

# DEVELOPING ALIGNMENTS WITH GREEN BUILDING FOR A PROJECT HOME MARKET

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Presenting an analysis on the project home market in Perth WA; this paper looks at developing alignments for greener housing solutions, focusing on ways to change public and industry attitudes. At the turn of the Millennium, Scholars collaborated that green building was not an emerging trend; however, current research suggests otherwise. These investigations of this paper highlight a vision towards a more deliberate green trend thrusts bettering the outlook for a green Perth project home market. The UN's had a MDG's summit in 2010, expressed a need to developing sustainable building that can be measured.<sup>12</sup> The background information to Perth's current market in the paper is providing a foundation to insight the practices that are can assist in the initiation change and removal of barriers. It concludes that the developing green alignments seem not to be translating to greening Perth's project home market. However, the acknowledgement of onus lies on homebuyers and the construction industry. Construction businesses need to use green marketing tools to highlight their social responsibilities and motivate green thinking. Moreover, it is to be understood that a maturing in green practices will cause the industry to say 'Green is the only way to remain competitive'. Therefore, businesses need to adopt better managerial practices to filter throughout the construction process for viability of affordable green projects homes.

*Keywords:* Sustainability, Construction industry, Green innovation, Green marketing, Corporate social responsibility, Collaborative efforts.

## 1 INTRODUCTION

'Climate change', 'Sustainable development', and 'go green' have been hot topics globally in recent years as we start to look at better ways of living and co-habituating together. The construction industry has always delivered housing solutions that fit in with our lifestyles. Unfortunately, according to Myers (2005), the industry has a reputation of not embracing or not passing on green thinking practices or advancements to their clients. This paper looks at Perth's local project home market, endeavoring to find ways to change the attitudes and developing alignments for greener housing solutions. This paper will discuss these alignments through looking at the following: firstly, Perth and the current global sustainability situation; secondly, contextualize the Perth project home market; thirdly, investigate the Perth market and how it uses

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<sup>1</sup> United Nations NB: Abbreviations are shown in full in reference list.

<sup>2</sup> Millennium Development Goals.

marketing tools; fourthly, investigate the best approach to marketing Green Building in the project home market; and finally, examine the best ways that building companies can maintain affordable green buildings.

## 2 PERTH AND THE SUSTAINABILITY STATUS

In recent years, sustainability has become one of a few global topics that are now starting to become a way of life. The Dept. of Housing and Dept. of Planning (2013) produced a report the findings of a survey on people in Perth and Peel. It showed a promising potential for a better outlook on a greener future for the construction industry. It surmised that people are realizing that, “It is becoming less socially, economically or environmentally viable to continue Perth’s traditional pattern of development ... on the urban fringe”. The ABS<sup>3</sup> (2013) recorded that, in 2012, mortgage payers were consuming the highest amount of energy costs of \$125 per week, \$26 more than national average. Moreover, household’s energy usage accounts for 34.5% of the national total; leaving all the other sectors to take up the rest of the portion of energy outlay (ABS 2012). The United Nations’ MDGs development began the sustainable alignment in the construction industry globally through starting up UNEP-SBCI.<sup>4</sup> This program found that increasing awareness is necessary; however, the work for achieving the delivery of construction systems for greener building has been less advanced (UNEP-SBCI 2012). Therefore, whole nations’ peoples are realizing that green living needs to start to be addressed; but developing the alignments for the Perth homebuyer is not translating to building greener houses to what is currently been offered.

