Mandatory Disclosure of Energy Efficiency for Residences – History and Compliance in the A.C.T. Sales and Rental Markets

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ABSTRACT

The Council of Australian Governments (COAG) has resolved to introduce Mandatory Disclosure of Energy Efficiency for Residences in the next few years. As a world leader, the ACT introduced its scheme in legislation in 1997 implemented in the market at the end of March 1999. New Zealand is developing a similar scheme.

Both nations can learn much from the ACT's experience and this paper seeks to outline the strengths and weaknesses of the scheme as it has been implemented to date.

This paper also addresses the study undertaken by Energy Partners in the Australian Capital Territory, analysing the compliance of real estate agents with the mandatory disclosure of house energy ratings for rental properties. Since the implementation of that amendment of the ACT Residential Tenancies Act (the Act) in 1999, landlords or their real estate agents are required to disclose any existing Energy Efficiency Ratings (EERs) in advertisements for properties to lease.

Over 135 months of study of the "Canberra Times" "Property Guide", now called "Domain", (analysed in quarters) has shown that most of the real estate industry and individual landlords continue to ignore the information needs of tenants and omit the EER from their advertisements, with only 26.2% of the advertisements last quarter disclosing an EER, even though an estimated ~58.4% of ACT rental properties have been rated. There is also an apparent skewing of the disclosure with omission of poor ratings being more common.

Keywords - energy rating, housing market, residential mandatory disclosure, EER

INTRODUCTION

In December 1997, the ACT Legislative Assembly passed the Energy Efficiency Ratings (Sale of Premises) Act, (EER[SOP] Act) which came into effect in March 1999 and made it compulsory for an Energy Efficiency Rating (EER) assessment to be carried out and published in any advertisements for all dwellings for sale in the Australian Capital Territory. Commentary on this scheme is in the public domain (Lee, 2001, 2002 and

2003) and (Energy Partners, 2002, 2003, 2004, 2007 and 2008) and further analysis and critique was "imminent" for several years (AGO, 2005) and is now published at the end of last year (ABS, 2008) demonstrating a robust relationship between EER and selling prices as shown by the research reported on here (see Figure 8: Average House Prices by Star Band since the start of the EER (SOP) Act).

In the same year as the EER[SOP] Act, 1997, the Residential Tenancies Act was amended to require any existing energy rating to be disclosed in an advertisement to lease a home. For obvious reasons, this was only applicable to new homes until early 1999. Subsequent to that, it could be argued as logical to not direct policing resources to the rental market for several years while the fraction of homes with ratings accumulated through the sales and new builds since then.

This requirement for all rental homes to provide known information on the energy efficiency of the dwelling is designed to improve consumer choice with respect to comfort, running costs and environmental considerations. That the requirements of the Act have hardly been enforced since its inception is well known in the industry and is demonstrated by the lack of correlation between the accumulated number of rental property energy ratings and the far lower frequency of inclusion of ratings in advertisements. This apparent failure of compliance and policing contributes a serious flaw to the system.

As the relevant ACT Residential Tenancies Act amendment in 1997 (taking effect in 1999) was initially a Greens Private Members Bill, the results of the recent ACT election on 18 October 2008 has provided some impacts on the promotion and policing of the EERs. By Monday 20 October it was apparent that the Greens' representation had trebled and on 25 October the poll was declared, confirming a fourth Green had been narrowly elected. With four of the 17 elected members of the ACT legislative assembly, the ACT Greens promptly negotiated a minority government for the Australian Labor Party with a published formal agreement of their expectations (Greens and ALP, 2008).

ADVANCES ELSEWHERE

In order to know more about Energy Efficiency Rating, it is interesting to have a look at some other countries. The main purpose of this part is to introduce the European Energy Performance of Buildings Directiveⁱ. From January 2006, the EU has required that its member governments have such schemes for commercial and residential buildings and as such they are now world leaders. Denmark has a history as long as that of the ACT but for the rest of the world this is new territory..

