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10 February 2023

The Hon Chris Bowen MP
Minister for Climate Change and Energy

Senator the Hon Jenny McAllister
Assistant Minister for Climate Change and Energy

Submission to the National Energy Performance Strategy Consultation Paper

Energy Consumers Australia appreciates the opportunity to contribute to the development of the National Energy Performance Strategy, starting with consideration of the issues raised in the National Energy Performance Strategy Consultation Paper (the Consultation Paper) released in November 2022.

The 10 million households and 2.6 million small businesses that Energy Consumers Australia represents, are facing both challenges and opportunities in the transformation to a renewable energy system that is underway.

The most significant challenge is in managing their energy costs, at a time of steeply rising retail electricity and gas prices, that come on top of prices that have been high for the past decade.

We also know that the burden of higher prices is not experienced equally. For those households below median household income, electricity costs account for between 3% and 12% of their income, compared with households above median income who pay at most 2-3%. On top of this, are high petrol costs and gas costs for those who also use gas in their home.

Small businesses with high energy needs are also confronting difficult choices, forced to pass on higher energy costs to their customers, cut staff or sacrifice their own income.

As a result, consumer trust that the energy system is working in their interests is again low.

Empowering consumers to take control of their energy use requires effort and commitment, which is the opportunity provided by the National Energy Performance Strategy.

It will require effort from households and small businesses, in that they will need to change their energy use behaviour, habits and practices. This means that they need independent trusted information and advice, that builds consumer agency, and offers fit-for purpose protections from over promising and under-delivering, with defective products and misleading claims about services and consumer outcomes. We need to start now, connecting households and small businesses to reliable information on what actions they can take that can have an impact in bringing down their bills, through a national campaign.

It will also require significant levels of investment to make every home and every small business resilient and adaptive, the scale of which means governments will need to support those without the means or the opportunity to fund the upfront capital costs. The finance sector will also need to play its part, including in funding and recognising quality investments, which deliver tangible benefits for consumers. We estimate that the investment required is of the order of $500 billion or more, to bring buildings and appliances to the standard that is needed at the same time as switching from fossil fuels to electric, so that consumers' exposure to high energy costs is mitigated.

It will also require effort and commitment from governments to ensure that the gap is closed between those paying relatively little for energy, and those for whom energy costs are a significant burden. The energy transformation cannot succeed if the divide between the "haves" and "have nots" becomes entrenched.

Given the scale of the investment required, as well as the opportunities for consumers to take control of their energy use in ways that is easy and convenient, in the longer term we need an independent source of trusted independent advice, that consumers can rely on to successfully take their own journey to 2050, at the pace they can manage. This is the purpose of an Energy Trust, which Energy Consumers Australia is developing.

Sitting alongside of this are opportunities for a trusted and informed workforce with the necessary skills and capabilities, and a national manufacturing capability. The enablers to support consumers, such as mandatory disclosure of energy performance and mandatory minimum standards for rental homes, will support a steady scale up of workforce and manufacturing capability, creating a system that consumers trust.

Managing energy costs needs to be embedded in the architecture of the energy system and its policy and regulatory design. It means optimising energy efficiency within the system, to ensure a least cost energy transformation by 2050. It also means reshaping demand, so that wherever possible it responds and supports efficiency and reliability in an increasing variable electricity supply. Of course, ubiquitous storage will provide opportunities to fully utilise solar generation generated locally, in addition to the firming capability of large scale storage linked to generation. But that storage also has a price tag, which can be weighed against the opportunities and value provided by demand flexibility.

In our response to the submission we have placed a great deal of emphasis on the importance of governance and targets, as necessary to supporting the scale of what could be achieved when opportunities are made available for all households and small businesses.

We also see that together the National Energy Transformation Partnership and the National Energy Performance Strategy together set the foundational architecture for equal weight being given to both the supply side and the demand side in the energy transformation.

We have supported our submission with findings from our own research (our surveys and the recent Energy Efficient Housing report), as well as two commissioned reports from KPMG on demand flexibility, and Dr Mike Roberts from the University of New South Wales on lessons from the UK experience of developing demand flexibility by households.

There is also significant research from our Power Shift program that remains relevant in its behavioural insights, that we believe can be drawn on in shaping policies and programs at a national and local level.

We look forward to working with you, and state, territory and local governments in taking the National Energy Performance Strategy forward.

Yours sincerely

Lynne Gallagher
Energy Consumers Australia

National Energy Performance Strategy

Energy Consumers Australia's response to the Consultation Paper

February 2023

ENERGY CONSUMERS AUSTRALIA

Contents

1. Introduction

Transitioning our energy system to clean resources, such as wind and solar, will require some $320 billion of investment in generation, network and storage assets. If we are to limit the impact this investment will have on consumers' bills, there must be equal importance given to reshaping the demand side of the energy system.

Energy Consumers Australia supports the National Energy Performance Strategy (the Strategy) as an opportunity for leadership across all levels of government, working together, to empower Australian households and small businesses to manage their energy use. There are opportunities to ensure that energy efficiency and demand flexibility (though load shifting and behaviour change) can together ensure that our future energy system is least cost.

The Strategy is an opportunity to develop policies and programs that prioritise, co-ordinate and invests in improving energy performance in our homes and small businesses. It is a necessary and critical complement to the National Energy Transformation Partnership.

By 2050, our aspiration is that all homes and small businesses will be resilient, their energy costs are affordable and fossil fuels will no longer be used for heating, cooling, hot water, cooking and transport.

As the Consultation Paper makes clear the benefits of a National Energy Performance Strategy are:

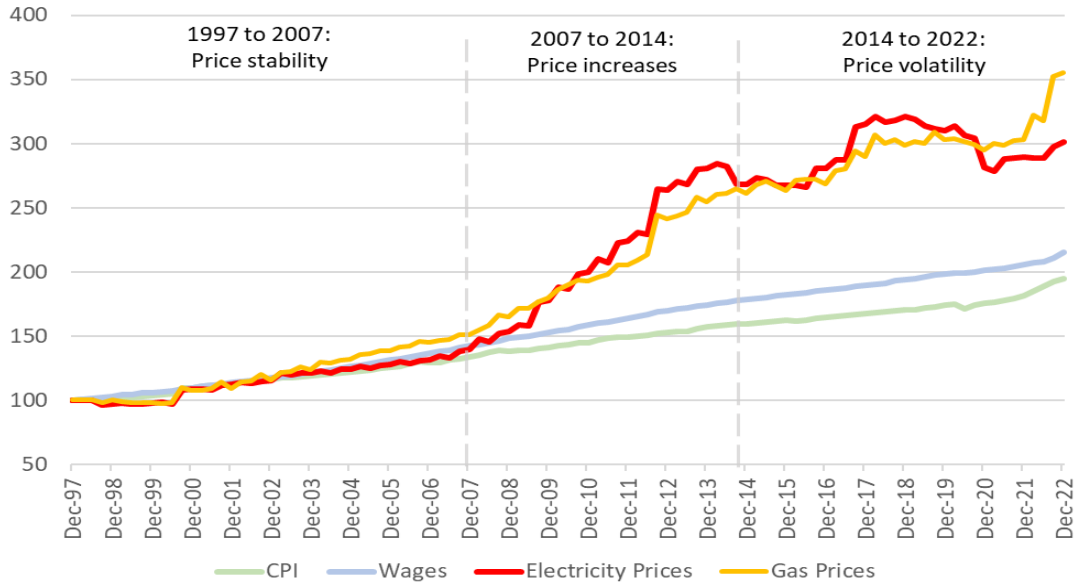
- lowering household and small business energy costs;
- improving the health and well-being of individuals and the community, and closing the gap in the energy divide;
- reducing emissions; and
- a least cost energy system, that takes full advantage of reshaping energy demand to reduce the size of the investment required in large-scale, long-lived generation, network and storage assets.

The case for a National Energy Performance Strategy

The affordability challenge

Retail electricity and gas prices are again rising, after remaining high for most of the past decade (Figure 1).

Figure 1: CPI growth, wage growth and electricity and gas price changes (December 1997 – December 2022)



Source: ABS, ECA analysis.

Note: Figures have been normalised to 100 in December 1997 to compare growth in each figure since December 1997.

The National Energy Transformation Partnership, together with state and territory government plans and roadmaps, commits to building the infrastructure needed to accommodate a 100% renewable energy system at pace. While this will result in downward pressure on wholesale electricity prices over the medium to longer term, it is clear that the additional investment needed in transmission and distribution network capacity, as well as firming resources, means that it is likely that retail prices could remain at historically high levels for the next decade.

Since being established in 2015, Energy Consumers Australia has conducted bi-annual Energy Consumer Sentiment surveys with the addition of an annual Energy Consumer Behaviour survey in 2021. This research tells us that consumers want a transition to a clean energy system, however, their primary concern remains affordability for themselves and other Australians.

Affordability is consumers' top priority, with 49% of households telling us that affordable energy for all Australians is the most important issue in the energy transition. Nearly all Australians are concerned that electricity and gas will become unaffordable for some in the next three years.

- From 2006 to 2020, 18–23% of households in Australia experienced energy stress.
    - Low-incomes, renters, and those with a long-term health condition or disability are particularly vulnerable.
- The Health of the NEM 2022 report indicates hardship customers use more energy on average than other groups, due to challenges investing in CER or energy efficient home improvements
- Energy customers are holding more debt for longer.
- Small businesses have seen energy costs increase in the last two years and will struggle to absorb any future energy price rises.

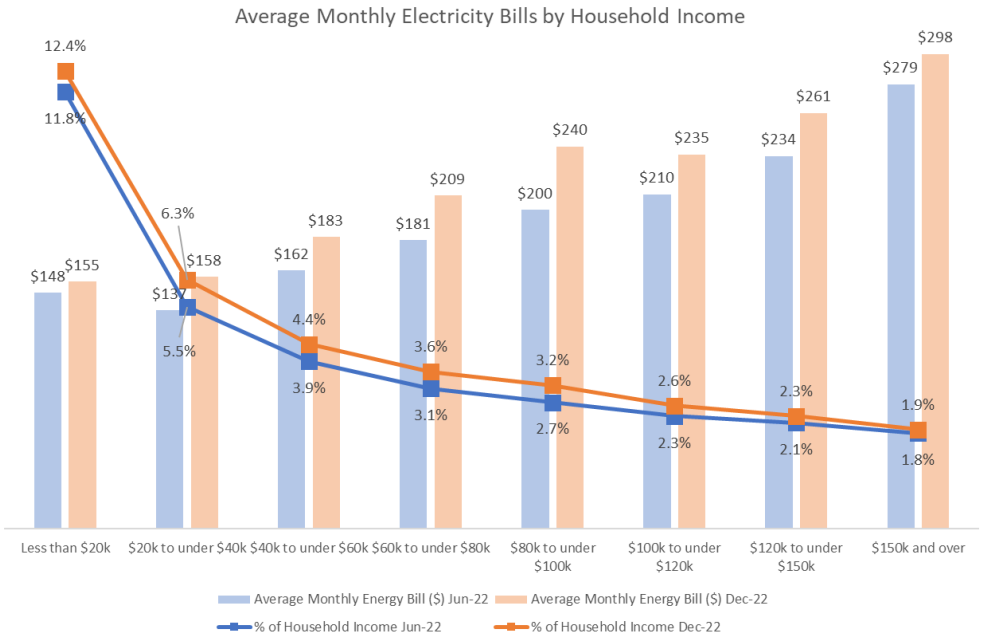
People's confidence that the market is working for them has declined – our last Energy Consumer Sentiment Survey indicated that only 35% of households believe the market is acting in their long-term interests, down 10% from June 2021.

Households' confidence that they have the tools to manage their energy use has seen a decline over the past 18 months. For people under financial pressure, their confidence that they have the advice, information and tools to engage in the market was significantly lower. Only a third of household seeking help from their retailer from bills stress say the help they received was not helpful.

The energy divide is stark. As Figure 2 shows half of all households (above median income) are paying between 2-3% of their household income on electricity, while the remaining half are paying between 3-12%. Those with efficient homes, solar on their roof and a battery and electric vehicle in the garage have more choices in how they meet their energy needs and interact with the system.

Those who rent – around one third of all Australians households and most small businesses – and those who live and work in shared buildings have fewer options and are likely to continue to experience the highest electricity costs.

Figure 2: The energy divide



Source: Energy Consumer Sentiment Surveys, June and December findings

Reshaping demand

Reshaping demand from households and small businesses places them at the heart of the system, as they way they use, generate and store energy has implications for the system as a whole.

The demand side of system design has not always been given equal weight with the supply side in policy and market decisions. However, our capacity to achieve affordable, reliable, and clean energy will depend entirely on what people do at home and at work – that we invest in renewable and more efficient appliances and equipment in our homes and businesses, that we change our energy practices and habits to align with times when energy is abundant and when it is scarce, and that we electrify our homes and businesses.

