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Phil Manners, Director
The Centre for International Economics
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Dear Phil

RE: Review of the Commercial Building Disclosure Issues Paper

Please find enclosed feedback on the Review of the Commercial Building Disclosure Issues Paper prepared by the Centre for International Economics for the Australian Government Department of the Environment and Energy in February 2019.

The Commercial Building Disclosure (CBD) scheme is a world leading program which targets and improves the energy performance of commercial office buildings in a transparent and effective way.

The *Building Energy Efficiency Disclosure Act* and CBD program should be continued and expanded to improve the uptake of energy efficiency in a broader range of buildings.

Since the scheme was introduced it is evident that awareness and action by building owners and occupants is resulting in better performing buildings with significantly more buildings rated and improved repeat ratings (see Appendix).

The measurement and management of energy used by buildings must continue to be a top priority for Australia, especially in the absence of a price on carbon or mandatory efficiency standards.

The City of Sydney has targets to reduce greenhouse gas emissions across the local government area by 70 per cent below 2006 levels, net zero emissions by 2050, and 50 per cent of all electricity to be renewable by 2030.

Highly efficient buildings are essential for meeting our targets and to improve liveability, productivity, health, resilience and efficiency of the energy system. Efficient and healthy buildings are key to Sydney remaining a desirable place to work and live.

Mandatory disclosure under the CBD scheme is improving the energy performance of existing buildings with potential to do significantly more. Results are greater through mandatory interventions compared with voluntary programs.

The City recommends:

- Expand CBD scheme coverage to include office tenancies, hotels and shopping centres as first priority. The case for expanding CBD is supported by Opportunity Knocks and Energy Action reports.
- Provide funding for supporting programs to assist as new sectors are brought into the CBD program.

city of villages



- Expand CBD program to include all building types as NABERS tools become available, and develop a mechanism for mixed-use buildings.
- Reduce threshold for mandatory disclosure of commercial office buildings to 500sqm to achieve greater results, especially for hard to reach buildings.
- Review CBD scheme every three years (in line with reviews of the NABERS Strategic Plan & COAG Trajectory for Low Energy Buildings).
- Include a greenhouse gas emissions objective to support Australia's Paris commitment; the COAG Trajectory work; uptake of renewable energy; and Australia's commitment under the Montreal Protocol to phase out HFC refrigerants.
- Introduce periodic disclosure where not triggered at point of sale or lease, especially for sectors which do not experience significant churn.
- Replace tenancy lighting assessment with information that is more meaningful to tenants about the total energy performance, ideally NABERS Tenancy ratings.
- Apply mandatory disclosure to strata title buildings by advocating for State led programs via COAG.
- Expand disclosure requirements to include NABERS Water in addition to NABERS Energy ratings.

Please find attached more detailed responses to questions asked by the Issues Paper (questions without answers greyed out). The City's comments are public and may be shared with the Department.

For any questions relating to this submission, please contact the City's Manager of Carbon Strategy, Nik Midlam on 02 9265 9847 or at nmidlam@cityofsydney.nsw.gov.au

Yours Sincerely,



Chris Derksema
A/ Chief Operations Officer

1. Is the objective of the CBD program — to improve the energy efficiency of Australia's larger office buildings and to ensure prospective buyers and tenants are informed — sufficiently clear and appropriate?

The objective is sufficiently clear and appropriate however should be expanded to include greenhouse gas emissions and resilience.

A recommended objective is: *to improve the energy efficiency, reduce greenhouse gas emissions and improve resilience of existing buildings in Australia and to ensure prospective buyers and tenants are informed.*

Expanding the objective to include a greenhouse gas emissions objective within CBD would support:

- Australia's Paris commitment to reduce emissions by 26-28 per cent by 2030.
- The COAG Trajectory work for net zero (carbon and energy) buildings which applies to new as well as existing buildings.
- Uptake of offsite renewable energy by buildings.
- Australia's Montreal Protocol commitment to phase out HFC refrigerants.