The French EER:

French equivalent is called the Energy Performance Diagnostic (Diagnostic de performance énergétique - DPE). The DPE in French building has been a requirement since:

- The 1st of November 2006 (for selling property).

- The 1st of July 2007 (for renting property and new construction).

The fee for this diagnostic depends on the size of the property (between \$70 and \$280)ⁱⁱ, and is a requirement of the owner, who has to do it every ten years.

This EPD document presents two different scales (see below):

- The first one presents the energy consumption of the property independent of the way it is consumed.
- The second one presents an estimation of the greenhouse emission for the property. This estimation takes into account all kinds of energy used in the dwelling (every kind of fuel) and the electricity production (takes into account output of production and transport of electricity).

btain with the 3CL-DPE	method, average price	from 15/08/2006.	
	Total energy	Primary energy	Annual cost
	consumptiom	consumption	
	Detail per kind of	Detail per use in	
	energy and use	kWh _{PE} /year	
	kWh _{TE} /year		
Heating	1.296 kWh _{TE} /year	3.344 kWh _{PE} /year	165 \$ ¹
Hot water	926 kWh _{TE} /year	2.389 kWh _{PE} /year	118 \$ ¹
Cooling	0 kWh _{TE} /year	0 kWh _{PE} /year	0 \$ ¹
Energy consumption	2.222 kWh _{TE} /year	5.733 kWh _{PE} /year	283 \$ ²
< 51 A 51 à 90 B 91 à 150 C 151 à 230 D 231 à 330 E	243	< 6 A 6 à 10 B 11 à 20 C 21 à 35 D 36 à 55 E	11 kg _{eq CO2} /m²ar
	kWh _{EP} /m².an	56 à 80 Forte émission de GES	G

¹ Without subscription.

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² Including subscription (In France, to have electricity, a subscription fee must be paid to the energy company. This fee depends on electricity consumption and Amps needs as illustrated below).

Power need (kVA)	Circuits breaker (A)	Annual fee (\$)	Price (\$)
3	15	98.08	0.1537
36	60	970.14	0.1582

The law imposes upon the owner to obtain this diagnostic and to provide it if somebody wants to rent or buy the dwelling. This diagnostic has to be made by an expert certified by an accredited organization. If the owner does not have this document, he cannot use an estate agent to sell/rent the dwelling. However, the French government does not impose sanctions. Currently, this document rarely appears in advertisements to sell or rent.

Differences between Australian and French electricity

If we consider the annual electricity production, Australia is at the 15th rank, producing 244.2 billion kWh, and France is the 8th rank with 870 billion kWh. Considering the electricity export, France is at the 1st rank while Australia does not export electricity. However, Australia does not import electricity, but France imports around 10,430 GWh per year (http://www.indexmundi.com/).

Currently, nuclear energy is the main source of electricity in France (78.1%). Other sources are hydroelectric (11.1%), coal and other fossil fuel (5.7%), natural gas (3.8%) and other (like waste-to-energy and wind turbines – 1.3%) (http://www.eia.doe.gov/emeu/international/electricitygeneration.html).

METHODOLOGY

Over a period of 135 months (11.25 years) in quarterly rests, Energy Partners monitored the ACT rental market to establish its level of compliance with the amended Residential Tenancy Act of 1999. All rental property prices advertised in the territory's main real estate advertiser – the "Property Guide" (and later under its current name "Domain") of "The Canberra Times" – were recorded with the EER (if present), and organised according to real estate agent. The number of rental advertisements for which the EER was being disclosed was compared with the target disclosure based on observation of nearly 100% compliance with the requirements for EERs for new housing and sales of existing housing and on reported market size.

For the first four years, the Government's focus was on the much higher profile EER[SOP] Act which, along with the 4-star rating requirement for new homes, generated the ratings pool to be tapped for this low or no-cost energy rating of rental dwellings. At the end of that four year period, when it was estimated that a quarter of all Canberra homes had been rated, the Department of Urban Services announced its intention to police the rental provisions whereupon the compliance of the real estate industry radically improved in the June quarter of 2003 from an indifferent average of under 5% for most of the earlier period. This change also coincided with the passage of the Real Estate Agents Act which brought compliance generally to the fore within the industry and supported the noted improvement.