## 3 PERTH'S BACKGROUND AND PROJECT HOME MARKET

To align with green thinking in Perth’s Project Home Market, its background needs to be understood. Shepherd (2014) highlighted that Perth homes are predominantly of double brick construction. The persisting and increasing trend has spanned 100 years to 87% of Western Australia in the national total in 1995. Hishop’s (1998) insight into the Perth’s historical expression of contemporary architecture seems to relay that project home builders are capitalizing on the marketability of modernists’ designing principles. According to market researchers, eight of Perth’s major project home builders accounted for 11.3% of the \$10 billion market’s value in building approvals last year; where double brick housing is specifically marketed (Australian Bureau of Statistics 2014, Kelly 2014). The MBWA (2010) argues that builders who ‘depart from norm’ can cause significant building cost increases for the homebuyer.<sup>5</sup> Since these market leaders benefit from market trends successful green implementation has to rely on careful campaigning and promotion. Therefore, the onus to make the project home market lies on: firstly, the homebuyer to relay their sustainable needs; and secondly, industry stakeholders to promote green practices and technologies that are available. This collective pursuit is thought to develop alignments in a greener project home market.

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<sup>3</sup> Australian Bureau of Statistics

<sup>4</sup> United Nations Environment Programme – Sustainable Building and Climate Incentives

<sup>5</sup> Master Builders Western Australia

#### **4 DISSECTING A MONOPOLISED PERTH MARKET AND MARKETING ENDEAVORS**

Perth's heavily monopolized residential construction industry there are currently around 1720 plus new home builders; where 950 plus (55%) accounts for the project home market. Moreover, it is further unfortunate that there are less than 100 green building businesses needed to service Perth, which is not specifically targeting the project home market. MBWA (2010) said that, "Brick is seen to be a sound and attractive building product, providing thermal insulation in summer and winter, sound proofing and fire resistance". It is this consensus that is deluding green advancement while sustainable regulatory requirements are supporting tradition. Aligning with this idea; Alcock (2010) argues that the new 6-star's regulatory deficiencies are not embracing a holistic approach in measuring the greenness of the home. However, Alcock has not deviated from the social normality of the affordable, double-brick house tradition. On the other hand, Wheeldon (2014) represents the WA regional green builder who exercises green marketing and practices the alignment with green building developments. He says that, "I think brick is being superseded by modern timber frame homes that are more sustainable". Alcock and Smith are servicing two different target markets; showing the current problematic norm of misalignment with green building in Perth. The well supported, double-brick, housing solution that services Perth's homebuyer seems to be captive to corporate marketing strongholds. Although both give insight; the employment of green building can only be exercised in with attitudes that are aligned. Smith alignment is being shown in the positioning of his business in regional WA; where green business activities can be freely exercised. Silverman and Mydin (2014) say that the aid of green technologies used in human activities of building projects will lessen the negative infliction on the environment. Alcock and Smith are exercising corporate social responsibility to show transparency through the use of green marketing (Clow and Baack 2014). It is important to recognize that both are exhibiting green thinking; however, within the project home market, public relation practices make it harder to change in monopolized market and still remain competitive. This means that green marketing can create illusions to the public but remain the same internally; insofar as using traditional practices or not promoting green technologies to the homebuyer. If green marketing is fostered properly then developing trends could promote homebuyers to choose greener options. Making the green step is not just doing minimum standard in sustainable practices. However, it is also the process of setting up green advancements to initiate a green thinking industry. Therefore, alignments to a greener project home market in Perth will be dependent on employed practices and attitudes.

#### **5 MARKETING GREEN BUILDING FOR THE PROJECT HOME MARKET**

In a heavily monopolized market, how do companies remain competitive and become greener simultaneously? Doug (2011) points out that "Behavior change is the cornerstone of sustainability". It is in his view that a community-based approach is the best way to change behaviors; however, Grosskopf and Kibert (2006) argue otherwise. They say that a market-based approach has been proven to be more effective and efficient in providing a positive outcome for behavior changes. Conversely, the employment of both may create a more holistically positive outcome. The UN's MDGs