In considering an emissions savings objective, broader social benefits and avoided costs of reducing greenhouse gas emissions must be included in the economic and financial analysis (in addition to energy bill savings of participating buildings as proposed).

The objective could also be expanded to include water efficiency, achieved by requiring disclosure of a NABERS Water rating together with the existing requirement to display a NABERS Energy rating.

The CBD program should continue to be reviewed and extended every three years in order to stay current without being too frequent. This would also align with the review timeframe of NABERS and the COAG Trajectory work.

Any expansion to the program as proposed to reduce thresholds and expand coverage needs to be reflected in the objective.

About refrigerants

An emissions objective would assist with the phase out of high global warming HFC refrigerants – currently not addressed by the energy efficiency objective. CBD could help the Australian Government to deliver on its commitment under the Montreal Protocol.

- One kilogram of refrigerant loss creates 1-2 tonnes of CO₂e emissions.
- Refrigerant losses greater than 5 per cent produce more greenhouse gas emissions than saved through efficiency over the life of a system.
- The National Carbon Offset Standard uses default leakage rates of 10% - demonstrating HFCs are a net contributor of greenhouse gas emissions.
- Natural and blended low global warming alternatives are available.
- Australia has signed up to the Kigali Amendment to the Montreal Protocol to reduce HFCs however there are no Government programs in place.
- The CBD program could be key for Australia to deliver on its international commitment to phase down HFCs.

2. Does the current CBD program, including the BEEC and the requirement to include NABERS ratings in any advertising, provide a sufficiently close alignment to the objective of the program? If not, how could it be improved?

The current CBD program delivers on the objective, however the impact could be significantly greater by expanding coverage to other sectors, reducing thresholds, switching to recurring ratings, and including greenhouse gas emissions in the objective.

NABERS is the national standard for rating the performance of buildings and accordingly all NABERS rateable spaces should be included under the *Building Energy Efficiency Disclosure Act*.

NABERS is a demonstrated world leading, industry accepted, clear and robust tool to measure and communicate the actual performance of buildings and should continue to be applied through the CBD program.

3. Are there other costs and benefits we need to consider outside of those shown in table 2.4?

Broader social benefits of rating and improving the performance of buildings should be taken into account which includes the avoided costs of electricity infrastructure and reducing greenhouse gas emissions.

The CBD program is reducing emissions which in turn is assisting the Australian Government to meet (or reduce its liability) under Kyoto and Paris commitments. This value should be quantified and communicated to support the case for CBD expansion.

Avoided electricity infrastructure costs are also directly attributable to energy savings resulting from the CBD program. These may be estimated using conservation loss factors in the absence of available data.

There are documented cases where energy efficient buildings attract higher rents and lower vacancy rates. These benefits must be taken into account in addition to the costs listed in table 2.4.

Table 2.4 lists negative changes in amenity caused by energy efficiency. It is more likely that efficient buildings improve amenity through better lighting quality, lower noise levels and natural ventilation for example.

4. What other assessment criteria should we consider in assessing the effectiveness and efficiency of the program?

The CBD scheme is particularly effective for targeting hard to reach building typologies and owners that may not otherwise be engaged through voluntary programs, for example the “mid-tier” office sector comprised typically of smaller buildings.

The efficacy of CBD could therefore be further substantiated by developing a metric or qualitative assessment of outcomes that otherwise would not have occurred through voluntary means, especially for hard-to-reach sectors.

Energy savings, emissions savings and total floor space rated under the CBD program by sector should be reported as a percentage of the total energy, emissions and floor space for each sector.

5. Are there other sources of information on the energy use, costs of the CBD scheme and benefits of the CBD scheme that we should consider or that you have access to and can provide to the review?