Also, since the start of this longitudinal investigation, the Internet has become increasingly used to display and search for rental properties. As such, the use of Internet listings for analysis has been included in the research for a number of real estate

agencies as they have ceased advertising rentals in "Domain". In making this change, we have sought to maintain the results as near as possible to a complete record of publicly advertised rentals at every quarter. Additionally, some fruitful consultation has occurred with the Office of Regulatory Services (ORS, a division of Justice and Community Safety or JACS) and the Real Estate Institute of the ACT (REIACT).

RESULTS

In the period examined, percentage compliance with EER advertising requirements has fluctuated between a minimum value of 3.02% (month 48, April 2003) and a maximum value of 26.97% (month 117), but has averaged at 13.3%. Figure 1 compares the actual compliance (maroon colour bars) to the level predicted by the numbers of rated rental properties (blue colour bars) – assuming that the frequency of prior rating of rental dwellings is the same as that of the housing stock as a whole. A slight upward trend over the 60-month period, the second half of the requirement's history, can be observed in Figure 2 but is far more gradual and variable than the consistent ~1.6% quarterly increase in the number of dwellings obtaining an EER as shown by the benchmark.

The gap between these actual and predicted values has widened markedly with time. During the most recent quarter surveyed, ending in July 2009 (month 123), disclosure occurred in approximately 18% of rental advertisements compared with the estimated 55% of rental properties that have been rated for energy efficiency (assuming that all EERs are enduring). The number of rental properties advertising an EER has remained almost constant for the past two quarters and has varied between 8 and 27% over the past four years while the estimated number of rated properties has almost doubled.

Figure 1 illustrates that EER disclosure is dominated by one real estate agency – Independent Property Group. Independent's disclosures often formed more than half of total real estate agent disclosures

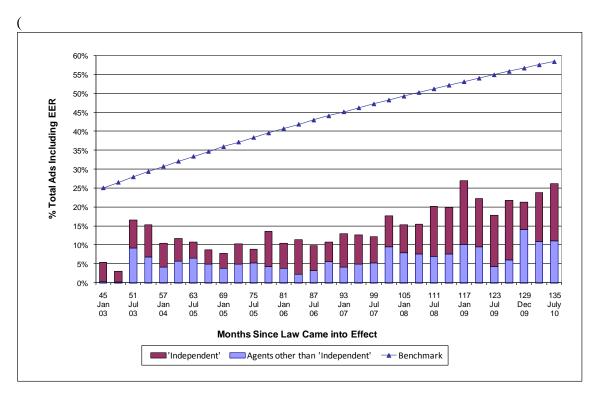


Figure 1) and, as a proportion of its total advertisements, regularly greatly surpassed the benchmark (Figure 2). They demonstrate what is possible within the industry although that firm's market position where they dominate the listing for rental of new dwellings makes that easier for them than for many of their competitors.

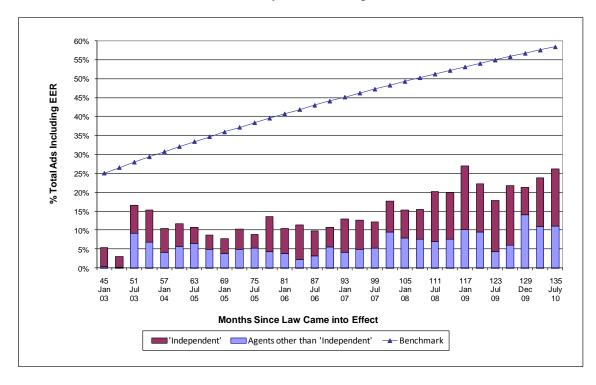


Figure 1: Advertisements which include EER as a percent of total advertisements compared with benchmark. Actual versus minimum expected EER disclosure of rental advertisers

