The cost of gas has gone crazy so we never use the gas heater anymore."

"It's better to keep the heat pump on 24 hours a day in winter than to turn it off. This is more efficient than turning it off and on when we leave the house."

"We try to just blast the heat pump for 10 mins at a high heat and then turn it off so we keep it on for minimum amount of time."

"We use panel heaters because they only cost a dollar a day to run which is cheaper than the heat pump."

"I never use the panel heaters because they are so inefficient, they must cost a lot to run and they don't really make much heat"

"Everyone says that heat pumps are efficient so we try to only use the heat pump. We only use the panel heaters when it's really cold"

"Firewood is cheapest so we mainly use the wood burner, we try to avoid the heat pump."

However, when you push on these beliefs, there is a lot of uncertainty…

…and most people don't have a clear idea about how much it is costing to run any of their heating appliances…

…or what the most efficient way to heat their home is.

Most would welcome some clarity on how much it costs to run different heating appliances so that they can make a more informed choice about when and how to use heating appliances to maximise warmth and minimise cost.

> "I'll use the space heater more than the heat pump, it heats up quick whereas the heat pump can take longer and so I feel like it's using more power."

> "I mean, there might be a way that you use your heat pump to minimise cost, but I don't know that is"

“I do get confused with what is the best practise for using power. Like there's so much information. People say oil heaters are cheaper than electric heaters. Or Heat pumps are only 30 cents an hour. It’s all very unclear what actually is consuming the power.”

General home energy literacy is low.

No one in our sample had a clear idea about how much it cost to run any of their appliances.

Most were not able to confidently identify more vs less power-hungry appliances in their home.

Most were not even able to guess what sort of dollar saving could be achieved through taking action to reduce energy use with different appliances.

It can feel frustrating to see a power bill and not know where all the money goes.

> “I know there’s a baseline cost to keep everything running, but other than that I wouldn’t know how much each thing cost to run, my guess is probably heating”.

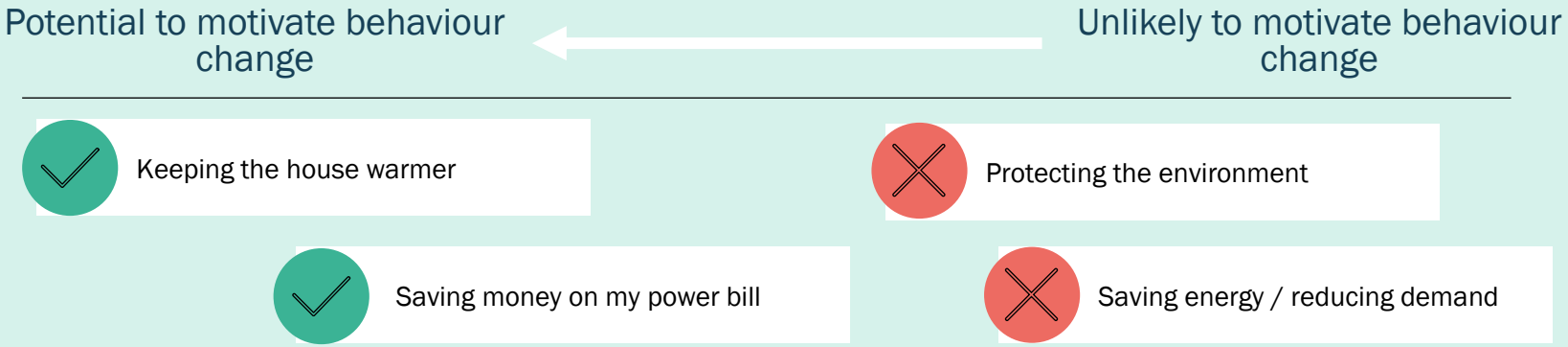
> “We have so many things on standby mode, the TV, computer, speakers, I don’t know if that’s costing us more to keep them switched on verses turning it off at the wall. ”

> “We don’t pay much attention to the power bill, unless it's higher than last month’s and then we have to think back over the last month and try and figure out what it actually was that made the bill higher.”

> I pay a flat rate towards the power bill, so I don’t really know how much things cost to run, but if I had to guess, I’d say the fridge costs the most because it’s constantly on and people are opening and shutting it.”

4. What drives consideration of energy efficiency behaviour?

‘Saving money’ or ‘keeping the house warmer’ are the most compelling reasons to think about taking steps to be more energy efficient.



In the context of our research interviews on home energy, people readily call to mind conservation and environmental reasons for taking energy efficiency actions at home…

…although day-to-day, they are not front of mind, or motivating when doing daily tasks.

Saving money and keeping the house warmer are more front of mind when making energy related choices at home.

Although ‘saving money’ is a compelling goal, there is some doubt about the magnitude of cost saving possible which can limit behavioural intent.

What makes a compelling motivator to take action?

- More tangible and personally relevant benefits.
- Perceived magnitude of impact that can be achieved with individual actions.
- Immediacy of the benefit / proximity of action to pay off.
- Positive frames of reference and experiences – do I have a mental model of this type of action delivering this type of result?

‘Saving money on my energy bill’ is a strong motivator but without tangible savings, this motivation doesn’t translate to action.

Financial intangibility

- Cost savings from energy efficiency / saving behaviours are intangible (cause and effect of behaviours is difficult to establish and the savings assumed to be marginal).
- People don’t have a sense of how much it costs to run their appliances, and are unable to attribute dollar savings to specific behaviours.
- This is in sharp contrast to many of the preferred money saving strategies: cancelling subscriptions (e.g. Netflix), changing food shopping habits, cutting out ‘luxuries’ – which all have an immediate, specific dollar saving.

Minimal overall financial impact

- There is a belief that the real impact of energy saving behaviour is likely to only be a few dollars and may not even be noticeable in the monthly bill.
- The cost of energy is ‘felt’ on a monthly time scale, so the pay-off of a behaviour needs to show up in a meaningful way in the monthly bill to feel worthwhile.
- For many, the monthly saving would need to be $20-50 per month to feel worthwhile, otherwise the new behaviour could be considered ineffective.

Perception that energy saving = compromise

- People associate energy saving behaviour with a compromise in convenience or comfort.
- E.g. colder house, clothes that are less clean, more work to achieve the same result.
- There can be an expectation that saving money on the energy bill will require a disproportionate level of compromise for a relatively modest pay off.

Delayed pain, delayed pay off

- The ‘pain’ of the expense associated with power consumption is delayed.
- When people are using energy, the power bill feels abstract and distant which creates inertia to act.
- When people do take action to try to save money, there is no immediate psychological reward for the action that negates the friction of doing the action. When coupled with the lack of belief in the overall financial impact, this can create inertia when any sort of behavioural friction is encountered.

Poor first experiences

- We heard a number of stories about a time when someone tried to do something differently to save money on their power bill (e.g. used the heat pump for less time, used the eco settings on an appliance, switched to a plan with off-peak pricing), and then when they checked their bill at the end of the month not much seemed to have changed. This creates additional inertia to take different energy savings actions in future.

“With the power bill, it's hard to know whether you're making savings there or if what I’m doing is causing it to increase or decrease. Whereas with DoorDash or Uber you know exactly what you’re saving.”

‘Keeping the house warmer without blowing the power bill’ has broad appeal and touches on a major pain point that most people feel during the colder months.

For most people, the perception is that the ‘variable part’ of their energy spend is associated with their heating…

…however, having a **warm, cosy, comfortable and healthy** home is important, and something that most people feel is worth spending money on…

…so this can create a conflict between the lingering sense of unease associated with having the heating running for many hours vs the desire to maintain a warm, comfortable, healthy home.

Anything that feels like it could credibly address this pain point would capture attention and interest.

Actions designed to keep the house warmer can be strong motivators because:

- The **pain (being cold) is acute and present** in the moment.
- The effect has the potential be **tangible** (felt) and **instant** (the house could become warmer right away).
- There is **minimal perceived compromise** associated with taking action to be warmer.

> “I’d love to find a solution that means going downstairs at night doesn’t feel like I’m sinking to the bottom of the sea or a trench. It would also make it easier to bounce out of bed in the morning without feeling like you're prying yourself out from the sheets.”

