

Opportunity knocks

Accelerating energy efficiency
for mid-tier buildings



Introduction

“There appears to be considerable scope for greater use of energy efficiency to improve reliability, security and affordability.”

Finkel Review

Mid-tier buildings are one of the largest untapped policy opportunities for governments to help meet our international commitments, improve business efficiency and grow the economy.

Mid-tier buildings—those classed as non-A Grade or non-Premium Grade account for around 80 per cent of Australia’s office buildings and 50 per cent of floor space.

These buildings are typically constructed between 1960 and 2000 with outdated and inefficient technologies resulting in buildings operating well below their potential. At the moment, the mid-tier sector is poorly positioned to deliver greater energy efficiency or help reduce peak demand for energy: both of which are increasing priorities for government.

The sector is highly fragmented, and characterised by varied ownership structures that contribute to market failures including split incentives between owners and tenants, and a lack of information and awareness amongst building owners and operators.

In spite of these challenges, recent reports including the Finkel Review, CSIRO Low Emissions Technology Roadmap, Sustainability Victoria’s Energy Efficient Office Buildings and the Australian Sustainable Built Environment Council’s Low Carbon, High Performance, create a compelling evidence base for new policy development targeting mid-tier buildings. Collectively these reports are clear on the necessity for governments to lead practical policy interventions that will deliver real benefits across the economy.

Focusing on information, incentives and research, and building on initiatives already in place through existing industry and government collaboration, we recommend five immediate actions for governments to realise the opportunities established through the latest policy thinking and accelerate energy efficiency for mid-tier buildings:

- 1. Investigate reducing the disclosure threshold for Commercial Building Disclosure below 1000m² to capture more mid-tier office buildings at the lowest cost-effective threshold for this sector.**
- 2. Expand Commercial Building Disclosure to new sectors including but not limited to mid-tier building stock, and with a priority focus on office tenants.**
- 3. Create a new tipping point for change with targeted tax incentives providing a one-off deduction of 50 percent of the cost of building upgrades.**
- 4. Lead by example and set targets for net zero emissions across government operations by 2030 with strengthened requirements for transparency and performance of government tenancies.**
- 5. Invest in research to further quantify and access the mid-tier sector, and in programs and initiatives that further improve energy efficiency.**

Meeting our international commitments

“Buildings are ‘shovel-ready’ to decarbonise using today’s technologies if policies and other measures can overcome barriers to increased deployment.” ASBEC – Low Carbon, High Performance

Australia is committed:

- **By 2050: to reach net zero emissions; to keep global warming under 2 degrees, and to strive to keep warming under 1.5 degrees.**
- **By 2030: to our current target to reduce emissions below 2005 levels by 26 per cent, and improve energy productivity by 40 per cent.**

Buildings currently account for almost 25 per cent of our national emissions. Using existing technologies, buildings could contribute up to one tenth of our 2030 emissions target through energy efficiency measures, and more than half of our energy productivity target.

Mid-tier buildings account for around 80 per cent of Australia’s office buildings and 50 per cent of floor space.

Some elements of the built environment have made impressive improvements in energy productivity over the previous decade. However, there are many more segments of the existing building sector, mid-tier among them, where little or no progress has been made at all.

International best practice is moving towards mandating energy performance standards.¹ This should be considered in Australia as we set a pathway to net zero and honouring our Paris commitments.

In response to these opportunities the Finkel review recommends governments accelerate the roll out of broader energy efficiency measures across the economy.

Growing business

“The savings potential in mid-tier office buildings is significant, real and feasible.” Sustainability Victoria – Energy Efficient Office Buildings

Sustainability Victoria’s Energy Efficient Office Buildings (EEOB) program demonstrated the commercial benefits for businesses with energy savings of an average 29 per cent, returning a simple payback on initial capital investments of less than 3 years. The EEOB is a great example of the substantial commercial benefits that can be delivered for business when a building owner is engaged and understands the benefits of retrofitting and tuning.

In the office sector alone an estimated 80,000 mid-tier buildings are ripe for energy efficiency upgrades. The services in these buildings are often not just inefficient, but poorly maintained with associated risks to the health and wellbeing of occupants.

Owners of premium office stock were early adopters of energy efficiency because the combination of incentives, market demand and regulation with disclosure were right. There is now an opportunity to establish this same catalytic policy environment for mid-tier buildings.

Every year of delay in capturing these opportunities costs business. The Australian Sustainable Built Environment Council has estimated that just five years of delay in improving energy efficiency across the built environment could lead to \$24 billion in wasted energy costs.

¹ Notable examples include New York, Vancouver, and Singapore.

Recommendations

“For buildings, considerable energy productivity gains could be realised through more extensive adoption of mature technologies such as efficient lighting, heat pumps, improved building envelopes and higher efficiency appliances and equipment.”

CSIRO – Low Emissions Technology Roadmap

1. Reduce the threshold for Commercial Building Disclosure

The Australian Government's Commercial Building Disclosure (CBD) Program, has been a critical driver in unlocking the emissions reduction potential of our buildings while raising awareness of building energy performance among occupants, delivering cost savings and creating jobs.