Floor Space and Employment Survey

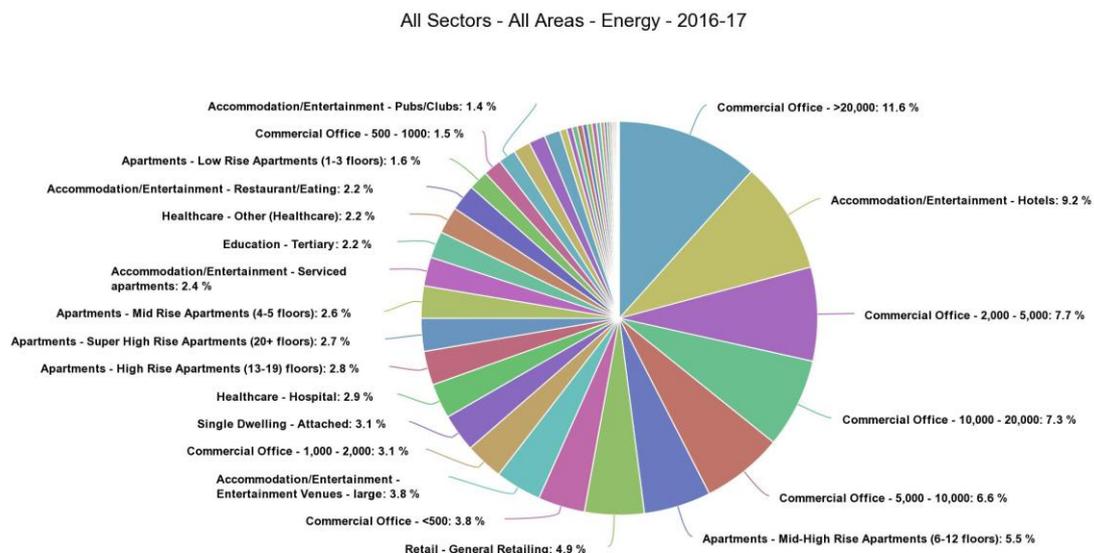
The City conducts its Floor Space and Employment survey of land use and ownership structures of buildings in the local government area every five years. This provides a very granular understanding of almost all space uses in non-residential buildings. Detailed floor space data is available upon request that may be beneficial for modelling scenarios of expanding CBD to other sectors. See bit.ly/2St9zvl

Energy Efficiency Master Plan

In 2015 the City produced an Energy Efficiency Master Plan bit.ly/2AjhAsa based on a Foundation Report bit.ly/2Z34cTm. These documents provide an indication of how energy is used by buildings in the area by sectors and end-use. Importantly, the results model the sizable contribution to energy efficiency by reducing thresholds and expanding coverage of the CBD program. It also highlights the significantly improved result from mandatory intervention versus voluntary programs.

CCAP City

The City uses the CCAP City platform developed by Kinesis for monitoring energy and greenhouse gas emissions across the local area. This is a sophisticated tool which takes utility, land-use, demographic and other datasets which allows it to be disaggregated by fuel type, sector, base building or tenancy, location or end-use. A sample chart is provided below. Detailed data is available upon request and would be beneficial for modelling changes to the CBD program.



6. Users of NABERS ratings could include: building owners/managers; investors; and tenants. Are there any other users of NABERS ratings?

Consent authorities

The City of Sydney and other jurisdictions use NABERS ratings commitment agreements as an approvals pathway for non-residential development approvals.

Employees and customers

Like investors, many employees and consumers may be attracted to use services and work for organisations with an environmental sustainability ethos as demonstrated by a NABERS rating especially where publically displayed (also noting NABERS is an approved method for obtaining carbon neutral certified buildings under the National Carbon Offset Standard).

Sustainability organisations

NABERS ratings (and indeed actions that are the result of the CBD Program) are used by property companies for recognition under GreenStar, GRESB and the Dow Jones Sustainability Index.

7. How are NABERS ratings used?

a) By building owners/managers?

Many buildings are maintaining current NABERS ratings to be sale-ready where these assets are required to disclose under the CBD scheme. NABERS ratings may also contribute to better rankings and scores through programs such as GreenStar, Dow Jones Sustainability Index & GRESB.

b) By investors?

Increasingly investors are looking to the carbon liability and ESG/CSR risks and implications of investments. Sophisticated organisations reporting under the Task Force on Climate-related Financial Disclosures (TCFD) may already take into account the NABERS rating for commercial office buildings as part of their investment decisions.

c) By tenants?