Incorporating demand side flexibility into our system will require a better understanding of when, where, and why people use energy.

The households and small businesses which make up our system are diverse. This diversity is a strength, not weakness, of our system. The system doesn't need everyone to shift their load at the same time. What we need is for some of the people some of the time to shift their consumption. A household with two adults who work from home may find it easy to shift their consumption to the middle or the day, using less in the evening, and they should be rewarded for this. Whereas a family of four with young children who need to be bathed, fed, and entertained between 4-6pm every night may not be able to shift their consumption but shouldn't be punished for this. Instead, our energy system needs to be designed to take this diversity into account by offering a variety of services, tools and rewards that suit different motivations, ability and opportunities. In order to incorporate demand side flexibility into our system, we need better understanding of what measures (programs and/or incentives) help consumers take action, platforms to share what works, and mechanisms to track success.

The National Energy Performance Strategy is being developed at a time when a majority of Australians are worried about their energy bills, are losing confidence that the market is working, and expect – with good reason – the situation could get worse. To keep bills affordable, people will need to undertake complex, onerous, and often expensive changes to their homes and change the energy habits of their household or business in response to the frequent periods of abundance and scarcity. We need to start equipping households and small businesses with the tools and information necessary for them to be able to adapt to an energy system, in which a house or small business which is able to maintain a comfortable, healthy and safe environment despite outside weather with little need for additional heating/cooling gives consumers back some control over their bills. Energy performance along with electrification are essential tools for households in managing their bills and maintaining a safe home.

Designing for diversity will require recognising that a significant number of consumers face substantial barriers to engagement. Renters, those on low-incomes or consumers living in apartments cannot easily improve the energy performance of their homes; online tools and advice are not easily accessible by the 1 in 4 Australians who are digitally excluded and small businesses are not sure how to manage the transition to net zero and what that means for their business. Accounting for these diverse barriers must be an essential part of the Strategy. Without support, those consumers who can't access the tools they need to adapt their behaviour and energy consumption will be left with higher bills and potentially dangerous homes or businesses. A key objective for the Strategy must be that no-one is left behind – an explicit goal should be that by 2050 no Australian should be living or working in a building that is too cold or too hot, not insulated and paying disproportionately high energy bills.

Helping consumers become more flexible in their demand for energy can help bring down overall system costs for the transition. Electricity networks make up the highest costs in consumers' bills. This is because networks must be built to accommodate the highest peak of electricity demand, even though this may only be one day out of the year. This means most of the time there is additional spare capacity that goes unused, despite consumers paying for it. Increasing flexibility in demand will help reduce the need for additional infrastructure to be built to cater for peaky demand. This will in turn lower consumers' bills and reduce the strain on the system during peak times reducing the risk of outages.

Delivering a trusted market will require changes to the governance of the energy system. We consider there is a need to build contemporary institutional architecture that better aligns with the energy market and supports coordination and collaboration between all levels of government and across relevant portfolios. We strongly support setting clear, tangible, and timely targets to track progress and feed back into system design processes. We recommend the establishment of a mechanism along the lines of the COAG Reform Council to improve reporting and accountability for supply and demand side targets, and how they are reducing system costs and energy bills.

The National Energy Performance Strategy should be seen as the critical complement to the National Energy Transformation Partnership, providing the plan that outlines how we will achieve the demand side/consumer behaviour changes required, builds confidence from consumers and industry that they are making the right investments, and engages with the concerns and questions of consumers as they make these changes in a timeframe that may not be in their control. The National Energy Performance Strategy addresses a longstanding gap in the energy system, providing the other half of the solution to a fair and orderly transition. Consumers will participate if assisted but need reciprocity from a market they can trust.

Response to the issues raised

Energy Consumers Australia has responded to the issues raised in the Consultation Paper in the three sections in this submission. Each section contains recommendations.

- Governance
- Targets
- Supporting consumer participation

The Consultation Paper raises the critical issues of local supply chains and workforce, which in the time available we have not been able to respond to in any detail, though we do address the issue of financing. To underline the importance of these issues, a simple calculation that assumes that every Australian home invests $50,000 in the period up to 2050, means combined investment of $500 billion. This investment could include smart appliances (replacing the current analogue versions); switching from gas to efficient electrical appliances; retrofitting adequate insulation; electrical rewiring that could be associated with installing digital meters and electric vehicle charging; and for those with the means and opportunity rooftop solar systems and batteries on-site.

As part of our submission, we are also including two reports.

The first is a report, that we commissioned from KPMG to consider the system enablers of demand flexibility, which we see as warranting separate and detailed consideration from improving the energy efficiency of buildings and appliances, or the shifting (either by habits or programming) of charging hot water, electric vehicles or batteries to periods of the day when electricity is abundant and cheap.

The second is a report, "Engaging households in electricity flexibility – insights from the UK," by Dr Mike Roberts from the Collaboration on Energy and Environmental Markets at University of New South Wales. It investigates policy and best practice in the UK for encouraging household electricity flexibility. Dr Roberts received funding from the Grants Program at Energy Consumers Australia to travel to the UK and conducted 40 interviews with academics, industry stakeholders, and consumer advocates, upon which this report is based.

2. Governance

Recommendations

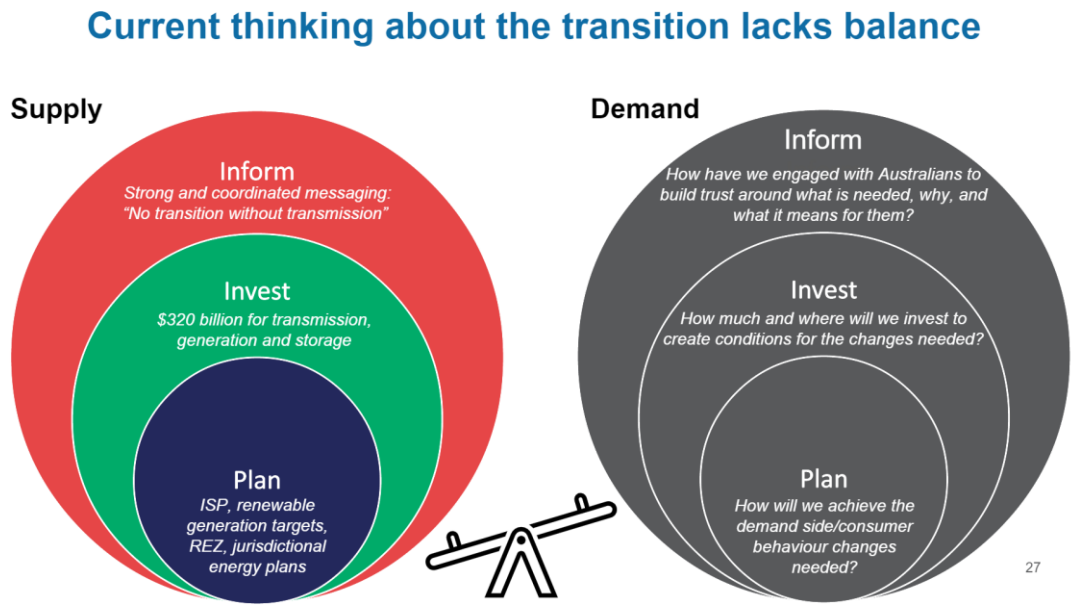
1. The National Energy Performance Strategy (the Strategy) should articulate consumer outcomes – what will be delivered for Australians in their homes and businesses, and how it will help them manage their energy bills and energy use.
2. A new institutional architecture is required to integrate energy performance into energy system governance, which should be built through a hierarchy of legislation, regulation, overseen by an intergovernmental agreement.
3. Reforms to the governance framework should include:
    - an overarching objective acknowledging energy performance as 'the first fuel', and obliges decision-makers to prioritise demand side opportunities wherever appropriate in system planning and regulatory decisions;
    - establishment of an annual Energy Performance Statement of Opportunities;
    - prioritisation of initiatives and programs to support demand flexibility;
    - establishing a mechanism that reports publicly and annually to Energy Ministers on the targets set by the National Energy Performance Strategy and the National Energy Transformation Partnership. We recommend the Government consider the COAG Reform Council as a model for robust, appropriately resourced reporting; and
    - as an interim step, we recommend that the Strategy assigns an obligated organisation responsible for monitoring progress against a Strategy target.
4. The Strategy commits to coordination and collaboration with all levels of government, including consideration of mechanisms to support community-based energy performance programs and share knowledge, learnings and resources about effective programs.
5. The Strategy should consider how to identify and amend existing legislation and rules that present barriers to improved energy performance.

The National Energy Performance Strategy (the Strategy) is a critical complement to the National Energy Transformation Partnership.

The Strategy addresses a longstanding gap in energy policy and market design, delivering demand side initiatives that represent the other half of the solution to a fair and orderly transition, as well as a roadmap to embed consumers' interests and assets into energy system decision-making.

The National Energy Transformation Partnership delivered a welcome and necessary reset for intergovernmental collaboration to support more efficient investment and planning; our ambition is that the Strategy will deliver a comparable commitment to collaboration across all levels of government to embed consumers and energy performance in decision-making.

Figure 3: A balanced transition



Source: Energy Consumers Australia, 2022

As illustrated in Figure 3, the work done by governments and market bodies as coal-fired power generators exit the market has produced various national and state plans to navigate challenges to reliability and security of supply. We have not however undertaken the same depth of analysis and research to understand how energy performance - energy efficiency, fuel switching, load shifting and behaviour change - can support the energy transformation.

The National Energy Performance Strategy is therefore a timely correction. As electricity consumption and maximum peak demand are forecast to grow significantly in the next 30 years[1], energy performance becomes critical to avoiding expensive investment in generation and networks, providing consumers with the tools to manage and reduce their energy bills and usage, and achieving Australia's emissions targets.

Articulate consumer outcomes

A good strategy makes clear its intended outcomes. Because the National Energy Performance Strategy is focusing on people, in all their diversity and complexity, we recommend that its outcomes be framed in terms of what it will deliver for Australians, and not the enablers or processes it will create. System metrics will of course continue to be important, but success in this strategy will be realised when people are making decisions on their energy use that are delivering good outcomes for their households and businesses as well as the system. So metrics should not just be how many kilowatts are saved, but how much bills go down, or how many people felt confident to change their behaviour.

The following are the outcomes for households and small businesses that we would like realised through the Strategy.

- People are living and working in energy efficient homes and business premises that are powered by affordable and clean energy.
- All consumers can easily engage and respond, tailored to their individual needs and preferences.

[1] AEMO 2022 Electricity Statement of Opportunities

- All consumers know how to find advice, information and tools to help them manage their energy use and energy bills.
- Energy performance and consumer energy resources are considered in system planning, and consumers are adequately rewarded when their assets and behaviour deliver system benefits.

Recommendation 1: The National Energy Performance Strategy should articulate consumer outcomes – what will be delivered for Australians in their homes and businesses, and how it will help them.

New Institutional architecture is required

The following outlines Energy Consumers Australia's response to the questions posed in the consultation paper.

- How can demand considerations be better integrated into Australian energy governance and what are the priorities for change?
- What new or modified coordination mechanisms or institutional responsibilities would be appropriate to better drive energy performance action in the future?

We see a need for contemporary architecture that affirms a commitment by national and jurisdictional governments to a national and integrated energy transition that leaves nobody behind and outlines a shared vision of consumer participation.

The current legislative and regulatory regime does impose obligations on decision makers to consider consumers.

- The Australian Energy Market Agreement (AEMA) includes an objective (clause 2.1 (b) (iv)) to enhance the participation of energy users in the market including through demand side management and the further introduction of retail competition, to increase the value of energy services to households and businesses".
- The National Energy Retail Objective, National Electricity Objective and National Gas Objectives direct market bodies to act in the long-term interests of consumers.

However, as is acknowledged in the consultation paper, those obligations have not been sufficient to give equal weight to supply and demand: we have not invested in understanding the diversity of consumer needs, or how consumer assets and behaviour can support the system.

The Australian Energy Market Agreement (AEMA) sets out the legislative and regulatory framework for Australian energy markets. It was signed in 2004 and was last amended in 2013.

The energy market of 2023 is fundamentally different from that of 2013, and it is continuing to change. New technology – digitalisation and the move to renewable and decentralised generation – as well as decarbonisation of the energy sector have challenged the regulatory and legislative framework. At odds with national and jurisdictional policies, AEMA objective (v) provides a commitment to further increase the penetration of natural gas, particularly to regional Australia, with the aim of lowering energy costs and reducing greenhouse emissions.

That the current architecture does not reflect the evolution of the energy system is understood within the sector, as was acknowledged by Gilbert and Tobin *Energy Regulations and Markets Review* (2021).