are aimed at communities and industries. The UNEP's (2014) report recommends that a commitment to targeting stakeholder relationships is a key task to developing green interventions. This is to promote and facilitate the elimination of barriers to greening the construction industry more holistically; achieving the charting of progression in light of the UN's MDGs. Their report on green progression promotes the development of advancements in regulatory policies, fiscal policies and voluntary actions seem to be showing green delivery from all angles. Moreover, this holistic reporting brings definition to the measurability of green building practices. Further analysis of Grosskopf and Kibert shows that Perth's segmented markets and trends within the industry can define what would be the best way to optimize the development of demand for a greener project home market. Accordingly, they said, "As the green building market matures so does the ability to understand the complexity of our sector and identify ways that we can improve our overall system efficiencies". It is this maturity that develops effectiveness and efficiencies. Therefore, developing these practices through industry stakeholder collaboration will cause companies to lessen the impact of homebuyers' lifestyles.

## **6 ANALYSES INTO MAKING SUSTAINABILITY VIABLE TO THE HOMEBUYER**

For businesses who want to embrace a more active approach to green practices the question needs to ask: How do they go about it? A business may restructure their operations to employ strategic green advancements. Grosskopf and Kibert notes that the adoption of best management practices and green marketing strategies can be seen as probable methods to remaining competitive in light Clow and Baack argument stated previously. Since competition is the key to business strategies it is important the triumphant forward in greener management practices so achieve a green Perth market. Likewise, Li *et al.* (2011) explains, "Management activities in green building can be better understood by exploring the critical success factors for improving the environmental performance of building projects". This is where the vision and the technical are to be intertwined to create a focus on the growing green solutions in business operations for the client. Matar *et al.* (2008) explains that, "One major technical barrier that hinders enacting sustainable construction is the absence of an application framework that integrates both sustainability and construction practices at an operational level". Moreover, he suggests that optimal use of Environmental Protection measures, Environment Management Systems, and frameworks would be beneficial; whilst it must be acknowledged that education, training, and cost can cause barriers to these implementations. Hurt and Thomas (2009) seems to suggest that effective Project Management is the best way to achieving company's strategic objectives; whilst Johnstone (2004) says that cost management tools are significant to cost effective green building solutions. The intertwining of both these ideas is the best way to making it viable for homebuyer to use green technologies. It is not enough to persuade the use of green technologies if inefficiencies hinder the deliverance of greener buildings. Therefore, to be beneficial to a greener project home market; companies' needs to further adopt managerial practices that personnel can filter into the projects.

## 7 CONCLUSIONS

In concluding this discussion of Perth's Project Home Market and its alignment with green building attitudes; homebuyers have realized that there is a need for more sustainable lifestyles. Unfortunately, unawareness and passive approaches are causing the failure in changing to building greener alternatives. It is both the industry stakeholders and homebuyers responsibility to navigate and discern what options will promote green building to develop better aligned practices. Moreover, green marketing tools used in businesses is the best way to promote green thinking. Notably, businesses should not exercise green marketing to promote their own agendas to remain competitive, which hinders the stimulation of green progression barriers. These marketing tools need to be accompanied with the implementation managerial systems and practices that aid project and costing personnel to filter green practices into affordable home building in greener reputations.