Actions to keep the house warmer also tap into loss aversion psychology which can be a powerful motivator.

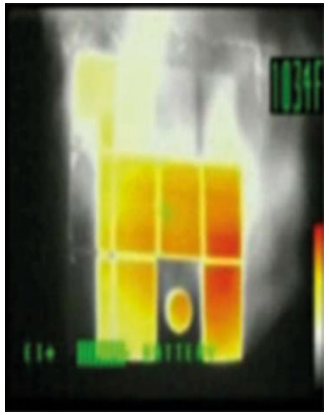
The idea of ‘precious heat escaping’ the house is tangible and compelling.

Through our conversations it was clear that most people are open to doing more to keep the warmth in.

Creating a mental image of heat escaping the house is fairly easy to conjure for most people, and avoiding this is a compelling reason to act.

Visual cues are likely to be more evocative than numbers or data.

E.g. imagery that visualises heat rushing out of drafty windows will evoke stronger associations than data or messaging that references temperature.



A ‘warmer house’ is generally described in terms of how it feels (‘how many layers’) rather than actual temperature values.

Feeling comfortable on winter evenings is the aspiration:

- People aren't measuring the temperature in their living rooms with thermometers, or even really thinking about the actual temperature in the room.
- They tend to 'measure' the warmth of their house in terms of layers worn, requirement for blankets, how long the heat pump stays on for, or how high the heat pump needs to be set to be comfortable.

Engaging people on this topic should centre on the cosy, comfortable, healthy environment they want to create rather than specific temperatures :

- Our conversations demonstrate that people want their home environment to *feel* warmer, cosier and more comfortable.
- Messages that allude to feeling 'chilly' or feeling ‘warm and cosy' will help people call to mind the sorts of environments they want to avoid/create, more than talking in terms of actual temperatures.

Saving a meaningful amount of money on the energy bill feels challenging...

There is doubt about the impact of small changes.

Unless a clear, direct financial benefit can be achieved, energy saving behaviours can slip down the priority list of money saving approaches.

Many people have past experiences of changing behaviour (either through choice or forced changed like appliances breaking) and seeing very little change in their energy bill.

And this can reinforce that small behaviour changes don't often provide meaningful savings.

...whereas finding ways to keep the house warmer feels more possible.

Many people feel that their homes are chilly during the winter.

And they suspect that they could do things differently to more effectively heat the home and retain the heat.

People would generally be open to trying new things to stay warmer on cold days as the potential benefit could be instant, and even small warmth benefits could make the home feel warmer.

From an experience perspective, people can often call to mind experiences of going into warmer spaces or warmer homes. So they have available mental evidence that a warmer environment could be possible.

In their words...

I'd like to see some kind of number comparison just to see how much I can actually save, like I want to know if the extra effort is worth it. Because otherwise if someone told me to do something to save a bit of money, but it was only just an extra couple of dollars a month, it's not worth me adjusting my habits in order to save that tiny amount, it has to be a substantial saving.

Our youngest has just turned one. So, he's very little and I just worry that they're going to get cold. And I think we probably don't know how to use the heat pump properly.

5. Exploring EECA's pre-defined set of energy efficiency behaviours

We explored a set of pre-defined energy efficiency behaviours with participants.

Our interviews explored these behaviours through unprompted discussion and then later through direct prompting.

Starting with unprompted discussion enabled us to understand how these behaviours fit in the broader life context.

- Use appliances at off-peak times (e.g. in the evening / overnight when demand is lower)
- Clean your heat pump filter
- Set your heating temperature to a maximum of 21°C
- Turn off appliances that are not in use e.g. second fridge, heated towel rails
- Set the temperature of your hot water to 60°C
- Use cold water laundry washes
- Fill the dishwasher and washing machine fully before using
- Only heat or cool the rooms you're using
- Close curtains at sunset / in the evening to keep in the warmth
- Seal gaps to prevent drafts (stopping cold air getting into your house and warm air escaping)

Motivation to take action on a proposed energy saving behaviour is driven by two factors.

1. Belief that the action could have a **meaningful impact** (on costs or warmth).

- Will I notice any benefit? How quickly?
- Do I believe that this appliance or behaviour is actually costing me a lot?
- Does this feel like a power hungry process?
- Can I imagine how this will make me warmer?

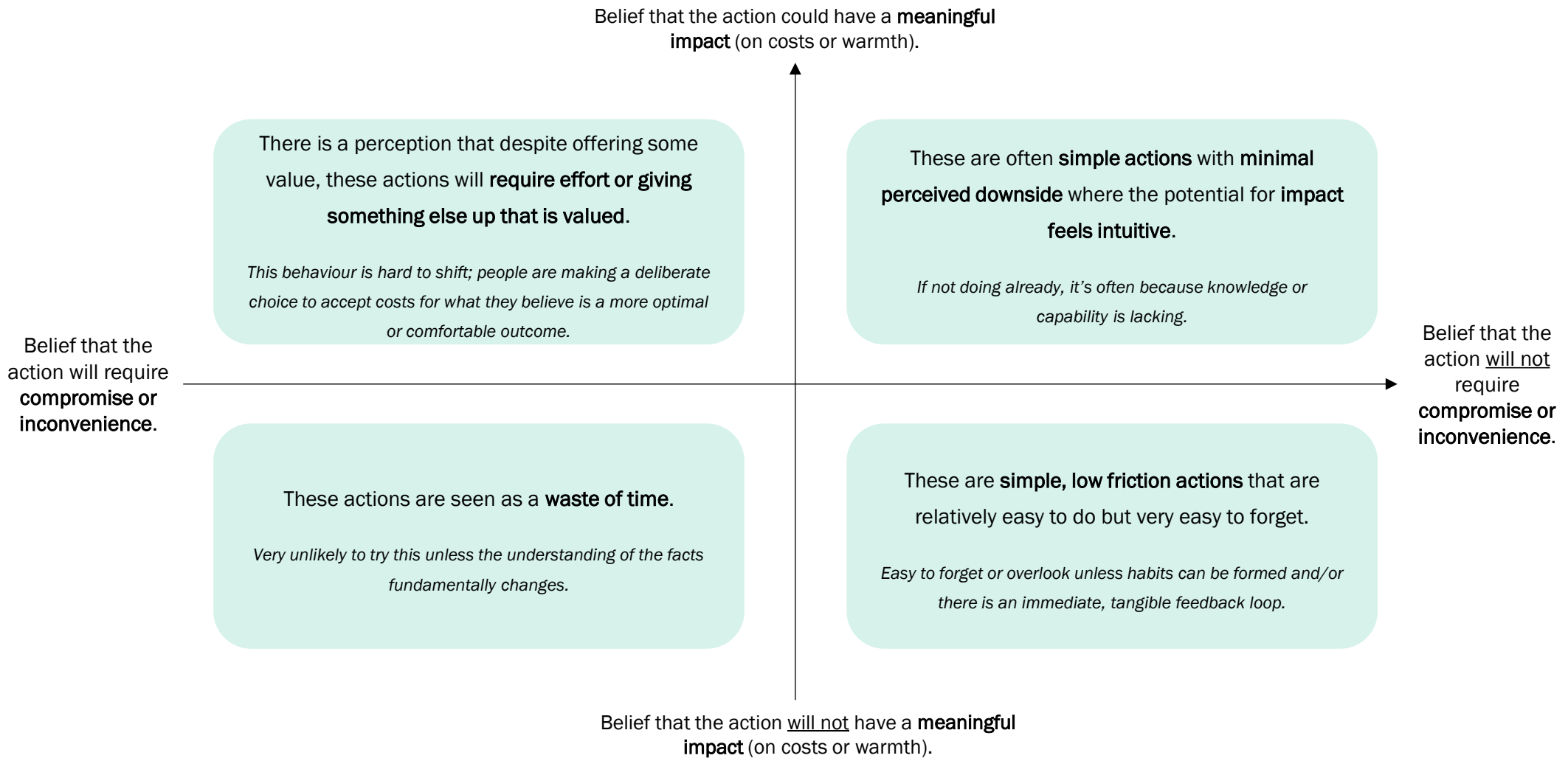
Intangible cost savings and weak behavioural feedback can undermine people's perceived **self-efficacy.**

2. Belief that the action will require **compromise or inconvenience.**

- Is this a 'one and done' action or do I have to keep remembering to do it?
- Will it require effort?
- Will it require a big change in my habits or routines?
- Do I expect a worse outcome than my usual approach?