"Participants across the energy sector have long realised that these changes are not well supported by current market and regulatory designs, which are fundamentally premised on a legacy model of generation location and technologies."[2]

While there are anomalies in the current regime, we believe the governance structure underpinning the National Energy Market provided sound scaffolding for its creation and growth - national legislation and rules that are overseen by an intergovernmental agreement that outlines the respective role and responsibilities of Commonwealth and State and Territory governments, and those of market bodies.

We see value in continuing a hierarchy of intergovernmental agreement, legislation and rules, but a review is required to ensure it is supporting the integration of the demand side into decision-making.

Recommendation 2: A new institutional architecture is required to integrate energy performance into energy system governance, which should be built through a hierarchy of legislation, regulation, overseen by an intergovernmental agreement.

The following recommends specific changes to the governance framework.

Obligation to consider energy performance first

Improving energy performance is imperative to achieving what we are calling a 'least cost, most participation system'. Least cost represents the supply side of the equation – that decisions about building assets, their location and operation should minimise costs wherever possible, and system planning should maximise asset utilisation. Least cost also actively considers where consumer assets and behaviour can help reduce or shift demand and avoid unnecessary investment in long-lived and large-scale grid assets. Most participation means that consumers are willing and able to do what they can, in their own circumstances, to better manage their use.

To embed that approach in decision-making, we encourage the Government to consider the value of an overarching demand-side objective that requires decision-makers to prioritise energy performance as 'the first fuel'.

Moving from a broad objective to a clear obligation is critical – to be effective, it should mandate demand side opportunities to be prioritised where appropriate in system planning and forecasting, and decision-makers to actively consider energy performance. Examples of such an approach include the European Union's energy efficiency first principle which requires countries to consider energy efficiency solutions in energy system and non-energy sectors planning, policy and investment decisions. It is tied to an energy savings target, and has been effective in generating new and increasingly ambitious energy efficiency policy measures.[3]

We note the work underway to review the National Energy Retail Objective, National Electricity Objective and National Gas Objective to include consideration of emissions. We see an energy performance first objective as being separate to that process.

Recommendation 3: That the Strategy commits to an overarching legislated objective to underline a national commitment to energy performance as 'the first fuel', which obliges decision-makers to prioritise demand side opportunities where appropriate in system planning and regulatory decisions.

Improving system planning

The current lack of prioritisation of demand-side solutions is starkly reflected in the Integrated System Plan (ISP). The most comprehensive energy system plan in Australia fails

[2] https://www.gtlaw.com.au/insights/energy-regulation-markets-review-2021-edition
[3] Santini and Thomas, Regulatory Assistance Project: *Article 7 of the Energy Efficiency Directive 3.0* Nov 2020 https://www.raponline.org/wp-content/uploads/2020/11/rap-Article7_policy_brief_251120.pdf

to identify specific approaches required to enable a truly least-cost transition. The 2022 ISP's most likely scenario (Step Change) considers a "rapid consumer-led transformation of the energy sector", with over 22 TWh in annual energy efficiency savings by 2030 and 45 TWh in distributed PV generation within the period.

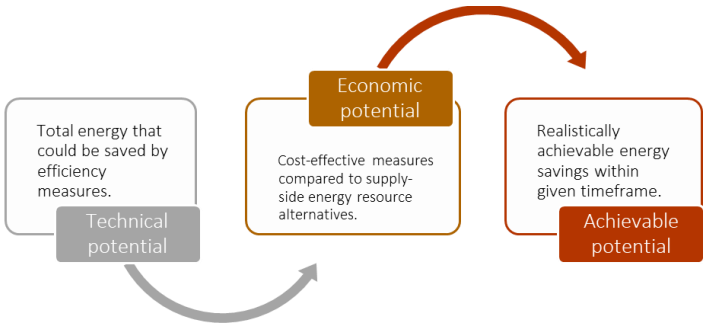
However, it does not identify the steps required to realise this ambitious transformation. There is no actual plan to make that happen.

For a truly Integrated System Plan with least-cost opportunities, we must have energy performance recognised as a high-priority resource in the ISP. This can inform targets, plans and priorities on the demand side.

Therefore, we support and echo the Energy Efficiency Council recommendation that governments establish an annual **Energy Performance Statement of Opportunities (EPSO)**. Analogous work is conducted in the US and referred to as Energy Efficiency Potential Studies. These potential studies include the investigation of technical, economic and achievable potential for energy efficiency measures (Figure 4).

An EPSO and its identification of energy efficiency targets could be incorporated into the GenCosts Report or used to improve the ISP's current forecasting assumptions for energy efficiency. The EPSO could disclose maps of efficiency potential for prioritisation of efforts and programs across residential, commercial, transport and industrial sectors. The EPSO could also provide sufficient evidence for a robust plan-based energy performance target that can be integrated into future updates of the Strategy. This would follow a more diligent process and methodological rigour to setting targets. In the absence of an EPSO-like approach, which is not uncommon in other countries, we also suggest below key targets that may inform the Strategy framework.

Figure 4: Energy Efficiency potential classifications



(Adapted from: *US EERE, 2020)*

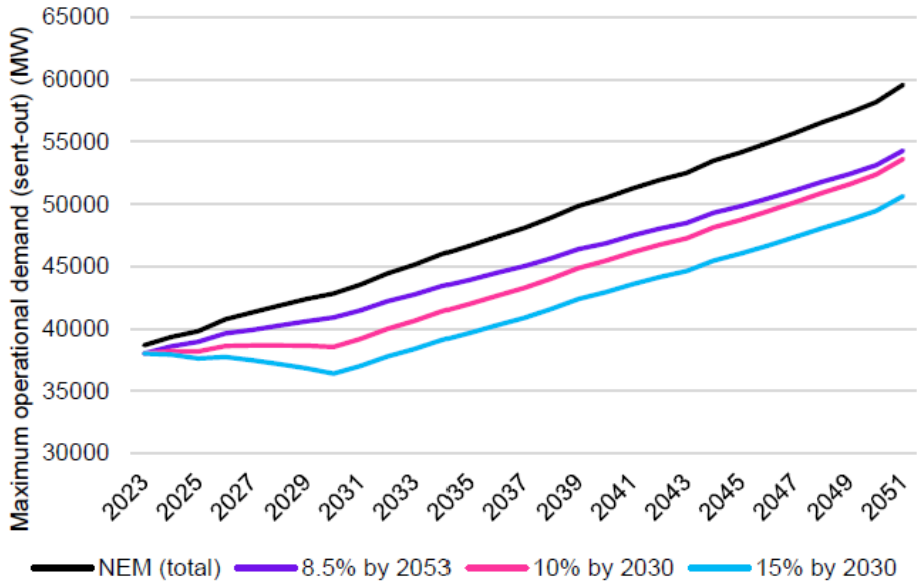
Enabling demand flexibility

We commissioned KMPG to provide advice on how the system could better support demand flexibility – where consumers reduce, shift or increase their energy use at or for specific times. That report is attached at Appendix A.

Demand flexibility is under-utilised currently but has tremendous potential benefits for both the energy system, as well as for individual households and small businesses, rewarding their investment and behaviour change.

It is used most often to describe how consumption can be reduced at peak times to lower wholesale prices or reduce congestion on the grid. KPMG's analysis notes the potential value of building demand flexibility as a reliable and established resource – Figure 3 below identifies the potential peak demand reduction that could be contributed by demand flexibility, of 8.5% by 2053 consistent with AEMO ISP forecasts, 10% by 2030 consistent with the NSW Peak Demand Reduction Scheme, and !5% by 2030, using international benchmarks.

Figure 5: Estimated peak demand reduction



(Source: KPMG report[4])

The KPMG analysis identifies 6 key enablers of demand flexibility which should be actively built into governance arrangements. Those are outlined in Table 1 below:

Table 1: Key enablers for demand flexibility

ENABLER	GOVERNANCE IMPLICATIONS
Integration into system planning	Market bodies should be required to consider energy performance as the first fuel and priorities demand side opportunities wherever appropriate
Technology capability	To ensure that we have the platforms to support consumer response, the Strategy should support • acceleration of the smart meter roll-out • unlocking CER benefits, including through the introduction of flexible trading arrangements
Information flows	Ensuring platforms and policies for consumers and regulators can easily capture and safely share relevant data, as well as interoperability standards that enable devices and appliances to easily engage in demand response programs and services.
Adequate compensation	Programs and policies that recognise and reward consumer assets and behaviour, rather than penalise people when they do not have the capacity or motivation to shift demand

[4] see attached report at Appendix A, Supporting demand flexibility in the energy sector transition, p 21

Clarity on responsibilities	The Strategy should acknowledge that current consumer protections are no longer fit-for-purpose[5], and the consequent need for a review that provides consumers with most agency, clear protections and rights across all energy suppliers, and access to effective dispute resolution. Government and regulators should be resourced and empowered to undertake research to identify where different consumers might have opportunities, or face barriers to engagement.

Recommendation 4: That the Strategy prioritise initiatives and programs to improve demand flexibility.

Responsibility for delivering and reporting on targets

We agree with other stakeholders that an important part of the Strategy must be that it monitors and reports publicly on progress on delivering energy performance targets.

Energy Consumers Australia proposes that the Government consider establishing a reporting mechanism similar to the COAG Reform Council (the Council)[6] which set a robust and rigorous reporting regime for a national reform program.

The Council provided independent and evidence-based monitoring, assessment and reporting on performance. It was independent of individual governments, funded by all, and reported directly to First Ministers. It reported annually against agreed performance indicators and benchmarks, reporting nationally but able to highlight contextual differences between jurisdictions.

The Council's Chair was appointed by the Commonwealth, a Deputy by jurisdictions and four members on the basis of their skills and expertise. Importantly, the Council was supported through a well-resourced Secretariat.

An Energy Transformation Council could be similarly established - through a partnership agreement with jurisdictions and the Commonwealth that reports annually to Energy Ministers (or the Energy and Climate Ministers Council) on the actions taken through the National Energy Transformation Partnership and the National Energy Performance Strategy. It is important that any reporting on progress should cover both the supply side and the demand side, together, rather than treat them separately. The partnership agreement should include an obligation to provide accurate and reliable data, and a framework that links performance indicators to outcomes.

The Energy Transformation Council's reports should report on progress, be public, and highlight good practice.

Recommendation 5: A mechanism should be established that reports publicly and annually to Energy Ministers on the targets set by the National Energy Performance Strategy and the National Energy Transformation Partnership. We recommend the Government consider the COAG Reform Council as a model for robust, appropriately resourced reporting.

Improving accountability for delivering on targets

Within the Australian federal context, there is no existing entity that can easily be given responsibility for delivering and reporting on all targets, given energy performance programs can be:

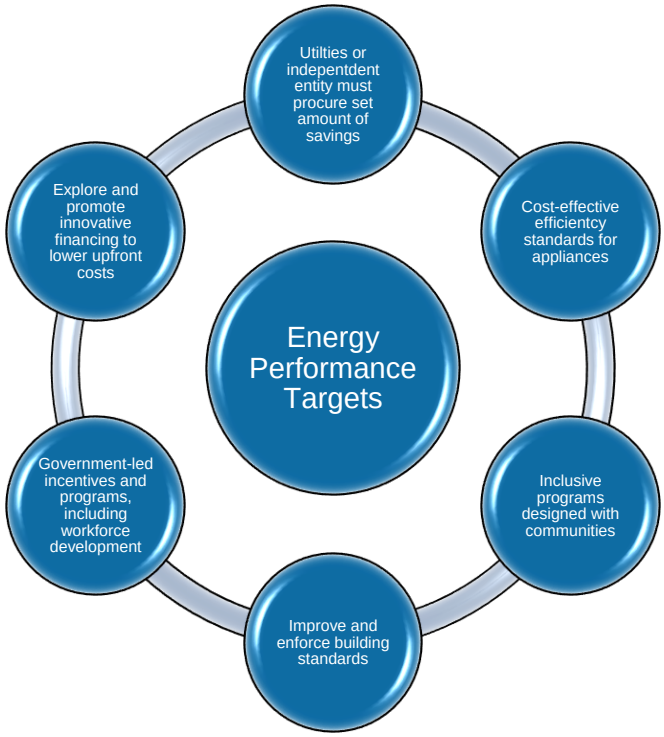
[5] See ECA submission on AER review of the Consumer Protections Framework at https://energyconsumersaustralia.com.au/wp-content/uploads/20221221_Submission-to-MFeather-on-AER-Review-of-consumer-protections.pdf

[6] See https://www.pc.gov.au/research/supporting/benchmarking-federal-systems/13-benchmarking-federal-systems-chapter11.pdf for more information about the mechanism.

- national, jurisdictional or local;
- delivered and/or initiated by government, energy companies, not-for-profit organisations, or other relevant intermediaries (e.g. banks or real estate agents); and
- developed and delivered by officials and companies that sit outside the National Energy Market (e.g. workforce development and building regulation).

