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Electricity and Energy Sector Plan Taskforce

Department of Climate Change, Energy, the Environment and Water
Ngunnawal Country, John Gorton Building,
King Edward Terrace, Parkes ACT 2600 Australia

By email: EnergyandElectricitySectorPlan@dcceew.gov.au

Dear Electricity and Energy Sector Plan Taskforce

**RE: Property Council of Australia submission on Electricity and Energy
Sector Plan discussion paper**

The Property Council of Australia welcomes the opportunity to provide comments on the Australian Government's Electricity and Energy Sector Plan discussion paper. As buildings consume approximately half of Australia's electricity, and almost a quarter of Australia's greenhouse gas emissions through their operations,¹ we urge the Australian Government to carefully consider how the Electricity and Energy Sector Plan will both inform and respond to the priorities to be set out in the Built Environment Sector Plan.

We note that many of the demand-side interventions set out in this discussion paper, particularly in relation to the emissions abatement to be achieved through energy efficiency, electrification and demand flexibility of buildings will be critical to meet our national abatement targets and curb the impacts of climate change.

About us

The Property Council of Australia is the leading advocate for Australia's largest industry - property. Our industry represents 13% of Australia's GDP, employs 1.4 million Australians and generates \$72 billion in tax revenues. Property Council members invest in, design, build and manage places that matter to Australians across all major built environment asset classes.

Australia's property industry leaders are world leaders in sustainability. They have a demonstrated commitment to ESG, topping indices like the Global Real Estate Sustainability Benchmark and the Dow Jones Sustainability Index for thirteen consecutive years. Most of our leading members have net zero goals by 2030 or before (Scopes 1 & 2), with several having reached it already at a fund level.

Our members have a long-term stake in ensuring our capital and regional cities thrive and want to see decisive action on both climate mitigation and adaptation to avoid the worst projected impacts of climate change.

¹ Australian Government Department of Climate Change, Energy, the Environment and Water, 2023; Australian Government, Department of Industry, Science, Energy and Resources, National Energy and Emissions Audit 2020

General comments

Buildings are energy nodes, drawing on, and supplying energy through an increasingly complex network of distributed nodes. Increasingly, buildings fitted with solar PV contribute to the supply of electricity, enable storage of energy in thermal or battery systems and will become intermediaries to supplying energy to electric vehicles.

Buildings are essential infrastructure, providing safety and comfort in homes while providing productive environments for Australian workers in offices, shops and logistic buildings. Managing energy performance of buildings allows this built environment infrastructure to meet societal needs at the lowest overall financial and environmental cost.

The interdependencies between the built environment, energy system and transport sector will only increase into the future as we try and create an energy system fit for the 21st century. While we understand buildings are to be the topic of a separate work program, we cannot overstate the importance of coordination between the Built Environment Sector Plan at the current work to deliver an Energy and Electricity Sector Plan. Supply and demand side policy interventions are two sides of the same coin, and we encourage the Australian government to make it clear the points at which the Energy and Electricity Sector Plan, which has a focus on decarbonising energy supply, will intersect with equally important demand-side policies.

We fully support decarbonisation of Australia's energy grid and that we estimate that implementing a comprehensive suite of energy efficiency policy measures could deliver \$20 billion in financial savings by 2030, and 64MT of avoided CO₂-e emissions by 2050.² Further, electrifying the built environment could deliver 199MT avoided CO₂-e emissions and \$49 billion in energy savings by 2050 compared to business as usual.³

Our priorities

1. Reform governance to build a cheaper, fairer, cleaner grid.

Demand-side participation is key to an energy system that acts holistically, reduces costs, empowers participants and can reduce emissions as fast as possible. Our failure to fully harness the power of demand-side participation needlessly locks us in higher future energy costs and emissions, while failing to serve the interests of the whole community.

Our energy systems were designed in a different time, for a different set of circumstances.

When Australia's energy governance arrangements were conceived in the 1990s, circumstances and priorities were different. Against the backdrop of a liberalising economy and the adoption of national competition frameworks, energy systems moved from being largely under the control of State and Territory governments to into a nominally competitive marketplace that would apply private sector efficiencies and discipline to energy supply.

While there have been challenges in achieving that vision even under business-as-usual circumstances, these arrangements never contemplated the vast, rapid revolution that the energy system must now undergo. This means that we are left with a 20th-century framework to solve a 21st century problem – and reform to energy system governance simply hasn't kept pace with the rapidly evolving needs of the energy system transition.

² ASBEC, Low Carbon, High Performance, May 2016

³ ASBEC, Unlocking the Pathway: Why Electrification is the Key to Net Zero Buildings, December 2022

There are five specific barriers to improving demand side involvement:

1. **Misprioritisation:** Energy system frameworks don't set out to achieve what matters.
2. **Unaccountability:** The demand side of the energy system isn't anyone's job.
3. **Invisibility:** The demand side of the energy system is ignored in system planning
4. **Inaudibility:** Energy users (the demand side) are poorly represented in policy making
5. **Misunderstanding:** Energy governance misconceives demand side participation

Our systems of energy governance are not fit for purpose to guide a rapid transition to zero emissions energy at least cost, while promoting equity and prosperity.