A lot of behaviour around the home is based on deep habits and routines, strengthening the natural tendency for **status quo bias.**

Looking at energy saving behaviours through the lens of these dimensions helps to explore if / how we might drive behaviour change.



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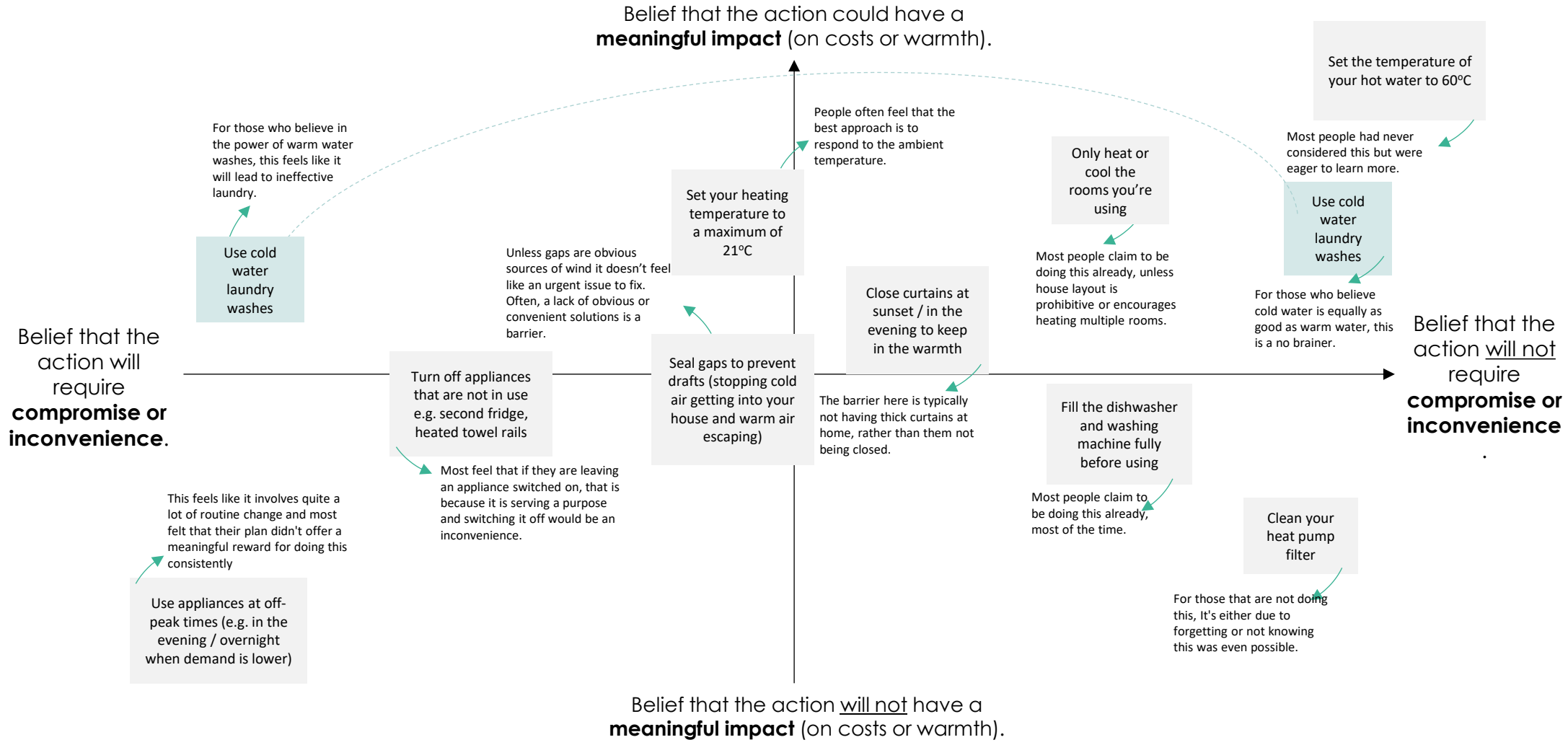


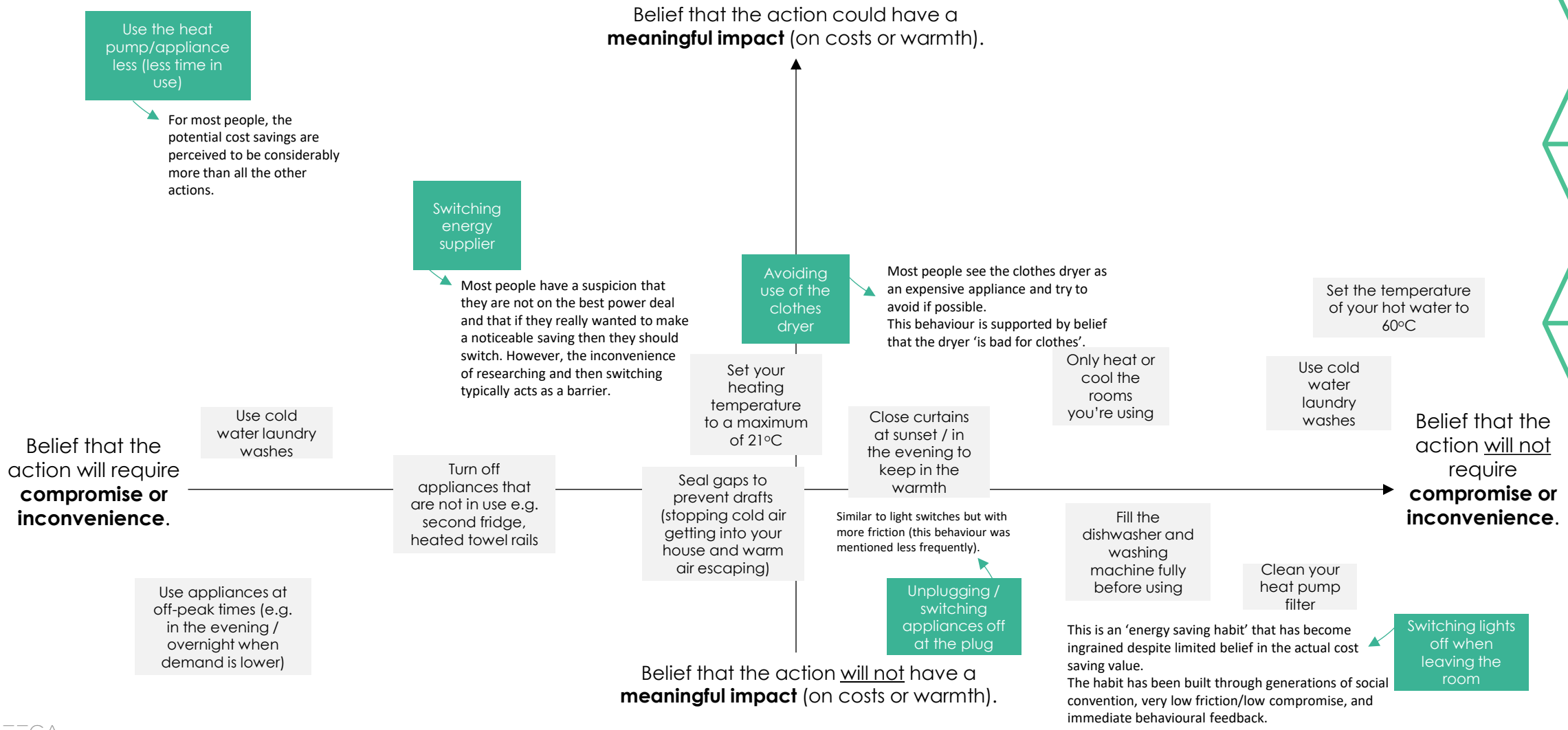
NOTE: Chart is a visualisation of qualitative analysis only and is for illustrative purposes. Chart is not based on quantitative assessment.

