

# LAonline - Research

## How green are Canberra's residential housing developments?

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When it comes to new residential developments in Australia 'sustainable development' is the resounding mantra. 'Green', 'sustainability' and 'lighter ecological footprint' are the terms trotted out by local governments and blistered over developers' marketing campaigns. While buying a home in a 'green' development may give purchasers a warm fuzzy feeling, a closer look at these claims is required.

Water sensitive urban design (WSUD) is regularly proclaimed as one of the main sustainability initiatives. However, WSUD is no longer new territory in landscape design and should be embedded in all projects, not as a green add on.

At last more attention is paid to house siting and design, yet five stars, northern glazing and compact fluorescents does not make a green building. In many commercial developments little attention is paid to the sort of building materials employed, with many structures having high levels of embodied energy. Blocks and household sizes are reducing, yet are houses are getting bigger and bigger, with the media room de rigeur.

In addition to addressing the environmental performance of individual dwellings, holistic sustainable housing development should address:

- how residents travel to work, shops, entertainment & recreation venues
- the growing and transportation of food
- how waste is disposed and recycled
- green energy generation

Carbon emissions are created not only through heating, cooling and lighting of homes, but how we get to and from our residence, workplaces and the numerous other places we visit. Ecological footprint calculators take into account usual travel methods when determining an individual's eco-impact. One of the transport options is by donkey. Life would definitely take on a different perspective if we saddled up one of these creatures each morning, making sure we hadn't forgotten the laptop and trotted towards the office. A stop for the morning caffeine fix, could take on interesting proportions if the donkey was impatient, cranky or amorous towards the beastie ahead in the queue. Showers, change rooms and stables would be deemed essential at work places and a good way to retain staff.



Stone steps across the water course at Norgrove Park

Research

Sustainable developments need to offer alternatives to individual car use, like efficient public transport, cycling and walking options, car lease schemes and working from home. Cities like Bogota have mandated one car free day a week. Why not don your grottiest jeans and work from home on Fridays, leaving the Subaru safely cosseted in the garage?

Australians create tonnes of waste each year, whether it's sewage, recyclables and non-recyclables and green waste. So far our urban communities tend to ignore the potential of most of this waste and transport it long distances away. The effects of this can often be disastrous for natural systems.

Sustainable developments also require organic food growing areas to reduce our carbon footprints. We could forgo our 5x4 media room and instead have an equivalent area in a sunny spot in the garden for growing vegetables, a much kinder option for the planet.

## Three residential housing developments Canberra

The economy is currently booming in Canberra, houses are at record affordability lows and rents are the highest in the country. As Australia's most planned city, Canberra is often seen as the logical place to set sustainability benchmarks, whether in planning, design or implementation. Two 'green' housing developments are briefly described below and the proposed development of Eastlake.

### Kingston Foreshore

One of the first developments in Canberra offering high quality 'sustainable development' was at the Kingston Foreshore, on Lake Burley Griffin's southern edge. While a genre of contemporary higher density residential design, WSUD and reduced energy use of buildings has been created at Kingston, it fails to deliver much else on the green front. Developments in this section of Canberra's inner south are targeted at the upper echelons, many with views to the illustrious lake, and have ignored affordable housing.

In its favour is its proximity to the city centre, government departments at Barton, the lake and nearby boutique shopping areas of Kingston and Manuka. A green Kingston dweller could hop on their bike and be at one of these destinations in under 15 minutes.

Townhouses at the Kingston Foreshore, have views across the lake to Mt Ainslie. For \$725,000 you may secure one of these tri-level contemporary homes, complete with reverse cycle air-conditioning. With an energy rating of 4 one wonders why a cooling system is required.



## Forde

Recently developed on Canberra's outer northern perimeter, the 131 hectare greenfield suburb of Forde is the latest offering, promoted with the hype of creating a lighter footprint. I went with great excitement to visit the 16 homes of the Housing Industry Association's Greensmart Village with all residences achieving five stars. Some of the houses are alarmingly large, with one Forde home boasting a floor area of 300 square metres on a 600 square block! The asking price was over  $\frac{3}{4}$  of a million dollars. It contained four bedrooms, a study, two and half bathrooms and a media room along with the basics of a living, dining, and kitchen. Generally house designs in the display village are indolent with large carapaces spaces and not a reused material on view.

Most residents will be dependent upon commuting by car to their workplaces and the 3.5 kilometres to the Gunghalin Town Centre, as the bus system in Canberra is notoriously poor.

On the positive side attempts have been made to reduce water use and some residences have grey water systems installed. Narrow strips of synthetic grass are imported to replace what would have been turf (this is an ecological ant's nest and requires a separate article in the next issue of *LAonline*).

One initiative worth commending is that domestic cats must be kept indoors or in a cat enclosure to protect wildlife within nearby Mulligan's Flat. Time will tell how successful this policy is.



Slithers of synthetic grass are employed as a lawn substitute in the small garden spaces at the Greensmart Display Village at Forde.

## Eastlake

A joint initiative between CSIRO and the ACT Planning and Land Authority could create a model sustainable infill development on Lake Burley Griffin. Sited adjacent to the protected Jerrabomberra Wetlands, and home to the Fyshwick markets, light industry and the Causeway low income precinct, a new community of higher density mixed used development is proposed.

Consultations led by CSIRO's Sustainable Ecosystems with planners, environmental engineers, landscape architects, real estate agents, housing industry associations and developers have illustrated that the knowledge exists to produce a model for the future. Imagine the development of a dense 'Medieval' pedestrian village with small workplaces on the ground floor and residences above with all the trappings of a green 21<sup>st</sup> century – quiet wind turbines, green roofs and walls, an enhanced Jerrabomberra wetlands, city farms and markets, wildlife corridors, an enhanced public transport system and cars relegated to the periphery. A pie in the sky? Only time will tell if the developers can implement a wide range of sustainability objectives to produce a bright green development, not Kingston Foreshores and Forde's subtle shade of khaki.



Norgrove Park located between the Kingston Foreshore and the lake is Canberra's best kept secret. As well as cleaning storm water from the development, a host of thriving endemic plants are providing habitat for a range of bird species.

## Postscript

I have used these three Canberra examples to illustrate the progress being made in delivering sustainable communities in my town. I am sure that there are many similar cases in everyone's neighbourhood throughout Australia. I invite other members to submit their views and observations on the good, the bad and the ugly in your region. Let's hope the number of success stories is on the increase.



Views from the nationally significant Jerrabomerra Wetlands to the proposed Eastlake site.