CitySwitch Green Office is a national program with a strong local presence which uses NABERS as the basis to improve energy efficiency. Close to a quarter of the commercial office space in the Sydney CBD has joined the program.

8. Does access to a building's NABERS rating provide useful information to prospective buyers/tenants over and above the information currently available through other means?

Access to energy information is not readily available to prospective buyers and tenants in the absence of a NABERS rating and may only be available as part of advanced commercial negotiations.

NABERS provides clear, consistent and useful information that is not otherwise available in a way that is benchmarked, uses actual (rather than estimated) building performance data, and is publically accessible (where disclosed under CBD).

9. Does access to a space's Tenancy Lighting Assessment rating provide useful information to prospective buyers/tenants over and above the information currently available through other means?

The City is not aware of alternative information that is currently being used to provide useful information to prospective buyers/tenants.

However the City is also unaware of evidence that Tenancy Lighting Assessments are being used to influence the decision of prospective buyers/tenants or negotiation with owners.

While a TLA remains an important indicator of efficiency that tenants should have access to, a system that is more representative of the total energy use of an incoming tenant (and more clearly communicated) would be more valuable to all.

Replacing the Tenancy Lighting Assessment with a NABERS Tenancy rating would be a clearer and more representative of total energy performance (while acknowledging there would be challenges in adapting the tool for this purpose).

As a minimum, performance standards should be set. The NSW Government Resource Efficiency Policy (GREP) requires tenancy lighting of 5W/sqm or better for any leased space shown by a Tenancy Lighting Assessment to be over 10W/sqm. The new National Construction Code Section J also sets lighting standards. Applying these to the CBD Program would ensure an efficiency outcome irrespective of whether TLAs are effective for providing useful information to prospective buyers/tenants.

The effectiveness could be further improved by measures that accelerate awareness and understanding of the TLA by tenants (which was acknowledged by the previous review of the CBD program). Australian Government resources to programs like CitySwitch Green Office bit.ly/2G6Q8Q7 to implement awareness programs would be an effective way to achieve this outcome.

A recommendation made to the previous review of the CBD program remains current whereby a TLA should be triggered where a major lighting upgrade occurs outside of the reporting period with mandatory explanatory text where it does not meet best practice (say 5W/sqm).

10. Are there additional studies or literature on the impact of mandatory and voluntary disclosure in Australia and overseas that we should consider?

The City of Sydney 2015 Energy Efficiency Master Plan bit.ly/2AjhAsa and Foundation Report bit.ly/2Z34cTm show there are significantly greater savings achieved by mandatory disclosure than by voluntary programs.

The 2015 C40 report *Urban Efficiency: A global survey of building energy efficiency policies in cities* bit.ly/2Pd0QsF lists cities with disclosure programs (see Table 3.3). These cities may have additional studies or literature available.

~~11. For building owners/managers, what was the main motivation for improving base building performance and improving the Tenancy Lighting Assessment?~~

~~12. What are the types of activities that building owners and tenants have undertaken to improve their energy efficiency?~~

13. What are the main ways that building owners/managers have improved their NABERS ratings as a result of the CBD Program?

A significant and increasingly predominant way to better understand and improve the energy performance of buildings is through the use of advanced building diagnostic and optimisation programs. The City is aware of systems by CIM Enviro, beuno and Buildings Alive being used by buildings in the local government area.

LED lighting upgrades are increasing common as technology improves.

~~14. Have these changes generally achieved the expected energy savings?~~

~~15. What are the main costs of implementing these measures? Are there any costs other than those identified in this paper?~~

16. Should the CBD Program be expanded to include the following and for what reasons:

The CBD program has achieved significant energy savings in commercial office buildings. These savings can be significantly increased as a proportion of the total energy used by the built environment by expanding the coverage to more building types.

The Issues Paper shows mandatory disclosure is equivalent to around a quarter of estimated energy use from stand-alone offices, 7 per cent of non-residential energy use, and 0.6 per cent of Australia's total electricity and gas consumption. While this is an outstanding result, it highlights the enormous opportunity to expand the scheme.