Through more detailed discussion we assessed receptivity to change behaviour.

	Receptivity to change	Commentary
Set the temperature of your hot water to 60ºC	Higher	Feels like a new idea. The potential for savings feels intuitive. No obvious downside. The action feels like a simple 'one and done' fix.
Clean your heat pump filter	Higher	The action feels quick and simple to do. The idea of making the heat pump work more effectively so it warms the house better with less energy and less cost is compelling.
Seal gaps / close the curtains	Mid	The idea of keeping the heat in so the house is warmer, and the heat pump doesn't need to be on for as long is compelling. However, a lack of appropriate curtains/gap sealing equipment creates friction to act.
Set your heating temperature to a maximum of 21ºC	Mixed	People are open to guidance on the most efficient way to use their heating appliances. But when people feel cold, the instinct is to crank up the heat pump and this is unlikely to change.
Turn off appliances that are not in use e.g. second fridge, heated towel rails	Mixed	Most people can't think of an appliance in their home that is switched on unnecessarily. However, if confronted with specific examples of appliances that may be costing more than they think (e.g. heated towel rail), the perception of what is 'necessary' could change.
Only heat or cool the rooms you're using	Mixed	This is intuitive for most, and primarily driven by a desire to stay warm rather than save energy. When this doesn't happen it is usually due to household layout.
Fill the dishwasher and washing machine fully before using	Lower	This is intuitive for most, and often driven by a desire to get through laundry and dishes more efficiently and household routines are built around this. Sometimes non-full loads are seen to be necessary to keep the household running. Most feel they are already doing the best they can here.
Use appliances at off-peak times (e.g. in the evening / overnight when demand is lower)	Lower	There is a lack of knowledge and understanding of how off-peak pricing works. But this is underpinned by a perception that the gains are likely to be marginal and the inconvenience is significant. Changing behaviour here would require significant financial incentives, education, and switching more people to off-peak plans.
Use cold water laundry washes	Lower	Amongst those that don't use cold washes, there is a strong belief that this is inferior to warm or hot washes. The core job to be done is cleaning not energy saving. So changing behaviour requires a major shift in belief around the power of cold water.

There were other energy saving behaviours that were often mentioned spontaneously in our discussions.

Understanding what makes these behaviours salient provides additional insight into what drives energy saving behaviour.



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What can we learn about the drivers of behaviour from the energy saving behaviours that are most commonly front of mind?

Switching lights off (more commonly front of mind) / switching appliances off at the plug (less common)

Switching lights off when leaving the room was consistently referenced by participants, despite limited belief in the potential for meaningful cost savings.

It is **very easy to do**, it has an **obvious behavioural feedback loop** (the room goes dark), it has been reinforced by years of **social pressure** around being 'wasteful', and happens **frequently enough for habits to form**.

So what?

- **Behavioural feedback loops are a powerful way of driving persistence** with behaviour. Providing a means through which people can see a tangible impact in 'real time' will likely impact trial and persistence of a behaviour.
- **Habit can be powerful** driver of behaviour, thinking about how behaviours can form part of a routine could help to encourage habit formation.
- **Social norms are important** drivers and helping people to contextualise their behaviour with what others do could help to motivate action.

Switching energy supplier

Most people feel relatively powerless to make significant savings on their home energy bill.

They **see the cost of energy as the dominant driver of their bill**, with individual actions only able to make a marginal impact.

Despite the belief that switching could save money, many haven't even looked into it because it **feels like an admin heavy and inconvenient task**.

So what?

- Perceived **inconvenience and behavioural friction can be major barriers** even when there is belief in the benefit. Framing actions as simple and fast is important.
- **Powerlessness** is a theme that emerged a few times in our interviews. Where this can be done credibly, there could be benefit in **messaging that creates a sense of re-taking control**.

Use the heat pump less (or other heating appliance)

Use of heating appliances dominates thinking on home energy use.

Time spent with the heat pump on is one of the most tangible 'measures' of energy use for many people.

So what?

- Actions premised on **keeping the precious heat in** the house are likely to play on the **sub-conscious value of heat** generated by home heating appliances.
- There could be an **opportunity to frame actions in terms that relate to use of the heat pump** (e.g. you could save enough energy to run the heat pump every night for a week).

Avoiding use of the clothes dryer

The clothes dryer runs for a long time and makes things very hot. **'Run time' and 'making things hot' are two of the core heuristics people use when guessing how energy hungry appliances are**.

People also want to avoid using the clothes dryer because they **believe it damages/degrades their clothes** and sheets. This **supporting belief** adds an extra motivation to avoid the dryer where possible.

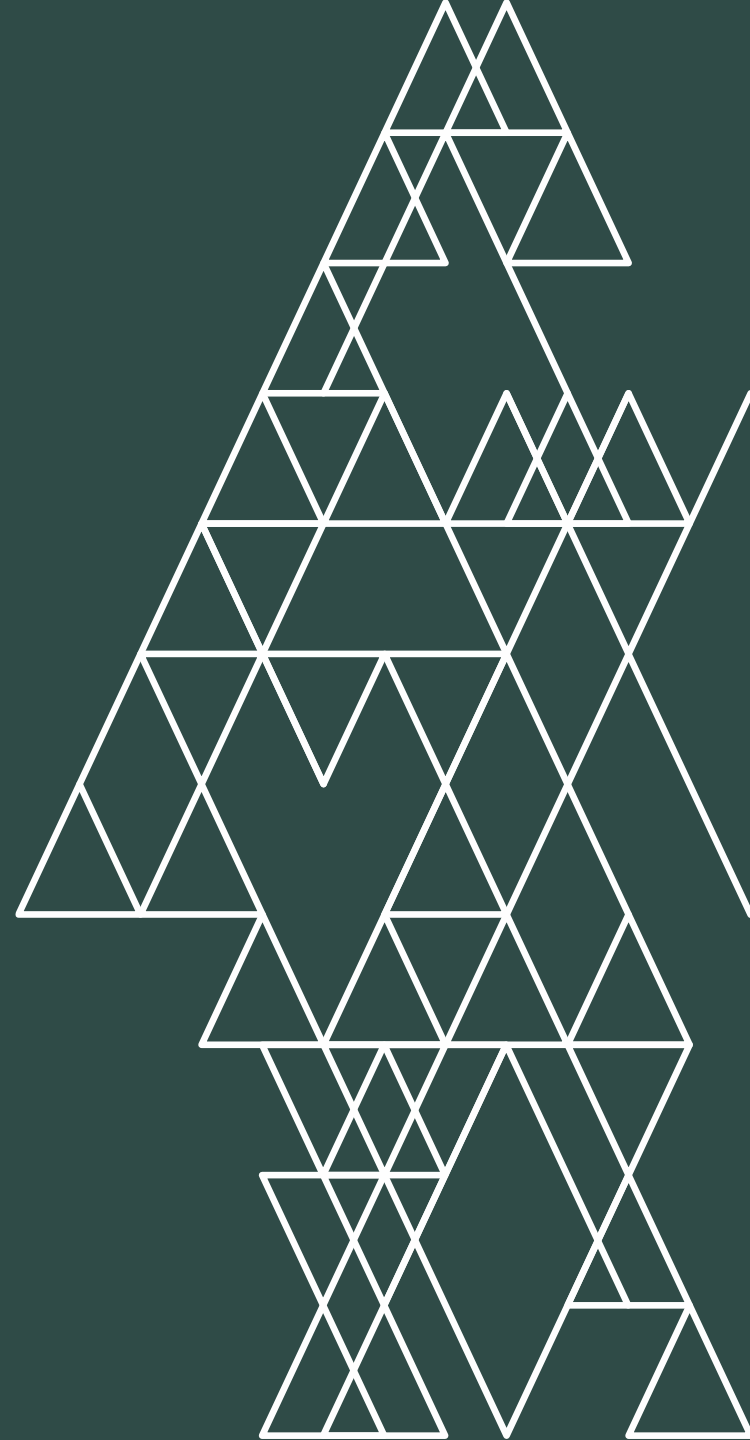
So what?