The Consultation Paper recognises the range of activities that should be considered within the Strategy. In its 2022 State Scorecard, the American Council of Energy Efficiency identified the range of best practice policy tools and programs to scale up energy savings, summarised below in Figure 6. Responsibility for developing and delivering these sorts of programs can sit with different Ministers and departments, or across different levels of government.

Figure 6: Strategies for improving energy efficiency



Source: ACEEE 2022

There are a range of different models, internationally and in Australia, that can deliver accountability for driving and delivering energy savings.

- Oregon's Energy Trust is mandated to work on behalf of consumers to specify the annual and long-term levels of cost-effective energy efficiency that should be acquired as part of the integrated resource plan for each utility. The Trust is accountable for securing those savings through its programs and activities[7];
- California establishes a loading order that puts energy efficiency first, then renewables, then conventional energy, and established targets for energy efficiency programs. The State Energy Resources Conservation and Development Commission must establish annual targets for state-wide savings and demand reduction. The Californian Public

[7] See https://database.aceee.org/state/oregon

Utilities Commission has a range of incentive program and can undertake ex post verification of savings[8];

- UK Energy Company Obligation (ECO): regulated through OFGEM, the ECO has been in operation for some years, and has been successful in driving particular initiatives. OFGEM identifies priority measures and publishes monthly reports. ECO4 came into effect from July 2022 and obliges suppliers to promote measures to improve the ability of low-income, fuel poor and vulnerable households to heat their homes.[9]

Several jurisdictions overseas have implemented the model of an Energy Trust (see examples from Oregon and the UK) as a one-stop-shop provider of energy advice, support, efficiency programs and incentives to help consumers reduce their energy consumption and encourage the market to deliver better outcomes. Energy Trusts have an obligated mandate to manage energy efficiency procurement across sectors and can be funded either by networks (through energy consumers' tariffs) and/or governments. Their main purpose is to simplify the energy ecosystem for all consumers, centralising solutions and providing tailored, timely and trusted advice while improving accountability and compliance mechanisms. Again, this is one approach for effectively prioritising performance efforts at the demand side.

As we noted earlier, a strong performance reporting framework will be integral to the Strategy's success in delivering to its targets. That includes clear objectives and outcomes, as well as robust performance indicators and benchmarks.

Currently targets tend to be set at either a whole-of-system or whole-of economy level – such as in the ISP – or at for a particular program or initiative. That approach has not been effective in integrating energy performance into decision-making.

We see multiple potential benefits for consumers in establishing an entity like the Oregon Energy Trust, which can provide a robust evidence base on achievable and effective energy performance which can inform and adapt targets. We acknowledge that it is not a solution that can be immediately implemented.

We therefore recommend that the Strategy consider a transitional step, that ties an organisation – a Government department, market body or market participant – to a target, requiring it to report on demand-side targets, as well as drive the development and design of programs to achieve them.

Recommendation 6: That the Strategy improve accountability for delivering targets through assigning responsibility for each target to an organisation that must drive the development and design of programs to achieve that target, and report back through the central reporting mechanism noted above.

Engaging all levels of government

The Strategy acknowledges that there are important enablers to action – for example workforce development or rebates and concessions – that sit outside the remit of Energy Ministers.

As well as promoting intergovernmental collaboration, the Strategy should support cross-portfolio collaboration, to set whole-of-government (such as having all Australian homes renovated to a 5 star level by 2035) and whole-of system targets (such as setting emissions saving targets in line with Australia's international commitments).

As the Consultation Paper acknowledges, State and Territory Governments have been active in delivering policies and programs to help households and small businesses reduce their energy use, invest in energy efficient appliances, or upgrade their homes or buildings.

[8] See https://database.aceee.org/state/california
[9] See https://www.ofgem.gov.uk/environmental-and-social-schemes/energy-company-obligation-eco

Local government plays an important, but too often overlooked role in this space:

- promoting community-based programs to reduce climate emissions, such as energy efficiency upgrades, solar installations;
- providing advice to consumers on the actions they can take to reduce their energy bills or manage their energy use – see, for example, Zero Carbon Merri-Bek's Electrify Everything advice, based on solid consumer research;
- making planning decisions on new builds and renovations, including on the installation of solar panels and electric vehicle chargers;
- working with local tradesmen and builders, including in some jurisdictions providing certification of building upgrades; and
- sharing information and intelligence through networks such as Zero Carbon Merri-Bek's community of practice or the Cities Power Partnerships.

These community-focused programs have proven very effective in delivering improved energy performance of homes, and providing homes and businesses with tailored advice and information that has helped them manage energy use. Those programs can work with local community groups and networks, and accommodate differences (in housing stock or climate, for example) particular to a region or neighbourhood. Those are particularly valuable in rural and regional areas, where the energy, economic and social infrastructure to support a program can be widely variable.

- There are also existing local government networks, such as Zero Carbon Merri-bek's community of practice, the Australian Local Government Association and the Cities-Power Partnership, who are already sharing information around strategies and programs to assist their constituents.

We strongly support the Strategy's intention to build close collaboration with jurisdictions, and recommend it consider how it could engage with local government to help local government identify the most effective programs to assist their communities and consumers, and capture community initiatives and learnings to share with other jurisdictions.

Recommendation 7: that the Strategy commit to coordination and collaboration with all levels of government, including how it could support community-focused energy performance programs and share knowledge, learnings and resources about effective programs.

Review existing legislation and rules

We regularly encounter legislation and rules that can delay or even obstruct action to improve energy performance. Those can range from the AEMA's objective of promoting the use of gas in regional Australia, to local council planning regulations that use heritage regulations to obstruct household rooftop solar PV, or charging stations for electric vehicles.

They can throw up significant – sometimes insurmountable – inadvertent barriers to individual action, adding to cost and complexity for households.

We recommend that the Strategy include a commitment to review legislation or rules that are presenting barriers to improved energy performance. That review can be undertaken in a number of methods, including providing consumers with assistance and advice when they encounter such a barrier and being able to capture and report to government on the problem, or leveraging networks such as the Australian Local Government Association or the Cities Power Partnership to share information where planning regulations encourage perverse outcomes.

Recommendation 8: that the Strategy consider how to identify and amend existing legislation and rules that present barriers to improved energy performance.

3.Targets

Recommendations

6. The Strategy should set targets that deliver clear benefits to consumers. Targets should be purposeful, ambitious and measurable.
7. That the Strategy include two meta targets, to make explicit and embed its commitment to an inclusive and equitable transition.
    - **Meta Target 1:** All homes and small business premises in Australia are net zero by 2050, if not sooner.
    - **Meta Target 2**: Energy costs represent **a small and manageable proportion** of households and small business input costs, with the level being to be determined through consultation with consumers.
8. Targets should set priorities, fill knowledge gaps and address existing barriers. In designing targets, there needs to be an understanding of how they impact the diversity of consumers and/or address consumer needs, empower consumers to participate, and include measures that enable progress to be tracked.

    Suggestions for smart, measurable, achievable, relevant and time-bound targets:

    - Target 1 – Energy efficiency and demand flexibility are Australia's highest priority energy resources. There are specific savings goals and obligations for each sector (public, transportation, residential, commercial and industrial) and these are tied to an obligated organisation with the mandate to manage and procure efficiency and demand flexibility. This could also be directly related to emissions reduction objectives for each sector.
    - Target 2 – All new residential buildings are all-electric after 2030, and all Australian homes are fully electrified and insulated by 2040.
    - Target 3 – All homes have undergone a thorough assessment of their energy efficiency by 2033, including their energy performance improvement potential, and there is mandatory disclosure of energy efficiency ratings on point of sale or lease in place for all homes by 2025.
    - Target 4 - All premises are connected to smart meters by no later than 2030.
    - Target 5 – Renovations to improve energy performance have doubled by 2035 for residential buildings in Australia, with specific focus on the most impactful solutions that deliver comprehensive benefits across energy consumption and costs, indoor air quality, thermal comfort and wellbeing.
    - Target 6 – All existing homes below 3 stars in the NatHERS rating must be upgraded to at least 5 stars by 2035, and then to at least 7 stars by 2040. All homes in Australia will range between 8 and 10 stars by 2050, according to technical capabilities and cost effectiveness.
    - Target 7 – Demand flexibility is proactively procured with programs that offer incentives and suitable rewards to consumers in order to achieve between 10% to 15% reduction in peak demand across all mainland regions by 2050.
9. The Strategy should set and tracks targets that measure the range of co-benefits of energy performance, including reduced incidence of hardship, avoided emissions, workforce benefits and deferred system investments.

We welcome the Strategy's recognition of Australia's opportunity on demand-side action to enable the energy performance improvement we urgently need in Australians' homes and businesses. We agree that better energy performance delivers long-term and permanent cost reductions for consumers, supports emission reduction targets, improves the security of the energy system and improves health and comfort. Furthermore, demand-side actions to improve energy efficiency, enable electrification of buildings and transport, and empower consumers to benefit from load shifting and behaviour change are also among the least risk and most cost-effective solutions to ultimately reaching net zero.

We agree that setting clear targets is essential to spur action of energy performance measures, as well as to improve their effectiveness. Targets that are measurable and achievable, delivering benefits to consumers as well as to the energy system set a successful direction to achieve our net zero by 2050 goal through an efficient, reliable, flexible, modern, and — most importantly — affordable energy system for all Australians.

With this in mind, this section is divided into four subsections that outline our main recommendations and focuses on the importance of the Strategy in setting targets for improved energy performance.

Targets that deliver clear benefits to consumers

The Consultation Paper notes Australia's Paris Agreement commitment to reduce emissions by 43% by 2030 and the government's overall target of a net zero whole-of-economy by 2050.

Limited tracking of success and monitoring progress, however, prevent us from knowing how far we are from reaching these targets. Buildings account for about a fifth of those emissions, yet the responsibility for delivering is spread across national, State and Territory and local governments.

Energy Consumer Australia's starting point is that by 2050 we cannot still have Australians living and working in poorly or uninsulated, very cold —or very hot— buildings, spending too much on energy and having their health and wellbeing impacted by poor indoor air quality.

The targets in the Strategy should mitigate the deepening energy divide and commit to an energy transition that leaves no one behind. Homeowners of separate (free standing) homes invariably find it easier and more cost-effective to improve the energy efficiency of their homes, fully electrify and install distributed generation and storage to reduce their overall energy consumption and save on bills.

The other half of Australians households face discouraging barriers to take part in the energy transition, conflicting messages and serious disincentives to act, which will lead to increasingly higher bills. To this end, the Strategy must ensure energy performance is a whole-of-community effort towards net zero homes and businesses that deliver benefits for all Australians.

Recommendation 9: The Strategy should set targets that deliver clear benefits to consumers. Targets should be purposeful, ambitious and measurable.

Commitment to an inclusive transition

The Strategy needs to provide a pathway to a net zero future for all Australians, not just those who have the means and capacity to improve the energy performance of their homes and business premises.

Therefore, we suggest that the Strategy considers as a meta target:

Meta Target 1: All homes and small businesses in Australia are net zero by 2050, if not sooner.

On the affordability aspect, we draw attention to the fact that a meta target for net zero homes and small businesses by 2050 doesn't necessarily mean energy efficient, affordable, healthy, comfortable, and flexible homes and businesses not until 2050.

Our research tells us that households above the median income level of $92,872 spend between spend 1.8% and 2.7% of their income on electricity bills. Those below the median income, however, are currently paying between 3.1% and 12.4% of their income to electricity costs. Fuel costs for transportation have reached a national average of $100 per week in 2022, which represents 5.6% of the median income.

If the Strategy is successful in improving Australia's energy performance by encouraging energy efficiency, load shifting, electrification and behaviour change, this is an achievable meta target that will undoubtfully deliver major benefits to consumers by reducing energy costs and freeing disposable income for other important needs and wants.

A complementary meta target that reflects energy affordability could be coupled with the net zero meta target, as suggested below.