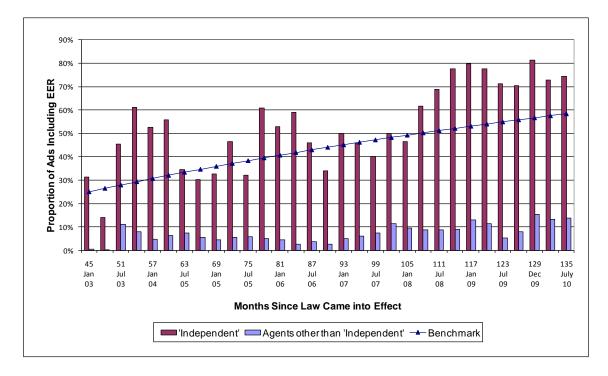


Figure 2: Proportion of advertisements from 'Independent' and agents other than 'Independent' to disclose an EER.

The compliance trend is demonstrated more clearly by examining the level of actual disclosure as a proportion of expected/potential disclosure. Figure 3 depicts compliance over the same half of the study. The significant decline of total compliance in the rental property sector since the short-lived revival of government interest in the requirement in 2003 is apparent, however a slow improvement is discernible over the past year following a relapse in the midyear of 2009.

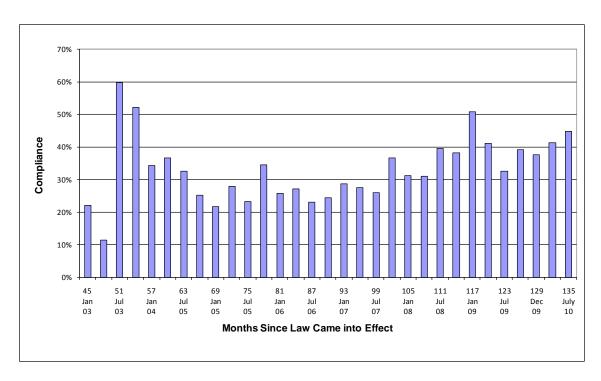


Figure 3: Compliance with the Residential Tenancies Act 1997

The unusually high level of overall compliance over two quarters in mid to late 2003 (months 51 to 54) were a result of enforcement measures indicated by Planning and Land Management (PALM) from within the Department of Urban Services at the time. A drop in compliance resumed as soon as the apparent threat of enforcement eased. After the election in October 2008 of an ACT Legislative Assembly where the Greens hold the balance of power over a minority Labor Government (Greens and ALP, 2008) there was also a surge in bureaucratic interest and resultant compliance but this too has withered away to apparent resumed indifference already.

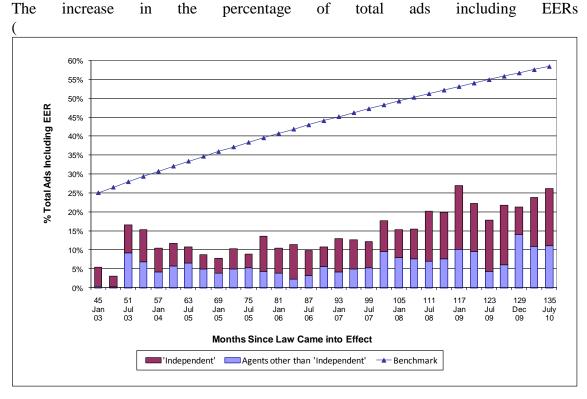


Figure 1) and compliance (Figure 3) over the past year and especially as seen in the past two quarters (three rests: month 111, June 2008, month 114, September 2008 and month 117, January 2009) may be attributed in part to the inclusion of a notice regarding EERs in the April 2008 electronic news bulletin of the Office of Regulatory Services (ORS). The ORS is currently responsible for enforcing section 11A of the Act. The news bulletin states that "EERs must be included in any advertisements for a property - for sale or rent. For renting this only applies if an EER exists." The article goes further to explicitly state that this includes advertising on TV, radio, Internet and in newspapers, pamphlets, real estate window displays and on-site 'for sale' signs and that "Monetary penalties apply for non-compliance" (ORS, 2008).