- Secondary **supporting beliefs can be powerful multipliers** (e.g. talking about closing curtains and sealing gaps as contributing to a healthy home as well as preserving heat / saving energy.)

In summary: What behavioural drivers are at play across all energy saving behaviours?

	What's going on?	Underlying behavioural principles	Implications
Intangible and deferred benefits	• People don't have a sense of how much it costs to run their appliances. • So cost savings from energy efficiency are intangible (cause and effect of behaviours is difficult to establish and the savings often feel marginal). • Savings don't show up until the monthly bill and attribution to specific behaviours is impossible.	**Temporal discounting:** Tendency to value immediate rewards more highly than delayed rewards. **Attribution and reward salience:** Behaviours with more salient rewards are more likely to be habit forming. If the outcome is weak, delayed, or invisible, the brain doesn't "code" the behaviour as worth repeating.	• Information or messaging that puts dollar values against specific behaviours is likely to be compelling (as per winter savings campaign). • Increasing the public's understanding of how much it costs to run different appliances will help to engage and motivate people on this topic. • Helping people to track energy consumption in real time and providing goals and targets is likely to be motivating. • 'Keeping the house warmer' is an attractive, immediate and tangible benefit.
Habitual inertia and status quo bias	• Households run on autopilot; small frictions and routines block change. • It's easy to try a new behaviour, it's much harder to make it part of the routine.	**Status quo bias:** We typically have a preference for the current state and are resistant to change. **Habit persistence:** Our existing routines are sticky because they are automatic, low-effort, and familiar. It's easier to slip back into an existing pattern than stick with something new. **Decision fatigue:** Our ability to make decisions or new choices deteriorates when cogitatively tired or overloaded.	• Think about the power of first experiences: If we encourage new behaviours, we must also consider what the first experience looks and feels like. A strong positive feedback loop and minimal friction are important for behavioural persistence. • People will easily slip back into old routines and habits unless the reward feels meaningful or a habit has been formed. • 'One and done' actions likely to be more attractive than routine/habit changes. • Removing friction and de-risking trial of new behaviours can help to overcome inertia (e.g. by removing cost barriers).
Diffuse actions, diffuse benefit	• The behaviours feel like a long list of diffuse actions that are difficult to remember. • The benefit of each action is perceived to be marginal.	**Schema theory:** Humans rely on mental schemas to make sense of the world. When items are grouped into a recognisable category or group, they create a mental schema, making them easier to remember, talk about, and care about.	• Grouping actions that feel similar in their process, objective or outcome can be beneficial to increasing their perceived value and memorability. • E.g. Grouping cleaning the heat pump filter, closing curtains and sealing drafts under a 'get your house warm for winter' banner is likely to have a multiplier effect.

6. Understanding motivations through four behavioural typologies.



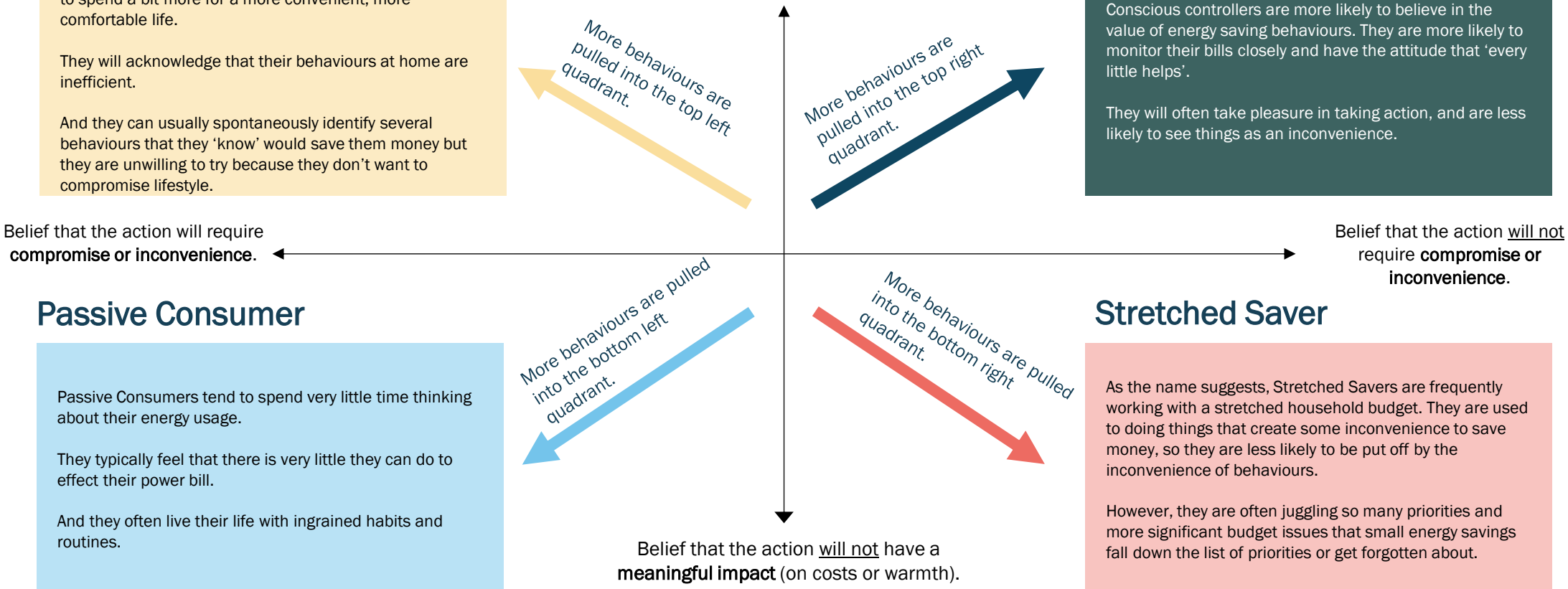
Although there was considerable consistency across the sample in terms of how beneficial or inconvenient different actions are, we did observe differing levels of motivation as outlined by the typologies below.

Comfort Consumer

Comfort Consumers prioritise convenience and comfort in the way they run their household. They are always willing to spend a bit more for a more convenient, more comfortable life.

They will acknowledge that their behaviours at home are inefficient.

And they can usually spontaneously identify several behaviours that they 'know' would save them money but they are unwilling to try because they don't want to compromise lifestyle.



Conscious Controller

Conscious controllers are more likely to believe in the value of energy saving behaviours. They are more likely to monitor their bills closely and have the attitude that 'every little helps'.

They will often take pleasure in taking action, and are less likely to see things as an inconvenience.

Passive Consumer

Passive Consumers tend to spend very little time thinking about their energy usage.

They typically feel that there is very little they can do to effect their power bill.

And they often live their life with ingrained habits and routines.

Stretched Saver

As the name suggests, Stretched Savers are frequently working with a stretched household budget. They are used to doing things that create some inconvenience to save money, so they are less likely to be put off by the inconvenience of behaviours.

However, they are often juggling so many priorities and more significant budget issues that small energy savings fall down the list of priorities or get forgotten about.

