



## Reflections on Residential Living and Eco-Villages

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In New Zealand there is a growing demand for affordable homes due to immigration, kiwis returning from overseas, and in Christchurch the loss of approximately 10,000 red zoned homes as a result of the earthquakes. The media has featured all sorts of ideas to address the shortage - from traditional three bedroom brick or plaster homes to innovative and more resilient container type homes. Container dwellings are thought to be difficult to establish despite the ease of buying them second-hand and fitting them out personally or of building container type homes assembled in factories to maximise efficiencies. In the New Zealand environment, container type accommodation provides mobility and resilience, but perhaps does not provide the desired outcome of meticulously designed subdivisions. It often seems that developers in New Zealand, as in many Anglo-Saxon countries, are able to dictate the rules in terms of the home types and landscapes they want to create and sell. Their main objective is usually to maximise profits, not necessarily to create the best possible community environment or low cost options for people who wish to own their own home on their own section but are not prepared to spend a lot of money on designer homes. The current residential living saga is very market driven without much freedom of individual expression.

Developers increasingly protect their subdivisions through covenants to avoid attracting eccentric individualists wanting an affordable home or maximising the use of the land by having a small one bedroom home (formed by a set of two containers). New Zealand developers could be accused of encouraging a nanny state within the residential housing

environment and it seems authorities do not mind.

Interestingly enough, the permaculture movement for example seems to be a challenge to this 'developer' led paradigm. These communities have a strong focus on living in a more resilient and self-sufficient way by looking at minimising their natural resource use while maximising the utility and reuse of resources. These communities came together because of their different ways of viewing society, and in many cases they have been alienated from the wider community for their perceived 'unconventional' way of thinking. This bottom-up communal society has gained a lot of momentum in the last few decades, not just from the individuals and families seeking greater depth from their living community but also through the efforts of individuals promoting the activities of these communities. For instance, a thriving entrepreneurship has emerged in education. Courses on more resilient living with topics such as permaculture, off-grid electricity generation options and organic farmstays are just a few examples. It is relevant to acknowledge that though this more community orientated residential living is perceived as "fringe", it is likely to be the driver behind the growing transitional town or eco-village movements that are slowly gaining popularity.

The term "eco-village" is increasingly observed in the New Zealand media without a clear understanding of what the term means. Eco-villages are defined as communities aiming to be more socially, economically and ecologically sustainable. The community size is not relevant

as such, as the range goes from small to large. The Earthsong Eco-village (Figure 1) in Auckland is small compared to the large-scale BedZED (Figure 2) community in London. The Beddington concept is based on Zero Energy Development. The basic idea of the eco-village is applying sustainability and ecological principles across the board and implementing these by taking a bottom-up approach.



Figure 1: Earthsong  
Source: (<http://www.earthsong.org.nz>)



Figure 2: BedZED, London, UK  
Source: (<http://www.peabody.org.uk/mediacentre/casestudies/bedzed.aspx>)

As mentioned before, the eco-village concept is neither new nor specific to any one country, though it appears to be more common outside socialist or communist countries. Historically, it is highly likely to have been derived from the sixties and seventies commune and hippie movements associated with the upcoming of the green movements and Green Parties that became established in most European countries in the late 1970s and early 1980s. At the same time, a number of universities around the world, particularly in Europe, encouraged holistic thinking by integration of degrees in architecture, civil engineering and social sciences for example, Gesamt-Hochschule Kassel (GHK).

GHK was the first university of its kind in Germany, integrating many disciplines and concepts. It was later followed by other traditional universities like Dortmund or Kaiserslautern. The academic staff employed at the time came mainly from the 1960s movements and the Land of Hessen was the most progressive in terms of a Green movement at the time. Politicians like Joschka Fischer, leader of the first German Green Party, came from Hessen and had a large influence on Kassel University. The adjunct agricultural university "Witzenhausen" was renowned for leading technology into solid waste management including research into composting technologies. Kikuth was one of the leading researchers to emerge from the European university movement in the mid 1970s. He developed algae water treatment systems for small communities independent of city treatment systems, and one of his colleagues became famous for mud brick adobe houses built in the first eco-villages.

These new concepts were implemented in small eco-villages until they gradually became fully accepted by the wider community as a result of the green movements across Europe that were, at the time, primarily focused on environmental issues. These movements emerged strongly in the Netherlands, Scandinavia, Germany, and Austria and were subsequently adopted in other European countries.

Despite studying in Germany under the influence of famous architects like Schinkel, Karman, Mies von der Rohe, Niemeier, Le Corbusier, Eiermann, Jahn, Otto and Behnisch, the trend of picking up the principles of ecological planning in terms of technology and infrastructure took up its momentum in the early to mid-80's.

New Zealand can learn a lot from the many European examples that have been developed over the last 10 to 30 years. Some are called *car free cities*, like "Vauban Siedlung" in Freiburg. And in a definite sign of maturity, the "Nordweststadt" in Karlsruhe is not even mentioned per se as an "eco-village" development since the concept of planning infrastructure for people and not cars and requiring excellent public transport systems to be integrated prior to construction is now a basic principle. This Transit Orientated Development (TOD) is still largely ignored in New Zealand apart from perhaps by Len Brown, the Auckland City Mayor.

From discussion with peers, it is obvious that the perceptions of eco-villages go in many directions; I like the principles of "Earthsong" in West Auckland and the newly developed "Braemar" concept in Nelson as they provide a lot of freedom and space to the people living there, whereas others will deny they are "eco-villages" because they are not integrated into a city concept since both are located outside cities and require more transportation than someone living in a city apartment.