Effect of Energy Efficiency Rating (EER) of Dwellings on Sale Prices in the ACT 1999 – 2021







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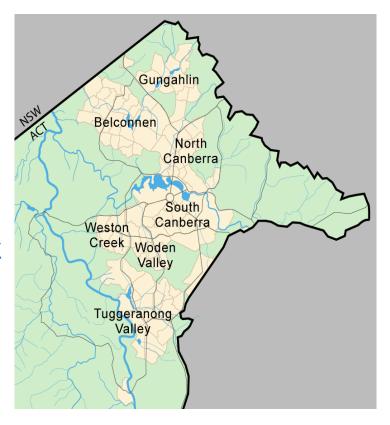
Introduction

- Energy Efficiency Ratings (Sale of Premises) Act 1997
 - Requirement for EERs in effect in 1999
- Civil Law (Sale of Residential Property)
 Act 2003
- Studied initially over a period of 153 months in quarterly rests to 2012
- Relationship between EER and prices grew weak
 - Proximity of worst rating dwellings to the city centre
 - Mean price instead of median price
 - Best rating dwelling-type (apartments) priced low



Revised Methodology & Rationale

- Properties in each suburb are grouped to 6 larger suburb regions surrounding town centres
 - Gungahlin,
 - Belconnen,
 - Inner North,
 - Inner South,
 - Woden/Weston Creek
 - Tuggeranong





Revised Methodology & Rationale

- Properties in each suburb are grouped to 6 larger suburb regions (Gungahlin, Belconnen, Inner North, Inner South, Woden/Weston Creek and Tuggeranong)
- Properties in each suburb region are disaggregated
 - Dwelling classifications: (Apartment/Units, Townhouses, Houses)
 - EER groups:Low (0-2.5 star), Mid (3-4.5 star) and High (5+ star)
 - Median prices
- Better data representation
 - Account for occasional outstandingly high advertised price
 - Price of each dwelling type differs significantly
 - More inefficient (i.e. low rating) housing located in inner regions still obscuring \$/EER trends



Key Results – Apartments

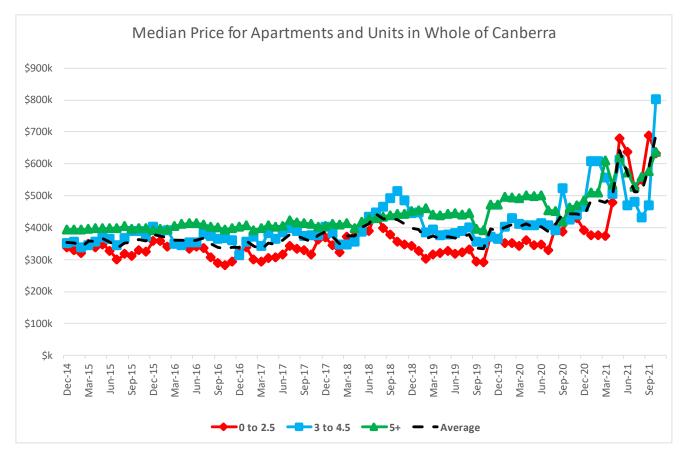
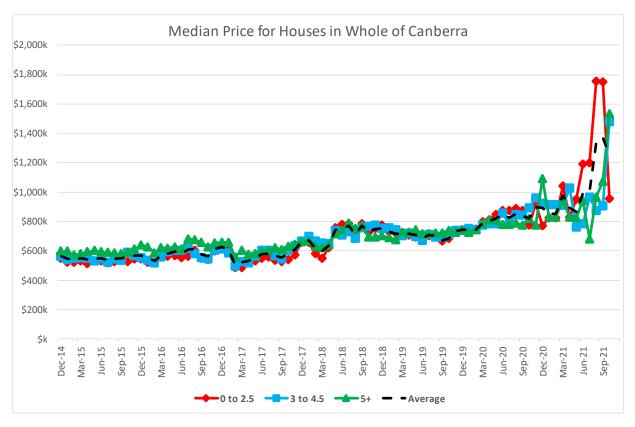


Figure 1: Median price for apartments/units in the Whole of Canberra

- Apartments rating 5+ stars generally attract a sale premium
- Premium in the past 24 months is between 16% (Mid-EER to High-EER) 30% (Low-EER to High-EER)



Key Results - Houses



- Price and EER had a positive relationship in the earlier years between 2014 - 2017
- Mid-EER houses appear to be more appealing and list at a higher price in the past 24 months

Figure 2: Median price for houses in the Whole of Canberra



Key Results - Townhouses

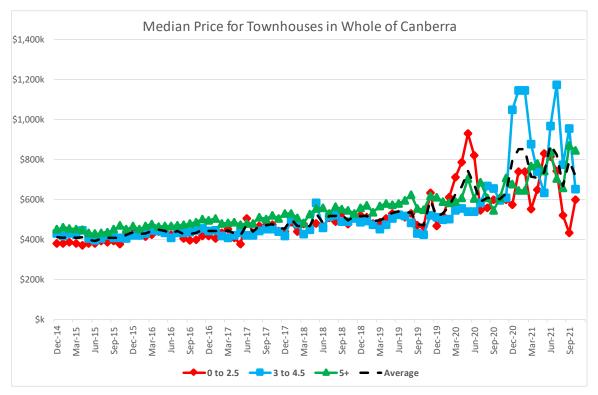


Figure 3: Median price for townhouses in Whole of Canberra

- Townhouses generally show a positive relationship between price and EER
- High-EER townhouses in Tuggeranong in particular attract above average sale premiums
- High-EER townhouses in inner regions experienced large price fluctuations and generally records price discounts

Review and Forecast

- In 1997, the introduction of EERs at the time of sale was a cutting edge development: Denmark was the only other jurisdiction to have such a scheme
- It was introduced as a private member's bill by the then sole Greens member of the ACT Legislative Assembly and was supported by both the Labor government and the Liberal opposition
- Now such legislation is the subject of an EU directive so that all its 27 member countries and the UK have such a scheme but none of the Australian states do
- The ACT scheme continues unamended since 2003 using superseded software with declining credibility



Review and Forecast

- The ACT scheme continues unamended since 2003 using superseded software with declining credibility
- ACTHERS uses FirstRate4 software developed by Sustainability Victoria in the 1990s based on the then current version of the NatHERS software AccuRate
- Since 1st May 2009 only second generation NatHERS software is referenced in the National Construction Code (NCC)
- All NatHERS software, including AccuRate and FirstRate5, currently use the CSIRO calculation engine, Chenath (v3.21)



Review and Forecast

- The ACT scheme continues unamended since 2003 using superseded software with atrophied procedures and declining credibility
- New homes since 2003 are rated with the current NatHERS software but existing homes are still rated using the very simplified FirstRate4 from the 1990s
- Inconsistent software and input protocols cause jarring differences in the rating of new homes and old
- 2016 Coalition Agreement for the ACT Gov't included a review of the EER Scheme but no action was taken
- 2020Labor/Greens Coalition Agreement for the ACT Government has no such aspiration



Conclusion

- Our results support the existence of positive effects of energy efficiency and dwelling prices over all three housing types, albeit to a lesser extent for houses
- EER correlates positively with property prices up to a price point above which other market variables appear to take greater effect
- Effects of higher EER appears diminished for homes with listing prices above \$800,000 (but this also correlates with inner suburbs)
- Political inaction seems entrenched
- The Minister for Sustainable Building, Rebecca Vassarotti (Greens), is yet to comment publicly on this problem after 13 months in office