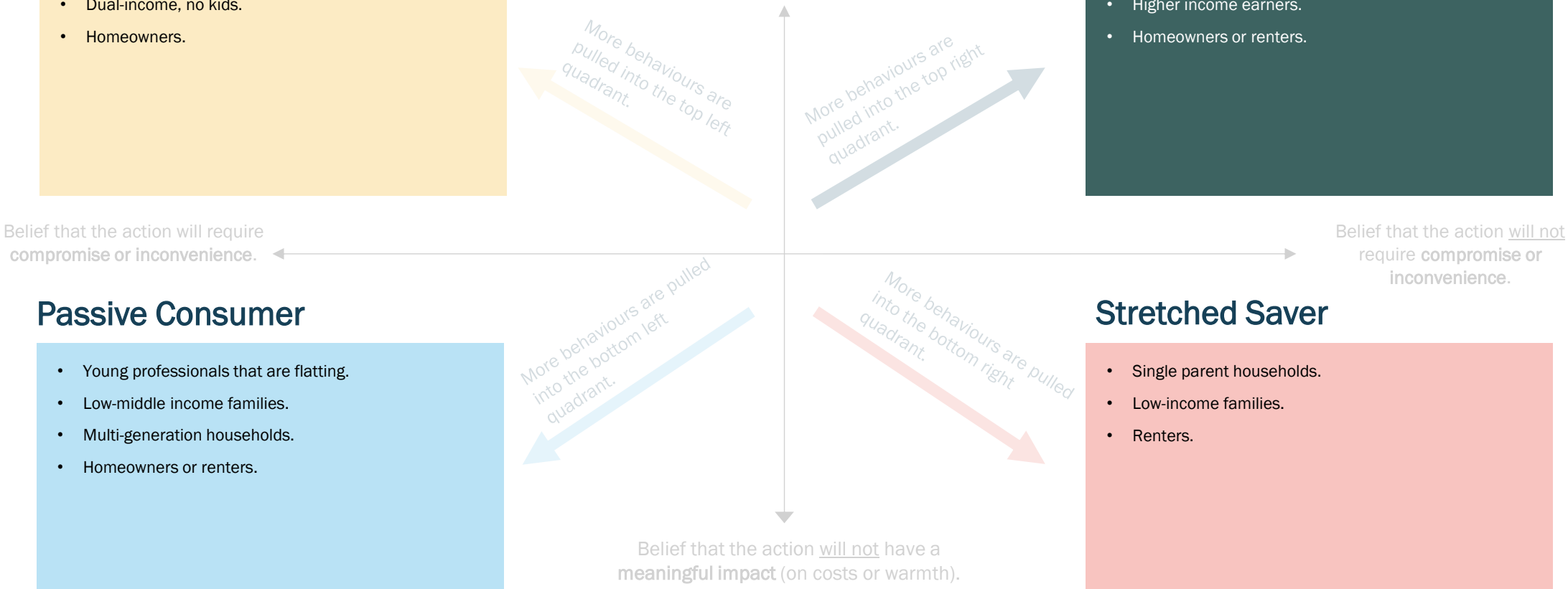
Demographic features associated with each typology

Comfort Consumer

- High income households with children.
- Dual-income, no kids.
- Homeowners.

Conscious Controller

- Single person households.
- Higher income earners.
- Homeowners or renters.



Passive Consumer

- Young professionals that are flatting.
- Low-middle income families.
- Multi-generation households.
- Homeowners or renters.

Stretched Saver

- Single parent households.
- Low-income families.
- Renters.

Comfort Consumer

Comfort and convenience are my priority.

Comfort consumers prioritise ***feeling* warm, safe and relaxed at home**, often justifying energy use as essential to maintaining their wellbeing, even if it comes at a higher cost.

Who are comfort consumers?

- High income households with children.
- Dual-income, no kids.
- Homeowners.
- Emotively driven.

What's driving their behaviour?

- **Comfort and convenience are prioritised over efficiency and cost.**
  - Comfort consumers make energy decisions, typically based on what *feels* good and works easily in their daily lives.
- **Energy use is emotionally and practically tied to taking care of the family.**
  - Heating and appliance use are emotionally and practically tied to caregiving. Keeping the kids warm, supporting routines, and creating a welcoming home. Energy use becomes a way of looking after your family.
- **Wellbeing, feeling warm, safe and relaxed outweighs energy cost concerns.**
  - Feeling comfortable is a non-negotiable. Energy saving behaviours are often perceived as a contradiction to this.
- **Heating is viewed as a necessity rather than a luxury.**
  - Will cut costs elsewhere before compromising on warmth.
- **Low guilt, high justification.**
  - Energy use is rationalised as a necessity.

> "Generally speaking, we try to live comfortably, so any kind of costs like keeping the house warm, have a nice space to come home to, we don't really keep a strict budget, we just want to make our lives more comfortable when we get home."

> "It would be a hassle to have to go around and turn everything back on again, some stuff I can't even get to, so I'd have to take things apart to switch it off, so it's a convenience thing more than anything, I guess."

Meet the Tuī family...

Sam and Jess both work full-time with demanding jobs, working upwards of 40 to 50 hours a week. They live in a renovated older home with their two young children. It's a busy household, and while the parents are often tied up with work, Jess's retired parents regularly come to stay and help out with the kids.

These days, the heat pumps run daily, before school, after school, and sometimes during the day if one of the parents is working from home. There's no set temperature they aim for, but they typically run it at 25 degrees or higher, depending on who's turned it on. They know it's warm enough when the kids are walking around without socks or when Jess's parents can chase the kids around without feeling uncomfortable.

Appliances like the dishwasher and washing machine are always run on hot. With young kids, things get grubby quickly, and Jess finds that a hot wash does a better job. It's easier to throw everything in without worrying about pre-rinsing or sorting. It's one less thing to think about.

Most evenings, when Sam and Jess get home from work, dinner is underway, and the washing machine is humming with a load of school clothes. There are usually multiple appliances running at once, and for Sam and Jess, that's a relief. It means they can come home and focus on the kids without having to worry about the housework. They know there are probably things they could be doing to be more energy efficient, and maybe their parents could too, but they don't want to burden them with that.

In saying so, they're not immune to the cost-of-living pressures, but when it comes to heating and keeping the home comfortable, it's something they feel makes a real difference to their daily lives.

It helps them get up in the morning, makes the house feel warm and inviting for the kids to come home to, and ensures the grandparents feel looked after too. If they ever needed to cut back, they'd probably cancel a few streaming services or stop buying individually packaged snacks for the kids' lunches. But compromising on warmth and comfort is not something they're willing to do.

Comfort consumers need reassurance that their sense of wellbeing won't be compromised by adopting energy saving behaviours.

What's keeping them as a comfort consumer?

- ✕ Convenience and comfort outweigh efficiency.
- ✕ Benefits feel somewhat intangible.
- ✕ Energy use is guided more by emotion, than logic, it's about comfort, safety, and security, not just function.
- ✕ The cost of energy use is justified by the value it brings.
- ✕ Household dynamics reinforce comfort-first choices.

How we can shift them...

- Messaging and actions that focus on keeping the house warmer will resonate more than messaging around saving money.
- Likely to be attracted to actions that feel like an upgrade to the house (e.g. thermal curtains, sealing gaps).

Passive Consumer

Convenience and low effort are my priority.

Passive consumers' energy use is shaped by **habit and routine, often going unchecked**. They rely on appliance defaults and habit to manage their usage, trusting that what they're doing is 'good enough'. Convenience and ease matter more than actively seeking out efficiency.

Who are passive consumers?

- Young professionals that are flatting.
- Low-middle income families.
- Multi-generation households.
- Homeowners or renters.
- Convenience-driven.

What's driving their behaviour?

- **Habitual, routine-based energy use**
  - Consumption is shaped by ingrained habits and appliance defaults, which tend to go unquestioned or adjusted.
- **Perception that energy is a necessity, alleviates pressure to be efficient**
  - It's seen as a basic part of living – *"What I use is what I use".*
- **Trust in current habits**
  - They believe what they're doing is 'fine' or 'normal'. There is an assumption that default appliance settings are already efficient, and because things seem to be working, there's little motivation to adjust their habits.
- **Busy routines and schedules can shape their energy use.**
  - With busy jobs, long hours and differing schedules, the priority is to keep things running and ticking along without having to think about it too much.

> "If it's just a couple of dollars a month, I don't know if its worth us adjusting our habits in order to save that tiny amount".

> We're not excessive users of power you know, we do have good habits like switching lights off when you leave the room. I just don't think we think about power much as a household, certainly not the teenagers. We kind of just do what we need too.

Meet Ben and his flatmates...

Ben is in his mid 20s, lives in a newer rental with five other flatmates, and all work full time. The house was built for big families or student groups, so it's spacious enough to handle the mix of routines and personalities.

Everyone's on different schedules, and most of the flatmates work long hours, which means that when they finally get home, the priority is to relax, not to think too hard about anything, especially not energy use.