Recommendations: The best way to deliver consumers energy needs for warm and affordable homes is through an integrated mix of demand-side and supply-side measures. However, the legal framework for national energy markets laws do not currently drive visibility, consideration or development of demand-side measures in energy markets. They primarily consider energy supply, with energy demand considered from a consumer protection perspective. Several areas of the national energy legal framework require reform to better facilitate demand-side participation.

The European Union has adopted the principle of 'energy efficiency first' to ensure that energy efficiency is elevated when policies and investments in energy are being considered. To embed this principle in Australia, a suite of reforms should be implemented:

- **reform the National Energy Objectives** to focus on optimising cost or affordability of energy for energy users, rather than just the price of energy, and introduce social equity into the objectives
- **reform national energy laws to require consideration of the principle of 'demand-side first'** at every stage of energy market development, regulation, and operation
- **amend energy market body establishment Acts** to enable and require greater board representation of members with expertise in consumer and vulnerable consumer issues and demand-side matters
- **rebalance energy market bodies to better incorporate demand-side opportunities** into energy system policy, planning and regulation:
 - **establish a National Energy Performance Agency**, separate to or within an existing market body - It is becoming clear that the lack of a central home for demand side policy is significantly hampering efforts to improve demand side participation. A dedicated agency to oversee, coordinate, facilitate and champion demand-side actions to improve energy performance is a critical enabler to advance this agenda
 - **strengthen energy system planning**, fully incorporating demand-side measures, and
 - **adjust the remits and skills of other market bodies** to create an efficient distribution of responsibilities that incorporates both supply and demand-side planning.
- **create an annual statement of demand-side opportunities** alongside statements of opportunity in supply, and include demand-side planning in the Integrated System Plan
- **expand and resource the role of consumer advocates in energy system planning, governance and delivery**, to ensure outcomes are consumer-focused
- There are opportunities for the **aggregation of demand-side flexibility certificates that would allow third party involvement in driving demand flexibility**. The Government should investigate these options, and
- **networks currently hold stronger negotiation power than the built environment in the application and fair valuation of distributed energy sources and storage capacity**. The Government should address this issue to ensure that the full potential of distributed energy can be unlocked in an equitable way.

2. Set a national energy performance target, and measure progress.

It remains a truism that it is impossible to manage that which is not being measured.

There are implicit targets for energy performance in Australia's energy system transition: AEMO's 2022 Integrated System Plan states that by 2050, 9.5k GWh of demand reduction will come from residential energy efficiency and 18.5k GWh will come from businesses (incl industry). There are yet to be comprehensive policy solutions implemented to deliver these outcomes.

There are explicit commitments the Australian government has signed up to in global fora: The final agreement from COP 28 in Dubai calls on all parties to contribute to, "*tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030.*" While this is a global commitment, the principle of common but differentiated responsibilities would suggest that as a wealthy, developed country, Australia should arguably be doing more, not less.

Recommendation: Australian governments should agree on an appropriate target to increase energy performance, and a range of metrics to measure progress towards that target. A target provides a clear point to aim for and provides a frame of reference for policies and programs to achieve it.

3. Retain renewable energy policy infrastructure that incentivises and accredits the new renewable energy generation including the Renewable Energy Target (RET)

Even though the formal requirements of the federal RET have been met, there remains strong consumer demand to access renewable energy certificates (RECs).

Similar to global practices, green building certification programs such as NABERS and Green Star consider the use of renewable energy as part of scoring a building's environmental performance. Using RECs can contribute towards achieving these certifications, enhancing the sustainability credentials of Australian properties.

Government-backed programs, like the RET schemes, offer a robust and credible approach to certification of renewable energy procurement. Notably, the combination of Climate Active with other programs such as GreenPower, renewable energy certificates (LGCs) and government controlled offset programs provides a unique opportunity for Australian businesses to accelerate emissions mitigation and be recognised for their actions.

Recommendation: The Australian Government should ensure there is continued investment in maintaining accreditation for renewable energy generation while the voluntary market remains strong in the short to medium term, and resource relevant agencies appropriately, given the anticipated rapid increase in renewable energy generation across the country.

As more renewable energy is introduced into the grid, it will remain important to industry to ensure that the use of renewable electricity can continue to be recognised by relevant accrediting bodies.

4. Ban new gas connections require all new residential and commercial buildings to operate on high-quality electric equipment in national construction code 2025

Every new building connected to the gas grid and equipped with gas is one more building to retrofit at a significant cost in the future.

Many homes and commercial buildings in Australia are already reaping the benefits of being all electric in their operations. Others, though, still operate on fossil gas equipment which is less efficient, has potential negative health impacts, and generates additional network expenses.