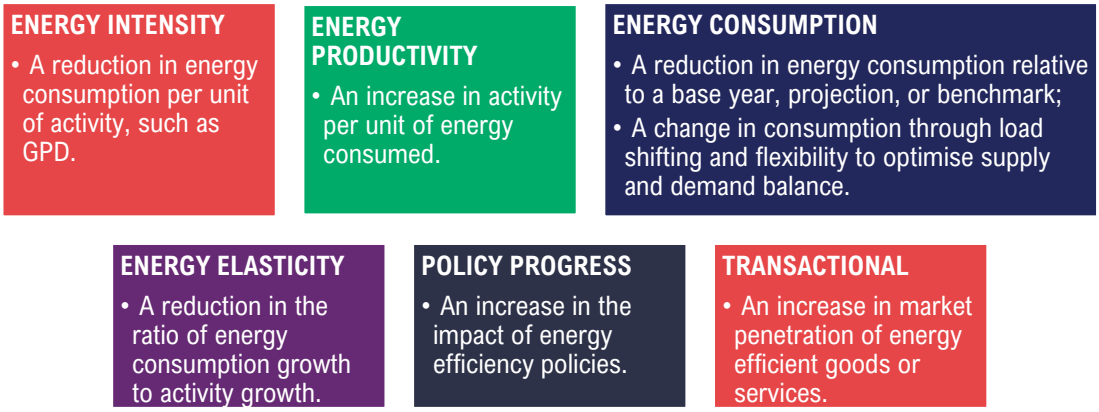
Meta Target 2: Energy costs represent a small and manageable proportion of households and small business input costs

To deliver those overarching targets, the Strategy should consider smaller, tangible, and action-oriented targets that can be delegated appropriately to a responsible entity. The Strategy could benefit from a common yet very useful approach: the "SMART" framework for Specific, Measurable, Achievable, Relevant, and Time-Bound targets.

In this section we make several suggestions on SMART targets that can be incorporated into the Strategy. Clearly defined targets should be intentional, purposeful, ambitious and aim to deliver system and consumer benefits altogether. Targets are critical enablers of the sustainable and net zero future we envisage and must play an important role in scaling up the market, the workforce and the innovation in products and services needed to meet everchanging consumers' needs.

The International Energy Agency (IEA) suggests six categories of energy efficiency targets that can be directly broadened to performance measures: energy intensity (including fuel-switching outcomes), energy consumption (which can encompass demand flexibility and load shifting), policy progress, energy productivity, energy elasticity and transactional targets. We expect that the Strategy considers all these options, as seen in Figure 7, when defining more specific targets. More importantly, such targets should be able to be directly transposed into actions for specific geographic regions or economic sub-sectors. Additionally, as we experience the many changes in our energy system in the next decades, targets in the Strategy should be updated to consider the supply/demand balance, i.e., if we continue to see the early retirement of coal power plants, how can energy performance on the demand side further contribute to energy security, reliability and affordability?

Figure 7: Energy performance target categories



(Adapted from IEA,2017)

Recommendation 10: That the Strategy include two meta targets, to make explicit and embed its commitment to an inclusive and equitable transition.

The role of targets

The targets in the Strategy should consider that energy performance improvement on the demand side is not a voluntary action; it's an imperative and systemic approach to achieving a least total-system-costs energy system.

The design of targets should recognise their impact on consumers, and how that may differ across different types of households and small business. They should acknowledge the different needs of consumers, and support consumer engagement. Targets should be measurable.

Recommendation 11: Targets should set priorities, fill knowledge gaps and address existing barriers. In designing targets, there needs to be an understanding of how they impact the diversity of consumers and/or address consumer needs, empower consumers to participate and include measures that enable progress to be tracked.

The targets in the Strategy should consider that energy performance improvement on the demand side is not a voluntary action; it's an imperative and systemic approach to achieving a least total-system-costs energy system. This is consistent with the efficient and prudent investment/operation of the energy system in the long-term interest of energy consumers. Additionally, since Russia's invasion to Ukraine, energy efficiency and demand flexibility have gained a lot more relevance as supply security strategies, especially in Europe. Consequentially, we recommend the Strategy adopting a first target that prioritises energy performance improvement as a resource to be procured[10], along the lines of:

[10] *Similar recommendations are in place in the US through the National Action Plan for Energy Efficiency, in which energy efficiency is a high-priority resource, and the lowest-cost system resource compared to supply-side investments.*

Target 1 - Energy efficiency and demand flexibility are Australia's highest priority energy resources. There are specific savings goals and obligations for each sector (public, transportation, residential, commercial and industrial) and these are tied to an obligated organisation with the mandate to manage and procure efficiency and demand flexibility. This could also be directly related to emissions reduction objectives for each sector.

Electrification of homes

Committing to energy efficiency and improved performance through the law is the first move Australia needs to enable a major overhaul of our energy system. Saving energy via demand-side energy efficiency programs can be achieved at up to half of the cost of large-scale solar and wind supply alternatives, besides directly reducing greenhouse gas (GHG) emissions, lessening peak demand and absolute values of network losses, and enabling power bill savings and many other benefits to consumers. The IEA 2022 Energy Efficiency report restates that "energy efficiency action is the unambiguous first and best response to simultaneously meet affordability, supply security and climate goals".

Another important aspect of the energy transition that is tied to energy efficiency prioritisation is electrification. Electrification is a form of energy efficiency when it saves energy, money, and reduces overall emissions, and the Strategy identifies both as measures for improved energy performance. Electric vehicles, for instance, are roughly three times more efficient in converting energy into motion than as a conventional internal combustion engine (ICE) vehicle. Electric heat pumps for space heating or water heating can use less than one-third of the energy (of an efficient gas furnace or gas water heater) to harness the same amount of heat. Most gas appliances can be substituted for electric ones with significant gains on efficiency and reduction on operation/maintenance costs. Upfront costs for electric appliances are also declining. Despite the uncertainty about the gas future in Australia, the 2022 Gas Statement of Opportunities produced by AEMO projects that only 22% of current residential and small business gas consumption still exists in 2050.

Particularly for the residential sector, the latest Multi-sector energy modelling 2022: Methodology and results: Final report, produced by CSIRO and Climateworks to inform AEMO on inputs, scenarios and assumptions for energy forecasting and system planning, estimates that in all but one scenario (Green Energy Export) there is a very small amount of residential natural gas consumption remaining in 2050, making up between 1% and 6% of final energy demand in NEM-connected states. It should be noted that their modelling doesn't consider costs associated with maintaining gas distribution networks, which would be "an important consideration in determining the economic feasibility of maintaining blended gas networks under scenarios with low gas demand, and therefore low utilisation of the gas network".

It is very likely that gas consumption in residential homes will happen at prohibitive costs for those consumers unable to electrify and still reliant on the gas network in the future. To this end, supporting building electrification and energy efficiency remain the most cost-effective decarbonisation pathway for residential buildings and the most affordable option for consumers in the long run.

Therefore, we strongly recommend a review of the Trajectory for Low Energy Buildings – Residential Initiatives, to explore building policies and supporting measures to accelerate electrification as an efficiency measure. To mitigate the risk of increasingly high gas network costs for residential consumers, the Strategy should set a target to electrify all homes in Australia by 2040. This can be complemented by the recommendation to require all new residential construction to be all-electric after 2030.

Target 2 - All new residential buildings are all-electric after 2030, and all Australian homes are fully electrified and insulated by 2040.

Understanding the energy performance of existing homes

Secondly, the Strategy should address major knowledge gaps on the demand side and build the foundation and evidence that will support tracking progress towards better energy performance. One of the reasons for Australia's inaction and inertia with respect to demand-side energy performance is the lack of data about the energy efficiency of existing homes, including whether major renovations are improving energy performance.

The CSIRO's Housing Data Portal has over a million NatHERS certificates for new dwellings, but only just over 50,000 certificates for major renovations and existing dwellings. Moreover, even new homes that should be compliant with NatHERS minimum requirements are not wholly audited after construction, with research indicating loopholes that allowed builders to sidestep energy efficiency requirements in the past. Thus, we would support the Energy Efficiency Council's call to prioritise creating a database of residential energy performance – critical enablers to that include requiring owners to obtain an energy performance rating on sale or lease of a home or business premise, as has been longstanding practice in the ACT.

Target 3 – All homes have undergone a thorough assessment of their energy efficiency by 2033, including their energy performance improvement potential, and there is mandatory disclosure of energy efficiency ratings on point of sale or lease in place for all homes by 2025.

Complete the rollout of smart meters

Smart meters are a critical enabler to improved energy performance, facilitating services and technology that will help consumers understand their energy consumption and options for energy performance improvement.

Target 4 - all premises are connected to smart meters by no later than 2030.

Incentivising retrofitting existing homes

The Strategy should set targets that rightfully acknowledge and address existing barriers. Energy-related retrofit and renovation rates for Australian homes are not keeping up with the urgency needed to decarbonise. The latest Building Activity Release from ABS (September 2022) indicates that current renovation rates to residential buildings have been declining in line with cost of living pressures and supply chain constraints and comprise only 4.3% of the total value of building works done in Australia.

While the opportunities for significant household and societal benefits from residential energy efficiency retrofits are immense, the upfront costs of upgrades are very difficult for many homeowners to realise on their own. Our 2022 research on Australians' perceptions of housing energy efficiency indicated that only a relatively small amount of households were considering investment in energy efficient appliances or upgrades to their homes.

Furthermore, outright homeownership has also declined considerably and is likely to continue to do so, with more homeowners in debt with mortgages for longer (nearing retirement age), with potentially significant impact on household disposable income for investments on energy performance.

The EU Renovation Wave aims to double annual energy renovation rates for buildings until 2030. We believe that this is possible in Australia too with the right incentives and subsidies.

> *Target 5 – Renovations to improve energy performance to double by 2035 for residential buildings in Australia, with specific focus on the most impactful solutions that deliver comprehensive benefits across energy consumption and costs, indoor air quality, thermal comfort and wellbeing.*

A clear pathway for homeowners

To ensure that energy performance is considered at critical points of intervention, the Strategy must focus on reducing transaction costs and potential friction for people to undertake energy-related upgrades. Specific enabling measures, such as requiring all major home renovation approvals (from council and financing/mortgages) to consider where there is potential to improve energy performance through a subsidised energy audit, can be useful. Alternatively, having specific government programs and incentives that encourage the replacement of major appliances (electrification and heating/cooling) and the installation of insulation with higher R-values can deliver significant benefits, especially for the worst-performing buildings.

Setting specific and gradual targets across the entire housing stock provides homeowners and landlords with time. Once we have mandatory disclosure of energy efficiency ratings in place for all homes, the Strategy can commit to enabling upgrades that will ensure the housing stock is future-proof by 2050. At the moment, Australia's minimum energy efficiency requirements are not set to cope with climate change and accompanying temperature extremes. Research has shown that 81.7% of housing is designed only to meet minimum standards, and 98.5% falls below the economic and environmental optimum.

There needs to be sufficient guidance and incentives (e.g., grants or low-interest financing opportunities) for builders, major developers, landlords and homeowners to seek above-Code requirements if we want to encourage net-zero buildings that can safely protect their occupants from the extreme weather events and temperatures we'll face by 2050.

Two common barriers that can overlap when it comes to improving homes' energy performance are the split incentive issue in rental properties and low-income households. Housing tenure in Australia has changed significantly in the last 20 years. The private rental sector is expected to continue growing over the coming decades, and the split incentive issue needs to be addressed with stronger regulations with respect to energy efficiency of rented dwellings.

Split incentives refer to the common rental situation where the person paying for renovations and energy efficiency upgrades (the landlord or building owner) is not the one receiving the benefits (the tenant). In these circumstances, the landlord may not be inclined to make the necessary upgrades to the dwelling, or renters may fear their rent will go up because of those upgrades. Adding to that, in the Australian private rental market, landlords generally overestimate the likely thermal performance of their rental properties and/or have little or zero knowledge about existing retrofit assistance schemes.

According to the AHURI Report 328 Australian home ownership published in May 2020, i.e., before the aggravation of the housing affordability crisis, cost of living pressures, and higher inflation and interest rates in 2021 and 2022, "there appears little chance of Australia sustaining home ownership at current levels. The [home ownership] rate is projected to decline by 2040 to around 63% for all households, and to not much more than 50%—down from 60% in 1981—for households in the 25–55 age bracket".

Low-income households are more likely to rent, and many can only afford to rent homes in the lower range of the market, where dwellings are usually of poor energy efficiency. While homeowners (without a mortgage) spend on average 3% of their income on housing costs, households with low income in the private rental market are more likely to be in housing stress, spending on average 32% of income on housing costs. In 2017–18, with nearly half (47.8%) of low-income households in greater capital city areas considered to be in rental stress. Higher energy costs due to poor quality rental homes only add to cost-of-living pressure for those who have little or no agency over the energy efficiency of their homes and limited resources.

A mix of carrots and sticks will be needed. Ensuring mandatory disclosure of energy efficiency in all homes (Target 3), encouraging and providing incentives for energy efficiency renovations (Target 5) and setting minimum energy rating requirements (Target 6) will undoubtedly contribute to shifting the precarious situation of rented dwellings in Australia. There needs to be a clear timeline and pathway that makes clear to landlords that they will not be able to rent out poor performing homes until they're upgraded to a certain level, e.g., they won't be able to rent out homes with ratings lower than 5 or 7 stars after 2035. That has been an effective spur to action in the UK. Landlords also need time, certainty, and guidance to conduct the required energy upgrade. Renters need their rights to good quality and energy efficient homes assured in tenancy laws. It's critical that landlords, renters and low-income households are properly supported throughout the process, with targets that relate specifically to their challenges. It may be that a specific proportion of NatHERS certificates is directed to rented and low-income properties every year, financial incentives for renovation may also be proportionally directed to these properties, and so on.