The flat's set-up is pretty typical for a shared house. Most of the appliances are second-hand or things people brought in when they moved. Ben bought the washing machine off Facebook marketplace because it looked newish and was cheap, and it's worked fine ever since. The dishwasher and other appliances are used the same way they've always been, just press start and let it run. The dishes come out clean, the clothes get washed, so there's no reason to change anything.

When it comes to heating, each person has a panel heater in their room, and there are a couple of heat pumps in the shared spaces. There's no house rule about how or when to use them. If someone's cold, they turn it on. When they first moved in, the heat pump was set to 22 degrees, and no one's bothered to change it. It's warm and that's good enough.

Ben and his flatmates do think about energy sometimes, especially in winter when the power bill tends to spike a bit. But the general feeling in the house is that energy is just something you need to live. You need power, you need heating, and trying to cut back or change habits feels like more effort than it's worth.

With six people in the house, even if they all made changes, the savings would be so small once split that it doesn't feel worth the hassle. They're not completely unaware of their energy use. People do turn off lights when they leave a room and try not to take super long showers, but beyond that, it's not something they actively manage.

A couple of the flatmates have their power provider's app, but they mostly use it to check the bill and pay it. There's no deep dive into their usage patterns or efficiency tips; it's just about keeping things ticking over.

For Ben and his flatmates, energy use is part of the background. It's not something they feel pressured to optimize or monitor closely. With full-time jobs and busy lives, the less they have to think about it, the better. As long as the house is warm and the appliances work, that's enough.

Passive consumers need to see that small, low effort changes can make a real difference, without disrupting their routines.

What's keeping them as a passive consumer?

- ✕ Routine habits are ingrained, and appliances are often used as they came, even if inefficient.
- ✕ They often have a low-compromise mindset.
- ✕ Busy or staggered schedules makes it hard to coordinate energy use, it feels somewhat impractical.
- ✕ Previous ‘failed’ attempts can make them reluctant to try again.

How we can shift them...

- Making the costs of appliance use more tangible and visible.
- Providing motivating dollar cost values alongside energy saving behaviours.
- Clear visual cues on appliances to help make smarter choices or observe the energy used without needing lots of knowledge.

Stretched saver

I do my best to try and manage my energy use, but I have competing priorities.

Stretched savers try to manage their **energy use in the hopes of saving money, but it's often just one of many competing priorities**. While they know energy use is important, it still tends to fall down the list. Instead, they'll take a **reactive approach**, only making changes when they have to.

Who are stretched savers?

- Single parent households.
- Low-income families.
- Renters.
- Cost-driven.

What's driving their behaviour?

- **Financial strain limits their choices.**
  - Stretched savers care about energy use and their power bill, but don't always have the freedom to prioritise it. Their actions are shaped by what they *can* do, not necessarily what they *want* to do.
- **Driven by necessity rather than strategy.**
  - Energy decisions are typically reactive, driven by an immediate need (e.g purchasing new appliance, because the old one broke) rather than long-term planning.
- **A desire to stretch their dollar**
  - They're motivated by wanting to make their money go further, often through small, practical actions that feel achievable within their means. (e.g layering up, instead of using the heating).
- **Competing life pressures**
  - Energy efficiency is one of many priorities, but is often overshadowed by more pressing issues, like food security, childcare, employment.
  - When money is tight, there is usually a more obvious and immediate way to save money than by trying to save energy.

> "Its expensive to be poor, you know when you have more income, you can make better decisions. My decisions are cost-driven, I've bought what I can afford, it's not the most energy efficient washing machine, nor fridge but it's what I could afford and what I had access too."

Meet Ana and Ricky...

Ana works full-time and lives in a quirky old two-bedroom villa with her 8-year-old son, Ricky. It's just the two of them most of the time, and while the house is damp and drafty, it's close to her work and Ricky's school, so it makes sense for now.

She's lived in cold homes before, so she knows all the tricks, like rolling a towel and putting it by the door, only heating the rooms they're in. But winter still brings a layer of stress, especially when it comes to keeping Ricky comfortable.

Lately, it's been so cold in the mornings that Ricky's been bunking in with Ana just to stay warm. Some mornings, he wakes up wide-eyed, pointing out how he can see his breath in the air. "Mum, look! It's like we're outside!". Half amazed, half uncomfortable.

She'll typically get up early to turn on the old space heater she's had since her flatting days, which is just enough to take the edge off before Ricky gets up. She's careful not to leave it on for more than half an hour, unless Ricky says he's still cold. In that case, Ana takes her lead from him.

She's mindful about how and when she uses energy or power, but it's not always something she gets to plan. Most of the time, it's about responding to what's needed in the moment, what's going to make the biggest difference right now, and what she can afford to do. She'd love to make the house warmer, less damp, more efficient. But there's always something else that needs attention.

She recently bought an air fryer on sale from Briscoes and was stoked, she reckons it'll help bring the power bill down since they'll use the gas stove less. She wants to get a dehumidifier too, especially with all the condensation build up on the windows every morning, but there's a car payment coming up and that takes priority. The car's essential for getting Ricky to school.

Ana's constantly juggling things whether its solo parenting, bills, work, childcare, and energy use is just one piece of the puzzle. She worries about the power bill, especially in winter. She describes it like 'holding your breath between bills' and hoping it won't blow the tight budget; it's always tricky to predict how much the bill is going to be. She's not careless, just stretched. Her decisions are practical, made in the moment, and always influenced by Ricky.

Stretched savers need practical support that eases financial pressure and simple, achievable actions that fit within their means.

What's keeping them as a stretched saver?

- ✕ Financial constraints limit their ability to invest in efficient appliances; even small costs can be a major hurdle.
- ✕ Poor housing conditions limit their ability to control energy use and efficiency.
- ✕ Using outdated or energy intensive appliances.
- ✕ Juggling multiple responsibilities on a tight budget means there's little time to be pro-active or implement new strategies.
- ✕ More immediate needs like food, rent, and transport take precedence.

How we can shift them...

- Offering support or grants for curtains, and draft prevention can make efficiency more accessible.
- Simple and easy to implement actions that can make an immediate impact (e.g. on warmth) are more likely to be adopted into the busy routine.
- Making cost savings more tangible and easier to track will make energy saving behaviours feel more valuable and worthwhile.

Conscious controller

Finding ways to make the most out of my energy use is my priority.

Conscious controllers are deliberate and informed energy users **who actively seek out ways to optimise their energy consumption**. They value efficiency, invest in smart solutions, and see energy as something to be managed rather than accepted.

Who are conscious controllers?

- High income earners.
- Homeowners.
- Energy literate.
- Time rich.
- Pro-active.

What's driving their behaviour?

- **They believe in the value of efficiency**
  - Energy efficiency is seen as worthwhile and impactful.
- **Energy literacy and confidence**
  - Their understanding and knowledge of energy use motivates them to act, whether it be adjusting routine or investing in smart appliances.
  - They monitor their energy use closely using the energy company app.
- **Desire to optimise efficiency across the household.**
  - Being energy efficient is just one part of their optimisation plan. They apply the same mindset to other household spending.
- **Time and capacity to act**
  - Being time-rich allows them to observe, research and implement changes that others might overlook.
- **Comfort without compromise**
  - They seek solutions that maintain their comfort, while making efforts to improve energy efficiency through smart upgrades and long-term investment.

> "I will always go away and do a bit of research, for example I wasn't comfortable with our broadband provider, so I did some research and found a better deal, I noticed that gas prices were going up and up and I'm uncertain with the future of gas in New Zealand so I'm looking at getting that switched too. I try to stay as informed as I can with these things."

> "That's the reason we got solar panels in, sure its good for the planet, that's the plausible reason, but it's not entirely the truth. The reason is, because it's a 5 ½ year pay back period, which means in 5 years time, eventually you end up getting your money back, in power savings and also by having the opportunity to invest in other efficient appliances, it's a win-win."

Meet Dee and his wife, Mary...

Dee lives with his wife Mary in a well-kept family home that's been gradually upgraded over the years. Their kids are out of the house now, off at university, but they come back during breaks. These days, it's just the two of them, and Dee's enjoying the chance to fine-tune the home to suit their lifestyle.