When the percentage compliance of Independent is separated from that of the other agents (Figure 4), it can be seen that the EER disclosure of Independent has increased and then reverted in the past year while that of the rest of the industry has again declined. The increase in Independent's compliance may have therefore been the cause of the increase in compliance overall and not the inclusion of the EER notice in the ORS electronic bulletin in April, 2008 (except to the extent that it may have affected Independent's behaviour).

As the use of online listing of rental properties increases, the challenge of enforcing EER inclusion in advertising also amplifies. Most real estate agencies have their own internet website, each with its own structure and field listings. It is assumed that the same trend in advertising compliance is occurring with online sources within real estate agencies; however further investigation into this area could provide differing results (e.g. agencies listing EERs on their websites but not in Domain ads to save on advertising costs perhaps).

There are also a number of multi-agency internet sites that list large numbers of rental and sale properties. Sites like www.allhomes.com.au and www.domain.com.au are fast growing and are a much used source of information for buyers and renters alike.

Allhomes is one of the largest residential rental and sale sites on the internet for the ACT. While Allhomes specifically asks for an "energy rating" for sale houses and rental properties when privately advertising, many of the advertisements (both private and agency listed) do not indicate an EER listing. A further study into quantifying the compliance of both private and agency based listings of Allhomes may provide more information but would be quite time consuming. Also, disappointingly, while their sale properties listings have a function for sorting by EER, their rental properties do not.

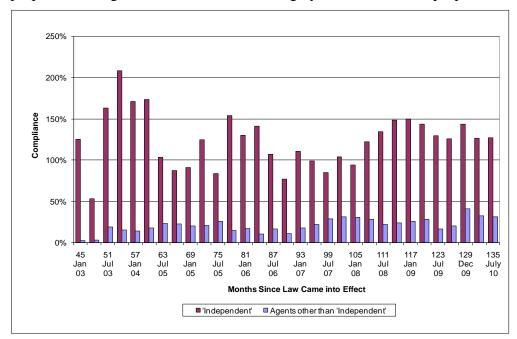


Figure 4: Compliance to the Residential Tenancies Act 1997 by Independent and agents other Independent.

Domain's internet home page (www.domain.com.au), as directly linked in the home page of the Canberra Times, does not provide any place for an EER listing to be added to a private listing for either sale or rental advertising. While there is a section on their property listings for an energy efficiency rating, having no prompt for information about the inclusion of EER on their website is most concerning until early 2010.

The distribution of EER advertisements across the star bands is also worth considering. As can be seen in Figure 5, the quarter for which the highest level of compliance occurred (January 2009, month 117) had the highest percentage of ratings advertised compared to total advertisements across the most star bands when compared to the lowest compliance period (Figure 6) and the most recent quarter (Figure 7). The higher number of lower-rated houses advertised during the 2003 period of enforcement of the Act indicates that lack of enforcement is resulting in low disclosure for houses obtaining a low EER. In all three of these quarters, there are significantly more 4-star ratings advertised than those of other star bands. This may be partly due to a 4-star requirement

for new developments from 1997 to July 2006 but also provides further evidence of skewed compliance with the Act. In the most recent quarter (see Figure 7) the increased occurrence of 5-star rental properties can be explained by the upgrade of the mandatory star requirement for new Class 1 developments (houses and townhouses) to 5 stars from the adoption of the 2006 edition of the Building Code of Australia in July, 2006.