The Strategy should develop a clear timeline and identify the appropriate setting that provides tenants with an energy performing home that is affordable and healthy.

Finally, it often receives little attention but there are also opportunities to develop and promote manufacturing capability in Australia, to support energy performance improvements in our building stock, as well opportunities for growth in the workforce that is qualified to advise and instal on energy performance improvements and electrification.

We recommend the Strategy adopt the following:

> *Target 6 - All existing homes below 3 stars in the NatHERS rating must be upgraded to at least 5 stars by 2035, and then to at least 7 stars by 2040. All homes in Australia will range between 8 and 10 stars by 2050, according to technical capabilities and cost effectiveness.*

Designing for diversity

The Strategy should contain targets to understand and reflect the diversity of consumers' and sectors' needs and encourage consumer participation. Actions at the demand level represent half of the solution to the energy transition and, in this sense, demand flexibility can contribute considerably to reducing peak demand and ensuring supply security at all times. It is possible to incentivise and reward certain consumer behaviours to benefit the system at large. Whilst the previous targets addressed all homes and people, we note that behavioural-related targets need not to be all-encompassing. Nevertheless, there's limited research in Australia about what energy consumers value in regards to demand flexibility programs, how they wish to be rewarded, what their motivations are to take part in such programs, what capabilities and level of automation are required/desired, which consumers may be more or less able to participate and how we understand the social license aspect controlling consumers energy resources. Therefore, we strongly suggest that the Strategy supports a broad consultation and co-design process to understand consumers' needs, expectations, motivations, opportunities and abilities to participate in demand flexibility. This will ensure demand flexibility programs are successfully developed and implemented, which will ultimately result in a least-cost transition for all Australians.

We believe effective demand flexibility will be enacted by some Australians, at some specific occasions and for particular loads. It is important that the Strategy acknowledges that diversity and puts in place provisions for procuring that flexibility. The Draft 2023 Inputs, Assumptions and Scenarios Report (IASR) produced by AEMO and under consultation, for instance, assumes demand-side participation to represent up to 8.5% of peak demand by 2053 in its most ambitious Green Energy Exports scenario. Whilst this may be the best available data we have so far, we think the Strategy can support initiatives that will facilitate higher levels of demand flexibility, such as targeting 10% to 15% reduction in peak demand across all mainland regions[11].

> *Target 6 – Demand flexibility is proactively procured with programs that offer incentives and suitable rewards to consumers in order to achieve between 10% to 15% reduction in peak demand across all mainland regions by 2050.*

National targets should measure co-benefits

It is critical that the Strategy not only takes advantage of existing successful programs at the Federal, State, Territory and Local Government level, but aims to expand and multiply these. At present, States have varying schemes, targets and governance frameworks for their Energy Efficiency Savings programs.

Nationally consistent targets that coordinate initiatives, programs, incentives and subsidies at all government levels can leverage existing investments, showcase effective programs and promote benchmarking.

Common targets between States and across levels of government can foster collaboration between different portfolios and ensure that we are all heading in the same direction towards successful outcomes.

Additionally, the Strategy's intention to be a long-term commitment towards a national framework with shared targets can provide the governments and market bodies with the certainty needed to conduct the necessary regulatory reforms and develop long-lasting and ongoing programs to improve energy performance. Consequentially, market participants will be able to develop and mature new services and products.

As the Power Shift Multiple Impacts Framework outlines, improved energy performance can deliver several economic, environmental, societal and health benefits. Developed in 2017, that Framework identified where there existed robust measures of co-benefits, to encourage any cost-benefit analysis or regulatory impact statement to take account of the full range of benefits. Given the investment internationally in energy performance strategies, policies and programs over the past two years in response to the energy crisis caused by the war in Ukraine, it would be timely to review that Framework.

Thus, the Strategy's targets should include impact measures that take into consideration not only the avoided energy consumption and reduction in system's peak, in terms of energy efficiency and demand response savings, but also the reduction in customers' debt and energy poverty, the avoided greenhouse gas (GHG) emissions, the number of jobs created, the overall energy efficiency and demand response market development, and the savings associated with avoided network investment and reduction in network losses (total system's savings).

Recommendation 12: The Strategy sets and tracks national targets that measure the range of co-benefits of energy performance, including reduced incidence of hardship avoided emissions, workforce benefits and deferred system investments.

[11] *In the US, demand response programs can reduce peak demand an average of 10%, with some states reaching over 20%.*

4. Supporting consumer participation

Recommendations

10. Supporting consumers will deliver the Strategy outcomes – the Strategy should:
    - commit to building an inclusive, equitable and fair transition – no one is left behind;
    - design for diversity – recognise that different people face barriers;
    - build fit for purpose consumer protections – enshrine consumer agency, provide adequate protections and redress; and
    - Improve the participation environment – actively making consumer decisions easier.
11. The Strategy should support consumer participation through a plan that includes:
    - Well resourced public communications campaign
    - Finalising and deploying energy performance ratings tools covering all homes and small business premises
    - Creating a one stop shop to deliver independent and tailored assistance
    - Mandating the discolure of the energy performance of homes on sale or lease by 2025
    - Working with jurisdictions to mandate minimum energy performance standards for rental properties
12. Prioritising retrofitting social and community housing, recognising the significant detriment to those residents of energy inefficient homes and appliances.
13. Building on the Closing the Gap target and also addressing the consumer harm through inefficient and unhealthy housing, retrofitting First Nations social and community housing must also be a priority in the Strategy, undertaken in partnership with First Nations communities.
14. Developing financial incentives to support consumers to improve the energy performance of their homes and small business,
15. Focus on small business, including:
    - providing tailored advice and information to small businesses, to help them improve the energy performance of their operations and premises; and
    - working with jurisdictions and small business peak bodies to identify effective incentive and assistance measures that address substantive barriers.

Supporting consumers will deliver the Strategy's outcomes

The success of the National Energy Performance Strategy depends on the day to day decisions that households and small businesses will make. Those individual actions and choices in aggegrate impact systemic reliability and affordability.

Energy Consumers Australia supports a National Energy Performance Strategy that supports an inclusive, equitable and fair transition, designs for diversity, supports fit for purpose protections and improves the participation environment.

Building an equitable and fair transition

The Consultation Paper rightly recognises that improved energy performance benefits all Australians, putting downward pressure on bills, reducing system costs and future proofing our homes to adapt to climate change.

Our recommendation for a meta-target 1 (in Section 3) makes explicit that commitment that no one is left behind in the energy transformation, and that all homes and small business premises are net zero by 2050.

Barriers to participation can take a range of forms – we tend to focus on the individual's characteristics and circumstances (income, age, health, self-efficacy), but consumers face structural barriers as well, including product complexity, housing type and tenure, where they live, inadequate information and tools, consumer protections or dispute resolution.

The number of consumers who face those barriers is significant. Policy and program design must actively consider where consumers encounter obstacles in making a decision – that can be through their location, the type of house they live in, whether they own their house, or their individual circumstances, for example, income, literacy, age, household composition or mental health.

Box 1: The number of consumers likely to face barriers to engagement

We tend to assume that only a marginal number of Australians are at risk of exclusion, but we did a quick drill into our Energy Consumer Behaviour Survey dataset which revealed that **at least 82% of households are likely to face one or more barriers to participation.**

Our Energy Consumer Behaviour Survey collects some demographic data from respondents. We looked at the last ECBS to identify how many people:

- do not report they are financially comfortable: meaning that they can struggle to pay energy bills, and are less likely to be able to afford to invest in energy performance upgrades;
- rent their home, who cannot add solar PV or batteries, or improve the energy performance of their house;
- do not live in a standalone property, who face constraints to installing solar PV or batteries;
- live in rural areas: where the network can constrain consumer energy resources, and have trouble accessing tradies and materials; and
- who are older than 75: where they are more likely to be on a fixed income, and at home during the day, so can have limited capacity to shift their use.

This doesn't include metrics on other factors that can also throw up barriers to engagement (eg. people with poor digital literacy or access or CALD consumers).

Designing for diversity

Designing for diversity recognises that different consumers have different preferences, values and needs.

The Strategy must accommodate and plan for that diversity. We have found value in segmenting consumers who face similar opportunities (and barriers) utilising the Capability, Opportunity, Motivation, Behaviour (COM-B) model, which is embedded in our Power Shift Supporting Households Framework and for which we developed a Policy Makers Guide.

The *Supporting Households Framework* makes clear that people's motivation and ability to change behaviour or take action can change depending on the decision facing them – renters can't instal solar PV but can reduce their use at peak times; people with small children can't easily shift their energy consumption at bath and dinner time but might be able to schedule laundry during the day when energy is cheap; people living in uninsulated housing can't comfortably reduce their airconditioning on extreme heat days, and end up with higher bills.

Building consumer trust and confidence

Consumers have low – and declining - levels of trust and confidence in the energy market. Only 35% of households believe the market is working in their best interests. Our housing research indicated high levels of concern about housing quality and availability, shortages of materials and skilled tradespeople. Research participants talked about timeline and cost blowouts, and builders going bust.

The Strategy should work to build consumer trust and confidence through encouraging fit for purpose protections for consumers, which understands and incorporates diverse consumer needs and preferences. It has three foundational elements.

- The enshrining of consumer agency: people feel they can make decisions that benefit them and their circumstances.
- Consumer protections and rights.
- Access to free, effective and independent external dispute resolution.

Supporting consumer decision-making

The UK Behavioural Insights Team (BI Team) has developed a useful model to support climate change action that makes clear the interaction between system settings and individual behaviour, and aligns closely with the challenge in improving Australian energy performance.

Its "upstream-downstream model" acknowledges that:

> "Individuals make choices as a function of their preferences, knowledge, values and biases (downstream), within choice environments that exert profound influence due to the proximate effects of pricing, convenience, salience and norms (midstream), which exist as they do largely because of a system of commercial incentives, regulation, investment, infrastructure and institutional leadership (upstream)."[12]

Downstream means informing and encouraging people to take direct action *where they can* (our emphasis). It recognises that people have agency, and will make choices based on their perceived needs, values and capabilities.

Midstream requires altering the context for consumer participation - or what the BI Team calls the choice environment. As the report says, we too often expect people to swim against the current. Currently we are asking consumers to take action in a system that makes choice hard – through complexity, confusing and fragmented information, and services or products that don't reward the desired change or even punish "non-compliant" behaviour. We need to remove friction and make choices for consumers easier, more attractive, more socially normative and more timely.

Upstream works on incentivising business and government to create the best possible choice environment for consumers. That requires understanding and reviewing how the system incentivises inertia or creates perverse incentives.

[12] Behavioural Insights Team *How to build a Net Zero society: a guide for policymakers and business* p. 6 https://www.bi.team/wp-content/uploads/2023/01/How-to-build-a-Net-Zero-society_Jan-2023.pdf

How the Strategy can support consumers

Policies and programs to improve the energy performance of new and existing buildings tend not to recognise the diversity of household types and tenure, across locations, climates and generations.

The recent Productivity Commission report underlined generational differences, with a sharp decline in the number of younger Australians buying homes in recent years. It is unlikely that enough people buy a home in later life to make up that gap. Of the 2.9m households living in rental properties, 2.4m are in private rentals. Most rental properties are owned by mum and dad investors, who themselves can be on relatively low incomes – they are nurses, teachers or self-employed. About 79% of private rentals are managed by real estate agents, meaning landlords may not be aware of the experience of their tenants or that their homes are causing problems.

What consumers told us

ECA and Renew jointly commissioned research to understand how consumers are thinking about the energy performance of their homes, where they see benefits or encounter barriers, or what they thought about key policy proposals[13]. We initiated the research because too often it is assumed that information and advice is enough to incentivize action, and address what can be very significant barriers to action.

Key findings included the following.

The research found strong support for a range of reforms to improve energy efficiency, providing a solid foundation on which to build policy and programs.

- Support was high – over 70% - for a range of reforms including the move to 7 stars, improving energy performance when undertaking a major renovation, and retrofitting social housing.
- Mandating minimum standards for rental homes was supported by 70% of respondents, albeit with concern expressed about how costs would be passed through to tenants.
- And 66% of respondents backed mandating the disclosure of energy performance at time of sale or lease.
- The benefits of energy efficient homes are well understood.
    - People described energy efficient features in describing the ideal – good airflow, comfortable living temperatures with minimal energy use.
    - People also acknowledged the benefits for health, wellbeing and bill savings.
- Only a minority of people rate their homes as energy efficient.
    - Tenants and financially vulnerable households rate the energy performance of their homes significantly lower.
- People think energy efficiency has a connotation of luxury – they link it more readily to major purchase and alterations.
- People are not sure what to do to improve the energy performance of their homes.
    - Most people said they didn't know much about energy efficiency – that result was higher among tenants and vulnerable households.
    - They indicated that their top three trusted information sources would be an independent regulator, CSIRO or a consumer advocacy organisation like Energy Consumers Australia.