The Issues Paper also states that buildings subject to mandatory disclosure cover 20 million square meters of floor space. The Draft Report should quantify coverage of CBD as both a per cent of total energy used by buildings and per cent of total floor space.

Recent works by the Opportunity Knocks coalition and Energy Action support the case and show a net benefit by expanding the CBD program to other sectors.

Adding new sectors is the single biggest opportunity for the Australian Government to deliver on the COAG Energy Productivity goal. It would also make a sizable contribution toward the COAG Trajectory aim to develop mechanisms for existing buildings by 2019.

The CBD program has resulted in highly efficient commercial office space that is understood and valued by customers (occupants), operators and investors and leads to positive market valuations and international capital inflows. Other sectors should reach the same level of maturity and enjoy similar benefits in the short to medium term.

It is strongly recommended that the final policy package must include funding for programs that will assist with the communications and actions required by new sectors coming into the scheme to minimise risk and ensure success.

The City welcomes further communication on ways that successful programs like the Better Buildings Partnership bit.ly/2VDyycX, CitySwitch Green Office bit.ly/2G6Q8Q7 and Sustainable Destinations Partnership bit.ly/2RXpEEH can support changes to the CBD program.

a) Office tenancies?

The City supports the proposal to include office tenancies in the CBD program.

Energy efficiency upgrade activity by tenancies is lower in the commercial building sector than by building owners. This in part reflects the success of the CBD program, while demonstrating there is a significant opportunity to expand the program to tenancies.

This position is also supported by the economic modelling by Energy Action and the Opportunity Knocks coalition that demonstrates a strong positive benefit cost ratio.

Expanding the CBD program to office tenancies would have implications for the Tenancy Lighting Assessment. It is likely that an incoming tenant knowing they will have to disclose their own rating will demand efficient lighting prior to taking occupancy.

There are challenges with using a NABERS Tenancy rating from a former occupant to inform an incoming tenant due to differences in the nature of the business and energy demands. To overcome this it should be clearly differentiated what contribution to the NABERS rating is due to fixed lighting (building owner) and variable energy uses like plug loads (tenant).

The NSW Government Resource Efficiency Policy specifies that all new electrical equipment be at least 0.5 stars above market average star rating or comply with high efficiency standards. A similar provision added to Tenancy disclosure might accelerate energy savings in line with the CBD objective.

Programs such as the Better Buildings Partnership bit.ly/2VDyycX and CitySwitch Green Office bit.ly/2G6Q8Q7 are highly effective at supporting tenants to improve performance and business decisions. However there remains an important role for legislation to help create awareness amongst those not yet engaged to take action on energy efficiency.

b) Hotels?

The CBD program should be expanded to include hotels as a priority.

Many hotels are not owned by institutional investors and therefore do not have the same corporate responsibility drivers that are common for the office sector. Mandatory disclosure would significantly help to build the business case for investment in capital works by an owner that may otherwise have little or no incentive.

The City is working to encourage businesses, government and leisure travellers to seek accommodation with environmental performance ratings such as NABERS. However there are challenges due to the voluntary nature of this approach and the lack of properties with ratings.

Mandatory disclosure of hotel ratings on a periodic basis is key to driving change for this market. It would raise awareness by hotel operators and customers and create the rated spaces to support complimentary initiatives as outlined above.

The hotel sector is familiar with accommodation ratings (AAA scheme), and it is highly likely that mandatory disclosure of energy performance would lead to prompt improvements. For example, a 5 star hotel required to display a 2 star energy rating on their front desk would be incentivised to take action.

The City's Sustainable Destinations Partnership bit.ly/2RXpEEH is a collaboration of Sydney's leading hotels, event centres, cultural institutions and tourism bodies working

together to improve environmental performance. This partnership can be called on for testing and implementing changes to the CBD program.

c) Shopping centres?

The City supports the inclusion of shopping centres as a lesser priority.

d) Data centres?

e) Other building types?