Dee's all about efficiency, not just with energy, but with time, money, and effort. Dee gets a real buzz out of finding smarter ways to do things. His latest win is a robot vacuum. Push a button and the job's done. For Dee, it's not just about convenience, it's about investing in things that make life easier and more cost-effective.

Over time, he's made a series of upgrades to the house. There's double glazing, heat pumps instead of the old fireplace, a DVS system, and LED lighting throughout the house. He's methodical about it, with each change being part of a bigger plan to get more value out of their energy use.

The most recent addition is solar panels, which have completely changed the game. Before they had them, Dee was strict about when and how appliances ran, cold water washes only, the dryer used only in emergencies, and everything timed to avoid peak hours. Now, with solar, he has more freedom to do things on his terms, he can run a load of washing when it suits, without stressing about the power bill. But more importantly, he knows his money is being used effectively.

Dee works from home a lot, which means he's had time to notice the little inefficiencies others might miss. He spotted cold spots in the bedroom and office, so he put up thermal-backed curtains to help retain heat. That kind of attention to detail defines how he approaches energy use.

He's observant, informed, and always looking for ways to improve. For Dee, being energy efficient isn't about cutting back, it's about living smart. He sees energy as something to be managed, not just accepted. He's financially literate, proactive, and genuinely enjoys the process of optimizing his house. Efficiency gives him freedom, more time, more savings, and a better quality of life.

Conscious controllers are optimising their energy use well, maintaining momentum requires continued visibility, relevance and trust.

What might cause conscious controllers to stop taking energy-saving actions?

- ✕ Lifestyle change may reduce their availability to be pro-active in researching, learning and monitoring their energy use.
- ✕ Conscious controllers rely on current, trusted resources and can lose confidence when energy information feels outdated or irrelevant.
- ✕ If technology becomes too complex, unreliable or smart tools don't deliver on their expectations, they may feel less empowered and hesitant to invest again.
- ✕ Without visible results or feedback, they may struggle to see the impact of their efforts and time.

What do they need...

Up-to-date, relevant information to help drive decision making.

- Desire to know more about energy security – future proofing their energy source.
- Smart appliances and technology – apps, dashboards, meters – they feel empowered when they know they're in control of their energy use.
- Feedback & visibility- feel motivated when they can see their return on investment.

7. What triggers people to think about their energy usage?

There are several triggers or moments where energy usage becomes more salient and openness to change increases.

Cold evenings	This was the most frequent trigger. When it's cold inside the house, people are often actively thinking about what they can do to make it warmer, while also carrying a low level of sub-conscious anxiety about how much energy the heat pump is using.
The winter	The energy bill is most front of mind during the winter months, this is when the cost of energy feels most painful. Outside of the winter months, people are more comfortable with their energy bill and assume there is very little saving to be had.
Bill shock	Most people in our sample talked about usually having at least one bill shock month during the winter. Although it typically doesn't trigger much behaviour as it is very difficult to establish where all the money has gone. So it is usually an annoyance, followed by a post-rationalisation that 'winter will be over soon'.
Changing living situation	Examples: Moving out of parents house, moving into/out of a flat share, moving in with a partner, downsizing the family home. These are moments when the level of responsibility for the energy bill changes and more thought is given to trying to be mindful about energy consumption.
Moving house	When people move house they often see it as a 'fresh start' and an opportunity to 'spring clean' the financial life. People often look at changing energy supplier to get a better deal or upgrading appliances to be more energy efficient.
Having a baby	When people are having a baby, ensuring the home is warm, comfortable and healthy becomes a top priority. People are more likely to be actively looking for ways to keep the house warmer before or just after having the baby if this coincides with winter.
An appliance breaks or a new appliance is needed	When people are looking for new appliances, energy efficiency becomes more front of mind. While this initially drives product considerations, it often extends beyond this to considerations about the optimal way to use the appliance to maximise energy efficiency. People are more malleable with appliance setting choices before habits have been formed.
The month(s) immediately after switching energy supplier	Energy use and cost becomes more front of mind, people are more proactive in checking their app or scrutinizing their bill to see if the switch has led to any savings.

Cold days in winter appear to be the most prominent and powerful trigger for consideration of energy usage.

These are the months when people are more concerned about how much their power bill is going to be.

These are the months where the heat pump is switched on more frequently… the heat pump is the appliance that seems to be most strongly associated with cost.

These are the months where the a cold house creates a pain point in life that can drive more immediate action in the search of an immediate fix.

‘Short winters’ create a challenge for persistent behaviour change and message salience.

- Outside of the coldest months of the year people say that they think about their energy use much less*.
- High power bills can feel like they are ‘just the cost of winter’, and that in a couple of months they will back to normal.

Bill shock is real during winter but often fails to drive any specific behaviours and is often associated with a feeling of helplessness.

People frequently have at least one bill shock month during winter.

However, there are two issues that block information searching or changes of behaviour:

- People feel that there is no way of knowing where all the money has gone, and the assumption is that it’s all gone on the heat pump which had to happen because it was a particularly cold month.
- A belief that this happens every year and that winter doesn’t last for long so the bill will come back down soon.

*This research was conducted during winter so the winter experience was much more front of mind for participants than the summer experience.

8. Information and support needs

People are most motivated by information that helps them understand the costs associated with their appliances.

This was the most frequently cited knowledge gap and barrier to action within our sample.

People really want information that helps them to put a dollar value on their behaviours and appliances:

- “How much does it actually cost to run all these different appliances?”
- “Are any of my appliances really expensive to run?”
- “Have I got anything that’s costing me loads without me realising?”
- “I’ve got a few different types of heater, what’s the most efficient way to use them to keep my house warm? Should I use different appliances in different situations?”
- “Does it actually make any real difference to the cost if I use different settings on my appliances?”

“The energy bill feels like a black box… it’s impossible to work out how much everything is contributing to it. So when you get the high bill you’ve got not idea where to focus or what to do about it.”

Some talked about how valuable it would be if tools were available that allowed easier real-time tracking of energy use.

> “If I could see a little dollar counter on top of the washing machine, it would definitely change how I thought about using it”

Tips, tricks and ‘life hacks’ to keep the house warmer during winter would be valued.

This might include more practical guidance around sealing gaps and appropriate curtains for warmth retention.

Any guidance, information or advice that are presented in terms that relate to keeping the house warmer in winter are likely to be more salient and motivate engagement.

“If these was something simple I could do to keep the house warmer without spending money, of course I’d try it.”

“I do feel like we probably aren’t using the heat pump in the best way, I’d love to know how to set it up so we get the most warmth without spending as much.”

Most have a general understanding that sealing gaps and closing curtains can be helpful to retain warmth. But understanding around the practicalities of this is more limited.

“Do I need special curtains?”

“I sometimes put a rolled up towel by the door when it’s really cold, is that what sealing gaps means? Is there something more permanent or effective that I can do?”

“Do I need special equipment to find and seal gaps?”

For those in rented accommodation and/or those with tighter budgets, there can be a reluctance or inability to make changes to the house (e.g. new curtains or permanent draft exclusion.

Power companies and Powerswitch are the most front of mind sources of information on energy.

People feel that they see relatively little information that helps them to make practical decisions about how to manage their energy use at home.

In the absence of many good examples of information to support energy choices, most people can call to mind information that they have seen from power companies or Powerswitch.

As these are the ‘messengers’ that are most commonly associated with information about power, there is an assumption that they are also likely to be the main source of information on energy saving.

However, there is a sense that the information provided by power companies can be confusing or unhelpful, and a suspicion that it’s not in their best interests to help you use less energy.

Media and social media are the usual sources for life hacks and helpful tips

- When thinking beyond obvious sources of information on energy, the next place people think of is media and social media.
- This is often where people stumble across helpful articles or tips and is somewhere that you might expect to come across a set of ideas for saving money on the power bill.

Although not front of mind, government resources would be welcomed.

- The government is not a front of mind source of information for helpful tips on how to save money or how to get on top of your power bill.
- This is largely driven by experience, most people have very little experience of seeing this sort of information from government.
- However, if a government agency was providing this sort of information, it would be seen positively and assumed to be unbiased and authoritative.

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