[13] SEC Newgate ran 20 focus groups across four States, talking to sole/joint decision makers on household finances and energy related matters. We aimed for a mix of audience segments (gender, age, household type and ethnicity), as well as ensuring we included people who were landlords, tenants, homeowners who had planned a new build or major renovation. That was backed in by a quantitative survey of 2010 people.

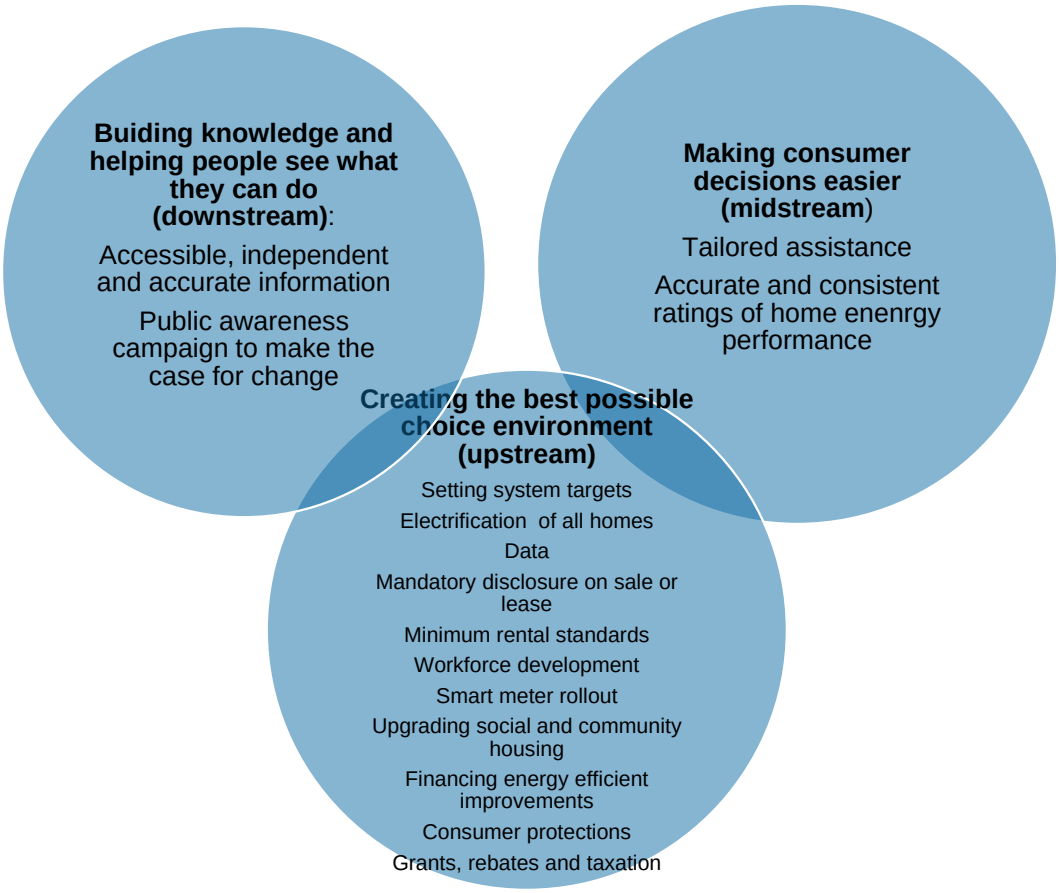
- Most people are not actively planning installation of energy efficient improvements.
- There are high levels of concern about affordability and availability of homes and energy.
    - People think homes are becoming more expensive – harder to build and costly to run.
    - All demographics expressed concern about rising cost of living pressures - younger Australians, tenants and financially vulnerable were particularly concerned.
    - Availability and quality of housing was a top tier issue - for new builds and rentals.
- People expressed concern (55%) about shortages of building materials and skilled tradesmen.
- Climate change was ranked highly as an individual issue, but fewer participants (28%) were concerned about their home's carbon footprint.

What that means for the Strategy

Our research made clear that people understand and support improving efforts to improve the energy efficiency of their home, but they need help.

Figure 8 below uses the BI Team's choice model to outline the key opportunities to improve the energy performance of homes that should be considered by the Strategy – many of those are under active consideration in the Trajectory for Low Energy Buildings process but could be further accelerated.

Figure 8: Recommended actions to improve the energy performance of homes



We are asking consumers to change longstanding behaviours, or undertake what they know can be expensive, complex and disruptive upgrades to their homes. Figure 8 lays out that complexity clearly - it maps the customer journey to undertaking an energy efficiency retrofit. It was developed for the Sustainable Energy Authority of Ireland and makes clear the range of decisions consumers must make.

The Strategy needs to actively support consumers through that journey – through active assistance with decisions, and creating an environment that improves consumers' motivation, ability and opportunity.

The following outlines programs and actions that should be available to <u>all</u> consumers.

Building knowledge and helping people see what they can do (Downstream)

A key focus of the Strategy should consider how it facilitates information and advice to households and small businesses, helping them understand what they can do, as well as building their awareness that they are going to be asked to change their energy behaviour, or make changes to their homes.

People told us that they don't know much about energy efficiency and are struggling to find low-cost, high impact changes. When they look for information it is often too generic to be useful or is delivered by a company trying to sell them a product or service.

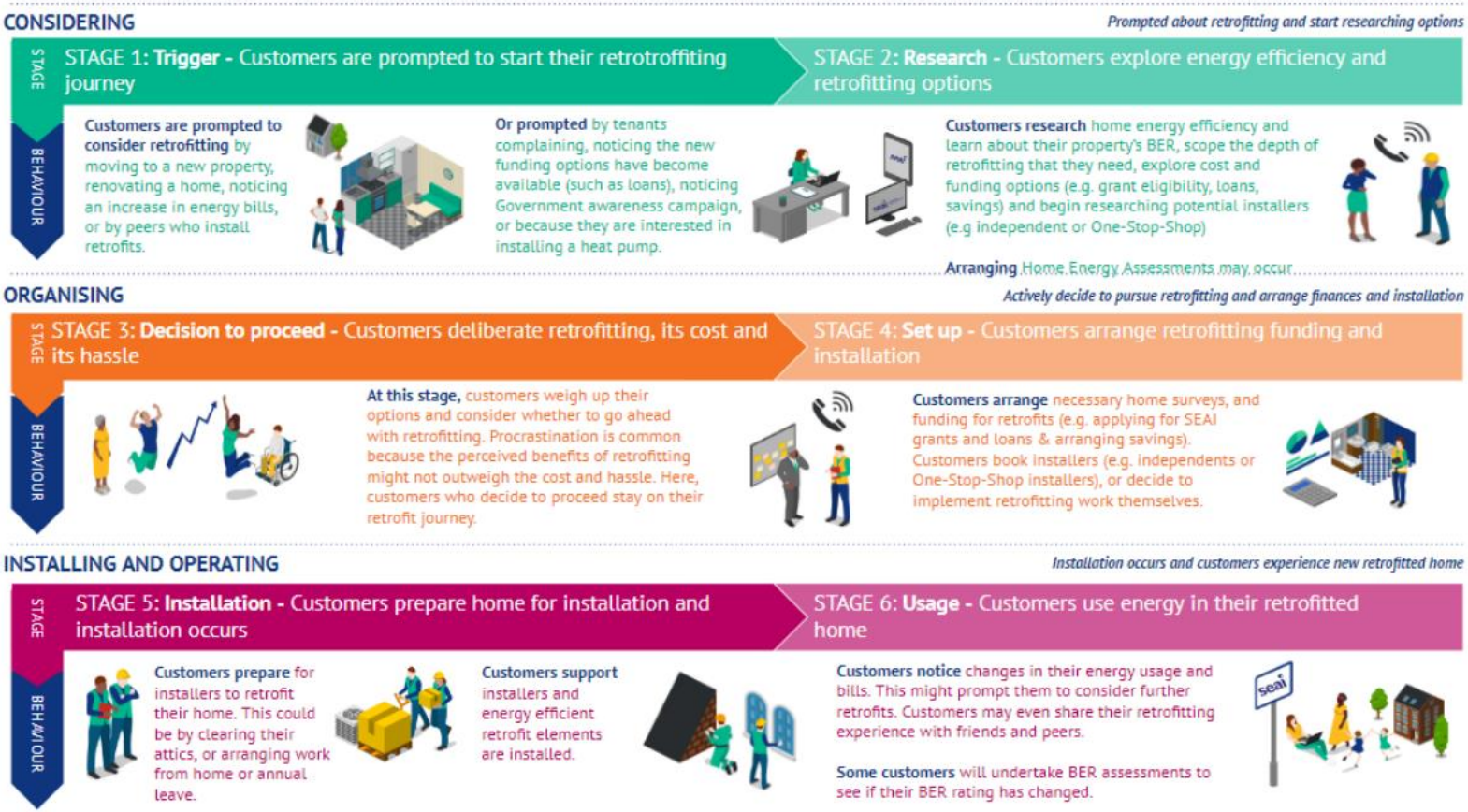
We see two important benefits to an **appropriately resourced public communications campaign.**

- Providing accurate and independent advice to consumers about low cost and easy to do actions that help address their immediate problems with high energy bills.
- Raising public awareness about the case for change, building support for the Strategy objective and policies.
    - Our research made clear that people are not aware of the urgency for change – indeed people told us that while they support the intention for change, they told us that they would prefer a staged roll-out, at their own pace.
- There has been a range of recent relevant research to help build effective communications.
- Zero Carbon Merri-bek's Go all electric campaign: it developed a messaging guide that recommended the following.
    - Support the transition – share resources that help people take action.
    - Be careful with savings-based messaging.
    - Don't focus on the environmental benefit, as it's not a broad lever for change.
    - Do focus on the inevitability of electrification.
    - Do talk about health and safety.
    - Do celebrate renewable energy.
- Sustainable Energy Authority of Ireland's Policy Guide to help anyone communicating energy savings to the public – it recommends the following.
    - Communicating actions people can take based on what is impactful AND what people find acceptable.
    - Consider carefully the framing of messages to avoid inadvertent outcomes – framing savings in terms of a loss rather than a gain may be more effective, and emphasising financial incentives might crowd out other motivations.
    - Highlighting positive social norms.
    - Emphasising need for collective action – we're all in this together.

- BI Team's Net Zero Guide, which recommends a communications strategy that:
    - informs your audience to know which steps they should prioritise;
    - warms them up – build trust, familiarity, legitimacy, norms and knowledge;
    - makes small 'asks' which are psychological or practical stepping stones; and
    - steerspeople toward the big choice when ready.
- International Energy Agency's collation of energy efficiency policies to manage the energy crisis caused by the war in Ukraine.

Recommendation 13: The Strategy should consider public communications to provide people with low cost and easy actions, as well as raise awareness about the case for change, building support the Strategy objectives and policies.

Figure 9: Typical customer journey to energy efficiency retrofits



Source: BI Team developed for Sustainable Energy Authority of Ireland

Making consumer decisions easier (Midstream)

A key part of the Strategy should be to remove friction and make it easier for people to navigate what are complex, onerous and disruptive decisions.

The energy ecosystem is complex and fragmented.

- The supply side includes companies selling energy and energy appliances, as well as appliance manufacturers, builders, tradies, and financial institutions. Advice may not be independent, and may not take into account the interests or circumstances of consumers.
- Government, regulators, and not for profit organisations offer information and advice, but it can be out of date, or pitched at too generic a level to be useful.
- Consumers also use their own networks, including through social media, to seek information and advice, but that can be inaccurate.

Our understanding of what support is effective has also evolved. There is now a substantive evidence base underlining the value of information, advice and tools that are tailored to an individual household or small business preference, needs and values.
We recommend the Strategy consider the following actions to support consumer choices.
Tailored assistance

We asked people what potential sources of information about the reforms might be – they pointed to non-commercial bodies, including an independent regulator, CSIRO or a consumer advocacy organisation or government.

Several participants in the focus groups asked for real life case studies and information to understand what they need to do how easy it might be and the returns they might get.

Recognising that there is no one size fits all solution, a number of overseas jurisdictions have created a One Stop Shop - an organisation that provides independent and tailored advice to consumers.

Examples include the Energy Trust of Oregon and Super Homes Ireland.

Recommendation 14: We recommend creating a similar entity in Australia, that could undertake one or all of the following functions.

- ***Providing independent, up-to-date advice, information and tools.***
- ***Linking consumers to Commonwealth and jurisdictional assistance programs and measures.***
- ***Providing or linking to energy auditors.***
- ***Mapping the diversity of consumer need and decision-making.***
- ***Providing feedback and evidence on what programs and interventions have been effective in encouraging people to move to more energy efficient practices, appliances or homes.***

Accurate and consistent ratings

Accurate rating tools for the energy performance of homes offer a range of benefits.

