



Australian
Institute of
Architects

Draft Residential
Apartments
Sustainability Plan

Submission to City of Sydney

12 June 2015

SUBMISSION BY

Australian Institute of Architects – NSW Chapter
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PURPOSE

This submission is made by the NSW Chapter of the Australian Institute of Architects (the Institute) to the City of Sydney in response to the Draft Residential Apartments Sustainability Plan.

At the time of the submission the office bearers of the NSW Chapter are:

Shaun Carter (President), Joe Agius (Immediate Past-President), Sarah Aldridge, Melonie Bayl-Smith, Nigel Bell, Callantha Brigham, Jacqui Connor, Chris Jenkins, Alex Kibble, Debra McKendry-Hunt, Andrew Nimmo, Kirsten Orr, Shahe Simonian, Howard Smith, Ksenia Totoeva, Paul Walter.

The Office Manager of the NSW Chapter is Audrey Braun. This paper was prepared by Murray Brown, Policy Advisor, and the NSW Chapter Built Environment Committee for Chapter Council.

INFORMATION

Who is making this submission?

- The Australian Institute of Architects (the Institute) is an independent voluntary subscription-based member organization with approximately 11,553 members who are bound by a Code of Conduct and disciplinary procedures.
- The Institute, incorporated in 1929, is one of the 96 member associations of the International Union of Architects (UIA) and is represented on the International Practice Commission.
- The Institute's New South Wales Chapter has 3,348 members, of which 1,951 are registrable architect members – representing 43% of all registered architects in NSW.

Where does the Institute rank as a professional association?

- At 11,553 members, the RAlA represents the largest group of non-engineer design professionals in Australia.
- Other related organisations by membership size include: The Design Institute of Australia (DIA) - 1,500 members; the Building Designers Association of Australia (BDAA) - 2,200 members; the Australian Institute of Landscape Architects (AILA) - 1,435 members; and the Australian Academy of Design (AAD) - 150 members.



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The Institute commends the City of Sydney for preparing this excellent resource. We support the initiative that adopting the actions in this plan for new and existing apartment buildings, the City stands to reduce apartment- sector greenhouse gas (GHG) emissions by 40 per cent and water consumption by 7 per cent by 2030, as well as divert 70 per cent of waste from landfill by 2021.

The Institute also agrees with the basic propositions in this paper that:

- Apartment living is more sustainable than single houses in the City of Sydney;
- The energy consumption of apartment buildings, particularly for common services and areas, can be reduced substantially through cost-effective measures;
- Assistance is necessary to address the key barriers to better environmental performance;
- It is easier to address the improved environmental performance of new apartment buildings through regulation than it is to improve the environmental performance of existing apartment buildings through retrofitting because of issues associated with strata management schemes and high tenant turn over.

The Institute supports the City's target of 80% of its residents in apartment buildings by 2030.

The Institute has a concern that the paper could be seen to demonstrate that high rise apartment living results in poor environmental outcomes. This view is in direct contrast to the Institute's strong support for SEPP 65, which we believe has had a major beneficial impact on the quality and liveability of Sydney apartment buildings during the past 12 years.

We also question the assumptions on which some of the paper's assertions are based:

- The paper mentions a review of 30 apartment buildings (Page 1). It is claimed that owners are already implementing 40% of the opportunities identified in these buildings. How is this 40% distributed across energy consumption, water and waste savings? Which of these areas do owners find it easiest to implement?;
- What contribution do these savings make to achieving the sustainability target for these buildings?;
- The graph on Page 2 shows that greenhouse gas emissions increase with the height of the building. What is the data demonstrating that energy consumption by centralised equipment systems is the cause of this increase?;
- Have transport emissions savings been factored into these calculations? Page 1 acknowledges that 'apartment living is often assumed to be more environmentally efficient than other dwellings based on lower transport emissions'. This suggests that savings in transport emissions could be offset against building emissions.

There are a number of limitations in the data on which the Page 2 graph is based:

- The Energy Australia study¹ included apartment buildings across a number of Sydney suburbs, not just the City;
- There was some confusion in calculating the exact emissions from centralised systems because of the differences in the distribution of energy between owners and common areas in the different buildings included in the study;
- The study conclusions note that: 'It is critical that future studies look at the whole building consumption, including internal apartment consumption and common areas, to fully understand the energy needs of multi-unit dwellings'.

The Institute considers that the data in this study is therefore not a reliable source of accurate information on energy consumption in apartment buildings in the City of Sydney.

The Institute agrees that 'the greatest potential for sector-wide greenhouse gas emissions reductions in new buildings is to improve compliance with BASIX and increase BASIX targets' (Page 7).

We also agree that mandatory disclosure is the most reliable means of achieving a performance benchmark for existing apartment buildings. While we applaud the City's proposal to introduce a funding program for retrofitting - and other voluntary schemes - we consider that compulsory systems are the only reliable way of achieving improved emissions standards.

On the other hand, we consider that publicity given to apartment buildings that achieve exemplary sustainability performance through an awards program, exhibitions, talks and website information has the potential to generate competition between owners, which will have some effect in lifting overall sustainability performance standards.

The Institute supports the initiatives described in the 'Actions' section of the Plan: Foster Innovation, Raise the Bar, Build Capacity, Activate Upgrades & Empower Communities.

We also support the outcomes and actions outlined on Pages 8-9.

We congratulate the City of Sydney on this initiative.

¹ Energy Australia, Multi Unit Residential Building – Energy and Peak Demand Study, 2005