Housing growth and the practice of integrating suitable/renewable energy outcomes

Australian cities are continually expanding; in fact, Australia has some of the highest urban growth rates in the western world (1). Take a look a greater Melbourne for example, the outer city housing development, which is often referred to in town planning as fringe development, is expanding. (2) The former state government planned and encourage this housing expansion in the cities fringe. The former State governments planning document, Melbourne 2030, predicted that Melbourne's outer fringe would become home to 925,000 people, and that growth rates in these fringe regions would play an important role in Melbourne's metropolitan development moving forward. (3) With thousands of people moving out to outer urban fringe development sites, there is an open opportunity to introduce renewable energy housing practices. In fact, it could be argued that the lack of legislation around mandating renewable energy outcomes in housing development is hindering the ability of cities, such as Melbourne, to move towards becoming more sustainable. Moreland City Council, in Melbourne, identified and recognized the need to create a program that assesses the environmental impact of housing development while guiding built form outcomes to reduce environmental impacts. (4) The City of Moreland developed policies to achieve the goal of attaining positive sustainable built environmental outcomes through the planning process. Moreland City Council created an integrated approach to assessing the sustainability of residential development applications through the STEPS program. STEPS, Sustainable Tools for Environmental Performance Strategy, developed as a planning layer is currently used by 12 councils within greater Melbourne. (4) The STEPS program is an assessment tool in which all-planning applications for new residential development must be assessed against. All new housing applications must meet a set of sustainability outcomes before a planning application can be approved. (4)Through this assessment system local councils have gained a way to control and drive the type of housing development outcomes; thus ensuring that renewable energy practices are being implemented early and often. The STEPS tool considers five critical elements when assessing a new dwelling application. These elements include; peak energy use, mains water use, storm water quality impacts, building material impacts, and greenhouse gas emission from operating energy. (4) Each of these elements is assessed individually and given a performance score. (4) If the proposed housing development meets the council set performance levels the development is considered sustainable and can be further assessed against the local planning scheme. STEPS, since its introduction in 2005, has been a successful tool for councils for enabling the development of better-designed, energy efficient and sustainable development outcomes. (4) Considering how many newly built homes are being erected on Melbourne's urban fringe, or the urban fringe of other Australian cities, the question is why hasn't the STEPS program, or a similar program been implemented in these growth area councils. Furthermore; the question should be asked why State-planning authorities not mandated energy efficient and sustainable development policies; when clearly the STEPS program demonstrates the strength and ease of integrating energy efficient and sustainable design policies with new development. Further information on STEPS can be accessed at:

http://www.sustainablesteps.com.au

References

- [1] http://www.infrastructure.gov.au/infrastructure/mcu/files/NUPBP_Ch2_Transition.pdf
- [2] http://www.environment.gov.au/epbc/notices/assessments/melbourne.html
- [3] http://nre.vic.gov.au/melbourne2030online/content/implementation_plans/03a_about.html
- [4] http://www.sustainablesteps.com.au

Kate Douglas, Melbourne, Victoria, Australia