Recent estimates show that there are 2.9 million gas heating systems and 5.2 million gas hot water systems currently installed in Australian homes. Under business-as-usual settings, the Residential Energy Baseline Study 2021 predicts that the number of gas hot water systems in homes will increase from 5.2 million in 2022 to 7.2 million in 2040.

This is in stark contrast to AEMO's 2022 ISP in which the central 'step change' scenario assumes significant reductions in fossil gas consumption by 2040, notably that the residential sector has reduced its fossil gas consumption by 85% by 2040. There is very little concrete policy in place to support this.

Recommendation: The first step to achieving assumed reductions in fossil gas is to avoid making the problem worse. State and Territory Governments should ban new gas connections to residential and commercial buildings, and this should be supported by a requirement that all new buildings be fully electric in National Construction Code (NCC) 2025.

This change to the NCC is in line with the Australian Government's own emissions and renewable energy policies and keeps Australia in alignment with similarly developed economies. Many regions of the US and Europe, including France and Germany, are already blocking new gas connections and equipment in buildings.

5. Introduce a national plan for an orderly exit from the gas distribution network and phase out fossil gas use in existing buildings and appliances

There is no national plan for eliminating use of fossil gas in Australia's buildings – and we need one. Importantly, AEMO's 'step change' ISP scenario assumes significant reductions in fossil gas consumption by 2040; notably that the residential sector has reduced its fossil gas consumption by 85% by 2040. This is not reflected in and won't be achieved with current policy settings.

Many of the buildings in operation today will still be in use in 2050 when we are due to achieve net zero emissions as a nation. We cannot achieve a net zero economy without decarbonising the built environment.

ASBEC's Unlocking the Pathway report shows that 100 percent electrification with renewable electricity is the lowest cost, fastest emissions reduction pathway for Australia's built environment. However, it is not a zero-cost option. The supply chains to Australia's millions of buildings are complex and international with most energy consuming appliances manufactured overseas. There will be a need to secure a supply of electric equipment in a competitive international market and upskill local professionals. A national electrification plan will be required to establish new supply chains, provide certainty to business and phase out fossil gas equipment and appliances.

Recommendation: A national plan for electrification of buildings and exiting the gas grid will provide the market with the signals appropriate to ensure a smooth transition of the existing building stock to all electric and the economic roll back of gas delivery systems. In the EU, the Energy Performance of Buildings Directive has set a date of 2040 for the complete phase out of gas boilers in buildings. Closer to home, the ACT has committed to achieving the complete phase out of gas by 2045.

An electrification plan for Australia will require ambitious reach, but some parts of it are already well underway.

Australian homeowners have been quick to embrace solar PV, and with system costs continuing to decline, the Australian Energy Market Operator predicts much higher penetration in future. Government coordination at every level will be key to a rapid transition. A planned phasing out of gas

to buildings will likely need to occur on a geographic basis as parts of the gas network lose connections and the cost of maintenance is carried by a declining number of customers.

A communities-based program of information, engagement and planned gas phase out will assist in understanding the many challenges. These will include renovating heritage buildings, working with main street food retail, supporting health care facilities through the change, and developing solutions for different styles of apartment blocks.

6. Reform energy markets and programs to reflect the value of energy demand management and other distributed energy resources.

Our energy system is undergoing a once-in-a-century transformational change. Carbon intensive electricity generation infrastructure is being replaced with low-cost renewables supported by firming capacity, and the capacity of the electricity system must be increased to accommodate higher demand from the electrification of new sectors such as the built environment and transport. Today the NEM delivers just under 180 TWh of electricity per year, but demand could potentially double to 320 TWh per year by 2050.

While tariff reforms could improve market signals, there are significant limits to what is possible. There is not the political will to provide truly cost-reflective tariffs which vary with the time and location of energy use, and smaller consumers are unlikely to be responsive to extremely complex tariff signals. Furthermore, many decisions in energy markets are not made by consumers, including network investments which are made by regional monopolies. Without significant reforms, ongoing underinvestment in demand management and distributed energy resources is likely to persist.

Recommendation: Correcting the historical bias towards supply-side measures requires enhanced governance, the creation of markets for demand-side services, and ensuring the demand side is considered when developing measures such as capacity markets. Governments and market bodies should consider a range of measures to provide accurate price signals to incentivise investment in energy management and other distributed energy resources that benefit the electricity system.

Governments should ensure that:

- demand-side measures are considered in the proposed capacity mechanism
- better baselining methodologies are developed for the Wholesale Demand Response Mechanism, and,
- consumers are rewarded for investments that reduce the need for expenditure on the network, potentially through the development of a demand-side capacity procurement process.

The Property Council looks forward to further engagement on this important issue to ensure the that supply and demand side policies work effectively together to decarbonise the energy available to consumers.

Please reach out to Eleanor Sondergeld, National Policy Manager – Sustainability and Regulatory Affairs at esondergeld@propertycouncil.com.au should you wish to discuss this submission in further detail.

Yours faithfully,



Francesca Muskovic

National Policy Director
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