## References

- Alcock, D., *Commentary from Dale Alcock, Managing Director, About 6-Star Home Rating*, ABN Group, Perth, 2015. Retrieved from <http://www.abngroup.com.au/news-media?page=8> on March 21, 2015.
- Australia Bureau Statistics, *Households spend \$99 per week on energy, 4670.0 - Household Energy Consumption Survey, Australia: Summary of Results, 2012*, Australian Bureau of Statistics, Canberra, 2013. Retrieved from [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4670.0~2012~Media%20Release~Households%20spend%20\\$99%20per%20week%20on%20energy%20\(Media%20Release\)~10000](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4670.0~2012~Media%20Release~Households%20spend%20$99%20per%20week%20on%20energy%20(Media%20Release)~10000) on March 21, 2015.
- Australia Bureau Statistics, *2012 Year Book Australia*, Australian Bureau of Statistics, Canberra, 2012. Retrieved from [http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/LookupAttach/1301.0Publication24.05.121/\\$file/13010\\_2012.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/LookupAttach/1301.0Publication24.05.121/$file/13010_2012.pdf) on March 22, 2015.
- Clow K. E., and Baack, D., *Integrated advertising, promotion, and marketing communications, 6th Ed.*, Massachusetts Pearson, Boston, 2014.
- Doug, M., *Fostering Sustainable Behavior : An Introduction to Community-Based Social Marketing, 3rd Ed.*, New Society Publishers, New York, 2011. Retrieved from <http://SLWA.ebilib.com.au/patron/FullRecord.aspx?p=679957> on March 21, 2015.
- Grosskopf, K. R., Ph.D, and Kibert, C. J., Ph.D, Developing Market-Based Incentives for Green Building Alternatives, *Journal of Green Building*, 1(1), 141-147, Winter, 2006.
- Hislop, K., Perth's house scene, *Architecture Australia*, , 87(4), 1998, Retrieved from <http://0-web.a.ebscohost.com.catalogue.slwa.wa.gov.au/ehost/detail/detail?vid=2&sid=7f7b68b8-a376-452b-833d-014914043707%40sessionmgr4003&hid=4104&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=1166099> on March 21, 2015.
- Hurt, M. and Thomas, J., Building Value through Sustainable Project Management Offices, *Journal of Green Building.*, 9(1), 55-72, Winter, 2009.
- Johnstone, I. M., Development of a model to estimate the benefit-cost ratio performance of housing, *Construction Management and Economics*, 22(2), 607-617, July, 2004.
- Kelly, A., House Construction in Australia, *IBISWorld Industry Report E3011*, 2014, Retrieved from <http://0-clients1.ibisworld.com.au.catalogue.slwa.wa.gov.au/reports/au/industry/default.aspx?entid=309> on March 27, 2015.

- Li, Y. Y., Chen, P. H., Chew, D. A. S., Teo, C. C. and Ding, R. G., Critical Project Management Factors of AEC Firms for Delivering Green Building Projects in Singapore, *Journal of Construction Engineering & Management*, 137(12), 1153-1163, 2011.
- Master Builders Western Australia, Bricks, *Media*, Perth, 2015. Retrieved from <http://www.mbawa.com/blog/bricks/> on March 27, 2015.
- Matar, M. M., Georgy, M. E. and Ibrahim, M. E., Sustainable construction management: introduction of the operational context space (OCS), *Construction Management and Economics*, 26(1), 261-275, March, 2008.
- Myers, D., A review of construction companies' attitudes to sustainability, *Construction Management and Economics*, 23(4), 781-785, October, 2005.
- Shepherd S., Perth's obsession with brick – What are the alternatives?, *The Essential Current*, Perth, 2014. Retrieved from <https://essentialenvironmental.wordpress.com/2014/05/14/perths-obsession-with-brick-what-are-the-alternatives/> on March 27, 2015.
- Silverman, N., and Mydin, A. O., Green Technologies for Sustainable Building, *Acta Technica Corvininensis - Bulletin of Engineering*, 7(3), 87-94, 2014, Retrieved from <http://0-web.a.ebscohost.com/catalogue.slwa.wa.gov.au/ehost/pdfviewer/pdfviewer?vid=5&sid=7f7b68b8-a376-452b-833d-014914043707%40sessionmgr4003&hid=4104> on March 25, 2015.
- United Nations Environment Programme, UNEP-SBCI releases its latest report on "Greening the Building Supply Chain", Nairobi, 2012. Retrieved from <http://www.unep.org/sbci/> on March 22, 2015.
- Wheeldon, D., What's with Perth's addiction to double brick buildings?, *Architecture & Design*, Chatwood, 2014. Retrieved from <http://www.architectureanddesign.com.au/features/features-articles/what-s-with-perth-s-addiction-to-double-brick-buil> on March 27, 2015.