Mixed use buildings

Mixed use is a predominant building type that consumes significant amounts of energy and there is significant potential to improve performance. Developing a mechanism for disclosure of mixed use buildings should be a priority. This may take the form of bundled ratings as tools become available, or by developing a bespoke mechanism.

Strata buildings

Strata buildings and in particular multi-unit apartment buildings are also a major consumer of energy. However there is no consistent measure used in Australia to assess the energy performance of residential buildings at the time of sale or lease.

Mandatory disclosure would inform prospective buyers and tenants of residential buildings about performance and running costs, resulting in better environmental and consumer protection outcomes.

While strata law is outside of the enabling legislation of the CBD program, the review should recommend working with COAG to develop a nationally consistent disclosure program (effectively replicating CBD) for strata buildings - including NABERS rateable high rise residential buildings and strata offices.

Government buildings

The City supports the recommendation of Measure 3.2.2 of the 2009 National Strategy on Energy Efficiency (page 27 of Issues Paper) to require mandatory disclosure by all Government operations.

17. To what extent is there scope to improve the energy performance of these buildings?

The following documents show there are significant energy savings that can be achieved across these sectors:

- City of Sydney 2015 Energy Efficiency Master Plan bit.ly/2AjhAsa
- Making Sydney a Sustainable Destination bit.ly/2UTQqzA
- Sydney's sustainable office buildings plan bit.ly/2ZfgGrg
- Residential Apartments Sustainability Plan bit.ly/2SFKXz4

18. Are there any barriers preventing building owners/operators from improving energy performance without a mandatory disclosure requirement? Which of these barriers would mandatory disclosure requirements address?

Barriers to energy efficiency have been well documented, including in the City of Sydney 2015 Energy Efficiency Master Plan bit.ly/2AjhAsa which lists barriers like the split incentive; limited interest, awareness or capacity; complex decision frameworks; and competing priorities. Effectively these barriers are addressed by mandatory disclosure.

Encouraging energy efficiency in the mid-tier commercial building sector is particularly challenging due to multiple ownership structures, competing priorities, and/or no apparent incentives to make proactive improvements. Mandatory disclosure is able to overcome these barriers and drive improvements for this building sector.

19. What minimum thresholds should apply to:

a) Office space?

It is recommended that the threshold for office buildings be reduced to 500sqm to enable more buildings (including mid-tier) to participate in mandatory disclosure and benefit by energy efficiency and cost savings.

Typically smaller, non-premium office buildings are the single biggest energy using sector for the City of Sydney - which makes reducing the threshold for mandatory disclosure to 500sqm of particular importance.

Whilst an obvious energy savings opportunity, this is also a difficult to reach sector due to multiple ownership structures and drivers. The CBD program is necessary to reach this sector in large part because it is mandatory.

This new cohort of buildings are likely to be underperforming. However, as outlined by the Issues Paper: "buildings that achieve a low star rating in their first BEEC improve much more rapidly than other buildings".

It is anticipated that reducing the threshold to 500sqm would result in significant overall cost benefit (similar to the previous reduction from 2,000sqm to 1,000sqm).

b) Office tenancies?

Average tenancy spaces of mid-tier office buildings in the City of Sydney area are between 300-400sqm. A threshold in this region would elicit a greater number of ratings and improvements across the board.

c) Hotels?

Using the number of rooms combined with overnight stays as a metric for disclosure may be suitable, however this would require further assessment to determine an appropriate number. By way of indication, within the City of Sydney local government area there are 106 hotels and approximately half have 100 rooms or more.

~~d) Shopping centres?~~

~~e) Data centres?~~

~~f) Other building types (where relevant)?~~

20. What exceptions and exemptions should apply and for what reasons?

Consideration and guidance should be provided about how mandatory disclosure applies to buildings that are also certified as carbon neutral under the National Carbon Offset Standard where a partial exemption may be warranted.

21. Currently, the requirement for a BEEC is triggered by office space being offered for sale or lease of covered by the CBD Program. What are the alternative triggers that could be used and what are the advantages and disadvantages of these triggers?