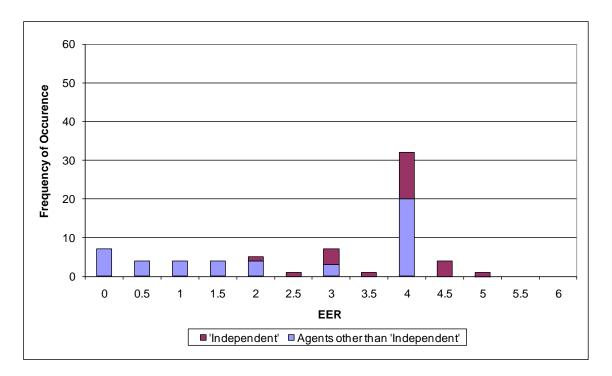


Figure 5: EER advertised for the quarter of highest compliance (10 January 2009, Month 117)

In July 2004 (month 63), when the Energy Efficiency Ratings (Sale of Premises) Act was replaced by the Civil Law (Sale of Residential Property) Act 2003 which added several other disclosure requirements to those of energy efficiency in a response to a perceived plague of gazumping, responsibility for the operation and policing of the EER disclosure provisions of the Residential Tenancies Act passed to the ACT Department of Justice and Community Safety (JACS). Under the care of JACS, the levels of compliance have ebbed unexplainably without drawing any response known to the authors until April last year. Through email communication with Dianne Gunston of the ORS during April 2008, the then authors (Lee, McMahon and Stewart, 2008) were advised that the ORS began "marking up" rental ads as was communicated through the April Office of Regulatory Services newsletter and that "A letter will be sent to Real Estate Agents for all ads that are missing an EER with a reminder of their obligations". It now seems that such letters were not sent then (or, if they were, they seem to have had no substantial effect on industry practice at the time). The authors have subsequently sighted such letters (dated 29 October and 5 November 2008) and note a substantial though unsustained improvement in compliance at the end of that quarter.

In a meeting with the ORS in early November 2008 it was clarified that, for resourcing reasons, the "marking up" only began for sales advertisements and no action was anticipated on rental ads before the end of 2008. Accordingly, the bulk of the small apparent improvement over 2008 must be credited the modest actions of the REIACT.

It has been noted that, largely as a result of REIACT action as detailed last year (Lee, McMahon and Stewart, 2008), the potentially confusing shorthand used in some advertisements was eliminated. In most ads for sale a 5-star home would be noted as EER5.0 and this has now been adopted as a de facto standard. The alternative of 5* used in some rental ads has now all but disappeared.

The REIACT has also pointed out that their members believe that the EER is "... of little or no interest to the market in terms of the decisions people make about their accommodation." Additionally they urge that there should be a "focus [of] efforts on promoting the benefits to the public at large, rather than seeking the persecution of the supposedly less righteous." Such promotion is the province of the ACT Government which has been consistently remiss in this regard since the legislation came into effect.

The REIACT has a valid point. If a substantial number of prospective tenants were self-interestedly demanding this information, the policing effort required of the Government would be substantially reduced. The Institute was also concerned that the easy response of Government is to remove the ambiguity through "a financial impost on landlords and therefore eventually on tenants, by seeking to have all rental properties assessed for their EER (rating)." This concern has eased after the failure in the Assembly of a Greens bill to do just that and it is now unlikely that any further moves will occur until the intentions of the other members of COAG for what has become known as "Mandatory Disclosure" (see for example Lee, 2009) becomes known in practical terms – perhaps forming a national consensus that the ACT might feel obliged to join even if it proves to be a retrograde step for that small but leading market. A similar response from the Government was invoked by the recent push by the Greens to ban the installation of electric resistance water heaters in new homes in the ACT well ahead of the nationally agreed program to do so (but well behind several states which have already done so).

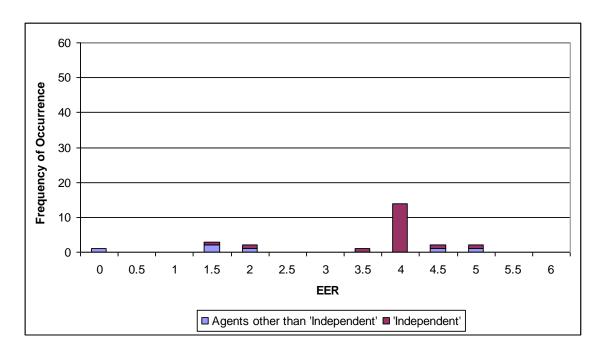


Figure 6: EER Ratings advertised for the quarter of lowest compliance (30 September 2006, Month 90)