- For the house occupant, it provides an indication of likely energy costs, as well as an idea of where they can make energy performance improvements.
- Provides data that informs policy and program development, by providing a common understanding of what level of improvement is required to move to net zero.
- Supports policies around mandatory disclosure and minimum standards for rental homes (see below).
- Informs the setting of achievable targets.

It is important that ratings are easily understood by consumers. An example of a best practice approach is the EU Building Renovation Passports which not only provide a rating, but also a long-term renovation roadmap that identifies retrofits and installations to decarbonise the property, as well as links to contractors, other service providers and finance options.

The Trajectory has progressed ratings tools, but there remains work to be done to ensure consumers understand the ratings system and see value in their use.

Recommendation 15: The Strategy should finalise and widely promote energy performance rating tools that deliver easily understood information to consumers, and extend the tools to include apartments and other types of communal accommodation, and how best to provide similar information and advice to small businesses about their premises.

Creating the best possible choice environment (Upstream)

The "choice environment" comprises the system of commercial incentives, regulation, investment, infrastructure and leadership. Upstream interventions include incentivising businesses to formulate products and services that don't require difficult behaviour change, setting clear market signals that help consumers choose more efficient options, and regulating to produce desired outcomes.

The earlier section on targets notes the value of electrifying homes and rolling out smart meters. The discussion below focuses on other mechanisms and enablers to support consumers.

The Trajectory for Low Energy Homes is already considering a range of enablers to help improve the energy performance of Australian homes. We see value in accelerating or strengthening those actions.

Mandating the disclosure of energy performance of homes on sale or lease by 2025

As we move to a world where energy supply moves from abundant cheap energy during the day to scarce expensive energy at night – the time when people have limitations on their ability to shift or reduce their consumption - it is important that people understand the energy performance of the homes they live in.

Mandatory disclosure has been an ACT policy for decades, and has been a factor in consumer decisions. It has also been an effective driver of action in commercial buildings.

Our research demonstrated strong support for mandatory disclosure – people thought it would add value to their homes, and assist with decision-making. Landlords and a few mainly older participants were concerned that it might reduce value. People did want more information about how often ratings would need to be sought.

The Trajectory work on residential energy efficiency disclosure has been thoughtful and consumer-focused – we have actively engaged in that process.

Recommendation 16: We recommend moving to mandatory disclosure by 2025, to provide consumers with the information they need around energy usage.

Minimum rental standards

As outlined earlier in the submission, renters are currently particularly disadvantaged – the split incentive means landlords don't see value in improving energy performance, landlords generally overestimate the performance of their properties and the use of third parties to manage that relationship creates further distance between intention and outcome.

The harm caused to tenants by inefficient properties are significant – not just disproportionately high bills, but to their health and wellbeing. Over half said they would be wary of asking landlords for upgrades for fear of raising rent, and 52% agreed that landlords were not investing in the energy efficiency of their home.

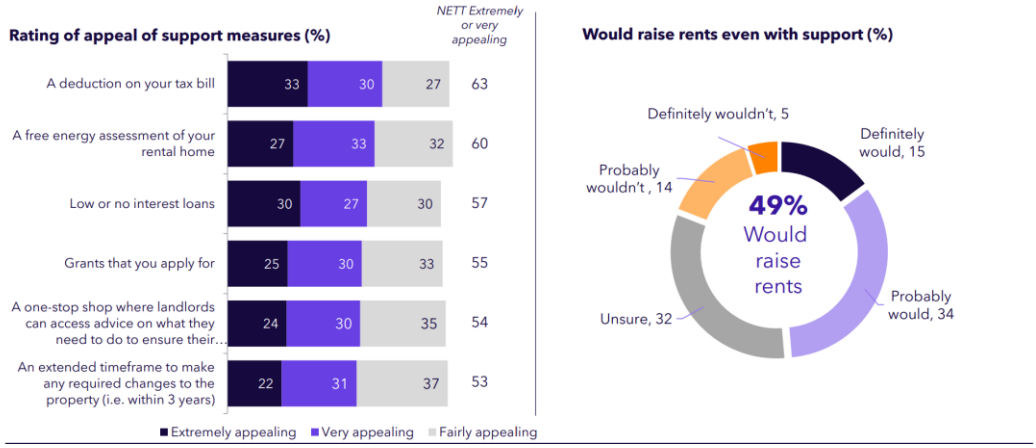
We have failed to find market-led solutions to those issues thus far.

Our homes research demonstrated high support for introducing minimum standards – 70% of respondents supported that move. But it also revealed a level of concern that the cost of upgrades would be passed through to tenants, worsening what is already a sector in acute stress.

We asked landlords what they thought – 63% told us that it was important to create a healthy, safe and comfortable home for their tenants, and 55% agreed an energy efficient property would be easier to rent. They identified the key barriers to change as affordability and inertia.

Figure 10 below illustrates a strong level of support from landlords for measures that incentivise landlords to take action, as well as a strong inclination to raise rents.

Figure 10: Landlord view on potential support measures



Source: ECA Energy Efficiency Housing report

Most participants agreed that there should be a mechanism to stop landlords passing on the costs to tenants, and that government incentives (e.g. tax breaks or no or low interest loans) were appropriate.

Recommendation 17: That the Government work with jurisdictional governments to encourage mandatory minimum rental standards be introduced as a matter of priority; and consider financial and tax incentives to landlords to take action, with a corollary that any incentive precludes a pass through to tenants.

Upgrading social and community housing

Our homes research indicated very strong support for government programs to retrofit social housing, with 73% of respondents supporting the proposal.

Participants also made the case that large-scale social housing programs would have a number of secondary benefits, including:

- providing case studies to communicate to the wider community;
- bringing down the cost of materials;
- boosting the pool of skilled tradespeople; and
- saving taxpayers money as tenants would spend less on energy bills.

The ethos of 'no home left behind' resonated with several participants, particularly when considering how to meet our goals of net zero by 2050.

Residents of social and community housing are perhaps at highest risk in the energy transformation – their capacity to make amendments to their homes and major appliances is zero, and they are likely to be already paying a disproportionate amount of their income on energy bills.

The Commonwealth Government, in conjunction with jurisdictions has agreed to build 50,000 new social and affordable homes, which will be built to a 7 star rating, but there remains work to be done to retrofit existing stock.

AHURI research found that the majority of social housing in Australia has a very low energy efficiency rating, due to the age of the that stock, backlogs in maintenance and selling off better quality properties. The individuals and families living in those homes face unnecessarily high bills and poor health outcomes.

Recommendation 18: Retrofitting social and community housing must be a priority in the Strategy, recognising the significant detriment to those residents of energy inefficient homes and appliances.

Upgrading First Nations social and community housing

We should also note the need to focus also on First Nations social and community housing.

The evidence base paints a poor picture of the experience of those households, particularly in regional and remote areas.

- AHURI research found that current regional and remote housing stock for First Nations people does not provide healthy indoor environments. There is inadequate funding and attention paid to climate adaptation, and retrofits.
- ANU Centre for Aboriginal Economic Policy Research found that remote communities using prepayment meters experienced high levels of involuntary self-disconnection, particularly during extreme temperatures. The researchers recommended that policy responses should work with community to develop solutions.

The new National Agreement on Closing the Gap included for the first time a housing target, working toward the outcome that "Aboriginal and Torres Strait Islander people secure appropriate, affordable housing that is aligned with their priorities and need". Its target is that by 2031, 88% of Aboriginal and Torres Strait Islander people are living in appropriately sized (not overcrowded) housing.

Recommendation 19: Retrofitting First Nations social and community housing must be a priority in the Strategy, in partnership with First Nations communities.

Role of Financial incentives

Our housing research indicated that consumers welcome the notion that government might provide incentives to help drive change – 75% of participants supported incentives, which they thought ensured everyone could 'do their bit'.

People wanted any incentive scheme to be well-managed, and not encourage scammers or rorters.

Their suggestions for incentives included tax deductions and grants or zero interest loans.

Participants also wanted guidance on how to go about making upgrades – several mentioned online calculators to help homeowners decide what modifications were best, and the potential savings.

> "*if they don't put the incentive in people just won't do it. With the cost of lining so high, people will just pay a little bit extra on the power bill over time rather than incur a huge upfront cost which they can't afford*"
>
> Participant, ECA/Renew research

Preliminary findings from Climateworks' Renovations Pathway project underline the case for active government support and intervention, noting that reliance on market forces alone will not generate the action required.

- Renovation levels are significantly more cost-effective for society than they are for households.
- Analysis of the renovations pathways data shows **basic renovations** and **intermediate renovations** are most cost-effective, at the **societal level**, on average, across 16 archetypes (residential buildings), which represent over 80% of the buildings in the residential building stock across Australia.
- On average, the cost-benefit at the private householder level was also positive for **basic renovations** meaning that overall, households would be better off financially, as well as achieving a reduction in emissions and reduced energy demand through the 'basic' energy efficiency upgrades.

There are a range of policy levers and mechanisms that have been effective in improving energy performance in the past – ranging from information programs, to major retrofits to industry obligations to deliver energy savings across a group of households.

Nearly all State and Territory governments have a range of programs currently, such as grants or no/low interest loans to low-income homeowners to undertake audits and retrofits, electrify homes, and install solar PV or batteries. NSW, SA and Victoria also mandate energy efficiency schemes that oblige energy suppliers to invest in measures and programs to reduce energy use (often with the primary objective of emissions reduction).

We see value in the National Energy Performance Strategy playing an important role in the following.

- Developing **principles for incentives** schemes that address substantive barriers, in lines with people's expectations of effective and fair management.
    - Inclusive - helping those who face barriers to action
    - Designed to help diverse range of consumers
    - Build consumer trust and confidence
    - Actively consider how to make consumer decisions easier.
- Delivering **national incentives** to help people improve the energy performance of their homes including through taxation reform (e.g. the Government's decision to exempt electric vehicles from fringe benefits tax, or potentially limiting negative gearing to energy efficiency performances).
- Identifying **best practice and innovative solutions** developed in other jurisdictions.
    - The US Inflation Reduction Act is delivering $270 billion in tax incentives to catalyse private investment in clean energy, transport and manufacturing, including:
        - $2000 per year tax credit to purchase heating appliances; and
        - $4000 per vehicle consumer tax credit for electric vehicles.
    - The UK Green Finance Institute identified 21 projects it believes are scalable and will overcome barriers to mobilising capital to finance energy performance retrofits.
- Coordinating with jurisdictional governments to **track effectiveness** of how jurisdictional and other incentives are driving behaviour change, and contributing to national targets.

The Trajectory for Low Energy Homes did consider financial incentives to drive change, but its scope was limited.

Recommendation 20: The Strategy develop financial incentives to support consumers to improve the energy performance of their homes and small business, particularly:

- ***develop principles for incentive schemes that address known and substantive; barriers, in line with public expectations that they are fair and well-managed;***
- ***deliver national incentives, including considering taxation reform;***
- ***identify best practice and innovative incentives; and***
- ***track effectiveness of national and jurisdictional incentives in achieving national targets.***

Small Business needs and challenges

The Consultation Paper notes that small businesses face unique challenges to improve the energy performance of their operations or premises.

Many of the policy actions recommended above – including information and advice, tailored assistance, and financial incentives for change - are of equal relevance to small business, but there remains an evidence gap on the range of effective measures to assist and incentivise the very diverse needs of that cohort of consumers.

Business NSW has undertaken recent research that focused on information and advice. That research made a number of recommendations, including:

- the need for an SME energy advice and support program;
- provide more businesses with free and independent advice from experts;
- messaging for SME energy policy should emphasise environmental and community benefits as well as financial impacts;
- target agriculture, forestry and fishing, and construction – those sectors were significantly less likely to seek advice;
- embed net zero and energy transition in future SME-focus energy advice and support programs; Business support was strong for net zero, but only 4% of businesses had achieved that target;
- introduce subsidy for the SME sector focused on heating, ventilation and air conditioning, as had been done for LED lighting. The research noted that funding remained the critical barrier to improving energy efficiency;
- messaging around new energy technologies must account for the reasons businesses adopt them; and
- establish a loan/grant program to allow SMEs to overcome financial barriers to battery purchases, and investigate potential for a REC-style scheme for distributed batteries.

The IEA has also collated small business strategies into its report Coping with the Crisis which recommended a range of potential actions for government to support small business.

Recommendation 21: The Strategy:

- ***provide tailored advice and information to small businesses, to help them improve the energy performance of their operations and premises; and***
- ***work with jurisdictions and small business peak bodies to identify effective incentive and assistance measures that address substantive barriers.***

ENERGY CONSUMERS AUSTRALIA