The City recommends recurring disclosure (every 1 – 2 years) where it isn't already triggered by a sale or lease event. It is more likely to inform behaviour change and provide consistency for CBD reporting.

For buildings where sales or lease events occur less frequently, very cost-effective energy savings opportunities triggered by disclosure may be delayed resulting in unnecessary costs to building owners and occupants.

Periodic disclosure is also the most appropriate trigger as the CBD program is expanded to more sectors. For example, the average length of a commercial office lease is 7-10 years and hotels are bought and sold much less frequently than office buildings

Periodic reporting is also in line with international best practice. Many international cities have mandatory disclosure including Tokyo, Singapore, Hong Kong, New York, Seattle and San Francisco. Many require the disclosure of information on an annual basis which provides an ongoing and timelier incentive to improve performance.

It is noted that many buildings already retain current BEECs to be sale ready which also supports the case for periodic disclosure.

~~22. What are the barriers (including legal, logistical or other barriers) to these alternative triggers?~~

23. What is the most appropriate trigger for a BEEC for:

- a) Office buildings?
- b) Office tenancies?
- c) Hotels?
- d) Shopping centres?
- e) Data centres?

Periodic (every 1-2 years).

24. For each building class under consideration to be included in the CBD Program, what information should be disclosed? What are the alternatives to a NABERS rating?

NABERS is the most robust, clear and appropriate metric (noting that the NABERS Strategic Plan intends on expanding NABERS to all building types). This robustness is supported by training and assessor auditing protocols.

25. Would a NABERS rating (or alternative indicators) provide useful information to relevant stakeholders over and above the information already available?

Yes – given that information on the energy performance of buildings is otherwise lacking.

26. How would the relevant information be used by stakeholders?

To inform building owners, investors, occupants, and prospective buyers and tenants about the performance of a building in a similar manner to how NABERS and the CBD program is currently used by the commercial office sector.

27. How should the information be disclosed? To whom?

It is recommended to disclose information in the same way as currently required by the CBD program at the time of sale or lease. However appropriate disclosure (such as on website, front desk, window display etc) should be developed as when the scheme requires periodic disclosure.

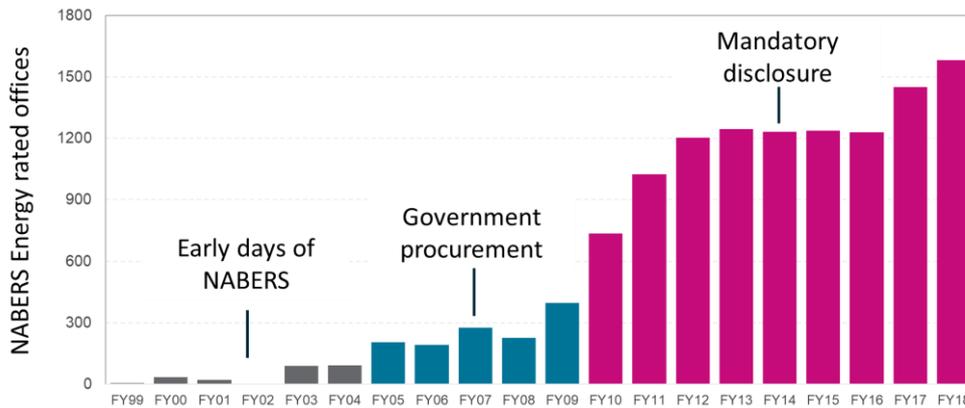
~~28. What is the cost of obtaining a BEEC?~~

~~29. How could the administrative arrangements for the CBD Program be improved so that the Program operates more efficiently?~~

APPENDIX

The following charts from NABERS clearly show how effective mandatory disclosure under the CBD scheme has been to increase the number of buildings that are rated and the increase in ratings with time which is leading to significantly more efficient energy use. It is recommended that these charts be used in the Draft Report to support the case for expanding the CBD scheme

Policy has been key in building energy efficiency demand



Second breakthrough: Commercial Building Disclosure



NABERS-certified buildings in Australia have one of the world's fastest rates of improvement