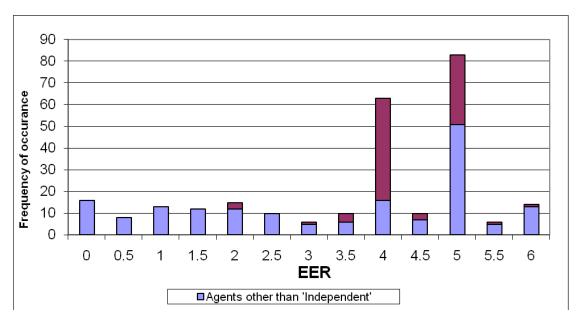


Figure 7: EER Ratings advertised for the most recent quarter (October 2010, Month 138)

The clear industry leader in complying with this Act, the Independent Property Group, has commented on our research. Through personal communication with the CEO, John Runko on 17 November 2008, is was confirmed that as the largest residential property managers in the ACT, they take compliance seriously as market leaders (now and in 2003) and that they are highly successful at attracting new builds into their clientele



where the EER is certain to exist, easy to access and attractively high.

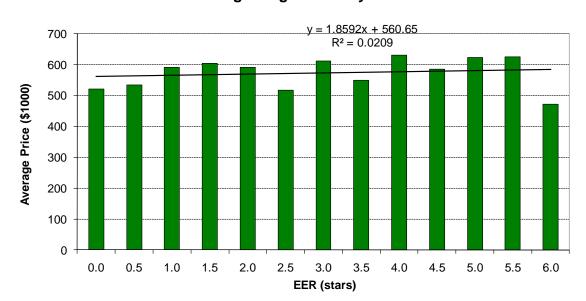


Figure 8: Average House Prices by Star Band since the start of the EER (SOP) Act

At the other end of the scale, private rental ads continue to ignore the Act with apparent impunity. In the latest quarter, only one of the 55 privately placed adverts included an EER. The ORS has taken no known action to address this market information failure. It would indeed be unfortunate if Government laxity here were to inadvertently give an incentive for landlords to avoid the professional side of the industry entirely.

CONCLUSIONS

The most striking conclusion to be drawn from this study is that the mandatory EER disclosure requirements of the 1999 Residential Tenancies Act 1997 have not been realised. The number of rental properties rated for energy efficiency has increased over the past decade yet disclosure in the rental market has remained essentially the same since the waning of a spurt of compliance five years and 6 months ago. The key problem with the current system is that it is likely to be followed only by the property owners who stand to gain – those with houses with a high EER. It is likely that the houses for which known star ratings were suppressed were generally the poorer thermally performing houses. In such cases it was to the detriment of consumers that such information, as required by law, was not provided.

The fluctuating level of compliance indicates that active enforcement of the Act is required. This has been acknowledged by the ACT Department of Justice and Community Safety (JACS) which last year expressed the intention to put more effort into enforcement in the future. The effect of enforcement in 2003 was dramatic and the methods used to achieve this could not be recalled by current staff of the JACS.

However, the Independent Property Group – the best performers in EER disclosure – recalled that compliance systems and culture were well established in their franchise at that time so that dealing appropriately with this new requirement was not onerous. More effective enforcement could be imposed by centrally recording/matching all rated and rental addresses. Perhaps a more practical approach would be to legislate a requirement for all rental properties to be rated for energy efficiency³. This would prevent poor-performing houses from hiding behind the façade of not having been rated, creating a fairer, comparable rental market, and aligning the rental market with the sales market for the benefit of all consumers.