The recent expansion of the CBD, lowering the threshold for mandatory disclosure, will encourage many building owners to explore the range of services, resources and technologies that can deliver building upgrades, often at relatively low cost, with attractive payback periods.

Further consideration should be given to the optimal threshold for Commercial Building Disclosure below 1000m². This would require detailed modelling and a thorough cost benefit analysis and regulatory impact statement. However, given the success of CBD there may be further opportunities to leverage its benefits below 1000m² across sectors. We recommend:

- Investigate reducing the disclosure threshold for Commercial Building Disclosure below 1000m² to capture more mid-tier office buildings at the lowest cost-effective threshold for this sector.

2. Expand Commercial Building Disclosure to new sectors

Tenants have a critical role to play in driving demand for better performing buildings. If tenants and owners were both required to report periodically, there would be a shared incentive to improve performance over time across the whole building; ameliorating the impact of the split incentive.

There is no time to delay the further expansion of CBD to sectors beyond commercial office. We recommend:

- The expansion of Commercial Building Disclosure to new sectors including but not limited to mid-tier building stock and office tenants.
- Further consideration should be given to the expansion of CBD to other sectors that are achieving ratings, or which present a significant opportunity to deliver increased efficiency, for example apartment buildings, hotels, and retail.
- In the absence of sale or lease, periodic disclosure for buildings captured through CBD should be required every four years.
- Periodic reporting should be used to align base-building and tenancy disclosure to deliver whole-building ratings for commercial offices.



3. Incentivise building upgrades

With awareness of opportunities increased through the expansion of the Commercial Building Disclosure Program, the business case for upgrades should be supported through targeted tax incentives for owners. We recommend:

- Building owners captured by the recent expansion of CBD to office space between 1000m² and 2000m², and any further expansion of CBD to the sectors identified above should be eligible to apply for a one-off bonus tax deduction of 50 per cent of the cost of building upgrades that improve efficiency.
- Eligibility for tax incentives should be contingent on a demonstrated improvement in the NABERS rating of commercial buildings.
- Opportunities to expand this incentive beyond CBD participants to other building types, particularly residential should also be considered alongside opportunities to leverage existing incentives generated through environmental and building upgrade finance like that available in South Australia and New South Wales.
- Government should lead by example in fully committing to best practice through all government-owned buildings and tenancies committing to net zero emissions by 2030 at the latest.

4. Governments lead by example

Government can use their strong market presence to drive improvements in energy performance in government owned and occupied premises. This will not only deliver substantial financial savings for government budgets, it will reduce costs for others, build skills and capability in the market and improve public facilities. This is particularly true in the mid-tier sector in regional Australia where government tenancies can create a model for local businesses, and support local supply chains that help deliver energy efficiency more broadly. We recommend all governments:

- Commit to achieve NABERS tenancy ratings aligned with the base building rating target, and Green Star ratings, for all government office tenancies.
- Commit to support improved NABERS Energy and Green Star tenancy ratings by joining established programs like CitySwitch that address education and behaviour change needs for commercial tenants.
- Establish a register on an appropriate government website that list the NABERS Energy rating and Green Star ratings for base buildings and tenancies for every government owned and occupied building.
- Display the base building and tenancy NABERS Energy, Green Star and other relevant third party certifications in the public lobby areas of government owned and occupied buildings.



5. Invest in research

Influencing key stakeholders in the mid-tier sector remains a challenge, and finding the right pathways to engage is a critical part of achieving market transformation. Further research is required that shares data to improve the national understanding of different mid-tier market sectors, ownership structures and opportunities to provide tailored messaging and influence across the sector. We recommend:

- Consistent with the Finkel Review recommendations the COAG Energy Council invest in an ongoing program of collaborative research with industry to deliver supporting data, information, training and education to further drive uptake of technologies that improve energy efficiency in mid-tier buildings, and an improved understanding of how to effect behavioural change and influence decision making supporting energy efficiency in this sector.
- Further research should include an evaluation of the benefits of further expansion of CBD, including into additional sectors, and provide an understanding of the costs, benefits and regulatory impact.
- Quantifying the level of emissions reductions/improvement in energy efficiency required each decade to support the mid-tier segment to deliver against the Paris Agreement target of zero net emissions by 2050.
- Develop and test minimum lease standards with a view to their introduction by 2020.

Next steps

These recommendations are supported by the following organisations who invite governments to work with them to realise the opportunities and accelerate energy efficiency for mid-tier buildings.



Each of these organisations is leading the delivery of a more sustainable built environment collaboratively and consistent with a science-based approach to meeting our international commitments. Initiatives like CitySwitch, the Better Buildings Partnership, and state based support for building upgrade finance are helping unlock investments in building retrofits and realise associated economic and environmental benefits. With government leadership through progressive policy and ongoing collaboration we know that even greater transformation is achievable in the years ahead.

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