REFERENCES

ABS, "Energy Efficiency Rating and House Price in the ACT", Australian Bureau of Statistics report to DEWHA, Canberra, 2008

AGO, "A Study of the Impact of Mandatory Energy Performance Disclosure Requirements for Class 1 Buildings in the ACT", project brief, Department of the Environment and Heritage, Canberra, June 2005 (consultant report eventually published as ABS, 2008)

Energy Partners, "Energy efficient houses attract higher prices", media release, Canberra, April 2002

Energy Partners, "Five Star Advantage Returns: indicator of the 'heat' leaving the residential sales market", media release, Canberra, September 2003

Energy Partners, "Energy Efficiency Star Ratings Compliance Collapse", media release, Canberra, January 2004

Energy Partners, "Energy Efficiency Star Ratings Compliance - Analysis of eight years of EER compliance data for the Canberra real estate industry shows that even though more and more rental homes have EER ratings, real estate agents aren't going to pass the information on to the tenants", media release, Canberra, July 2007

Energy Partners, "Gas Guzzling Houses Lead ACT's Price Decline", media release, Canberra, May 2008

Energy Partners, "Home Energy Efficiency pays off at sale time", media release, Canberra, December 2008

Greens and ALP, "Parliamentary Agreement for the 7th Legislative Assembly for the ACT", Canberra, 31 October 2008.

Lee T R, "ACT Mandatory Disclosure of House Energy Rating", updating presentations at ANZSES Solar 01, 02 and 03, unpublished

Lee, T. and McMahon, J. "EER Disclosure Non-Compliance in the ACT Rental Market", Solar 07 Conference Proceedings, ANZSES, Alice Springs NT, 2007

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³ Such an amendment to the Act was proffered as a private member's bill during 2008 by the one Greens member of the Legislative Assembly but it did not gain the support of either major party.

Lee, T., McMahon, J. and Stewart, J. "EER Disclosure Non-Compliance in the ACT Rental Market", Solar 08 Conference Proceedings, ANZSES, Sydney, 2008

Lee, T., "Energy efficiency Mandatory disclosure at sale or lease", BEDP Environment Design Guide News, Australian Institute of Architects, Melbourne, May 2009

Office of Regulatory Services, Department of Justice and Community Safety, April 2008. http://www.ors.act.gov.au/pdfs/Newsletters/ORS_E-News_08-Apr.pdf

Wilkenfeld G. et al, "Mandatory Energy Performance Disclosure Requirements for Dwellings: Impacts in the Australian Capital Territory and Potential Impacts in Other Jurisdictions", Report to the Australian Greenhouse Office, Canberra, 2001

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Solar2010, the 48th AuSES Annual Conference

BRIEF BIOGRAPHY OF PRESENTER

Trevor Lee, ARAIA

An architect by initial training, Trevor is a consultant on energy conservation in the built environment through his multi-disciplinary firm Energy Partners. He is the lead author of the Australian Solar Radiation Data Handbook (ASRDH, 2006) and team leader for developing the current Australian Climate Data Bank (ACDB, 2008), the basis of all building and energy system simulation programs in current use in Australia. Subsequently, he worked on a project for the then Australian Greenhouse Office to project the impact on the built environment of "inevitable climate change".

His interests include solar energy applications and ethical investment and, in pursuit of these, he has served as the Chairman of the Australian and New Zealand Solar Energy Society and as a director of the Sustainable Energy Industry Association (forerunner of the Clean Energy Council (CEC)) and of the Canberra-based funds manager Australian Ethical Investment Ltd.

Notes

- Ian McNamee & Partners, Laurie Scheele and Ray White explicit state EER N/A for rentals without a rating.
- Rentals listed as best offer and sales as listed as by negotiation have been left out and
- If price range was given then average was taken
- Most of the EER ratings that were missing for the sales are due to investment properties for the Defence housing.
- A large portion of Independent PG are due to apartments and have several listings in the same building.

ⁱ Implementation of the Energy Performance of Buildings Directive (EPBD) 2002/91/EC as cited in "Country reports 2008", EC Directorate for Energy and Transport, Brussels, 2008

ⁱⁱ From €50 to €200 converted at the rate of A\$1.00 = €0.67 (30 September 2010).