
Editorial

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Cities are our future. Some day soon, for the first time in human history, the majority of the world's population will live in cities. Huge cities of 20–30 million people are growing around the world, bringing with them staggering challenges. How on Earth can a city so big be made environmentally sustainable?

Australia is never likely to have giant cities on the scale of Tokyo, Mexico City or Mumbai, but in some ways we are far ahead of the pack. While it is only now that half the global population have become urban residents, most Australians have lived in cities for decades.

Melbourne and Sydney between them have almost 40% of the Australian population. Add Brisbane, Perth and Adelaide and the figure is well over 60%. Smaller cities contain millions more. For newly developing cities in our region, Australian cities may well become a role model, for good or not. Hundreds of thousands of students from Asia come to Australia to get part of their education, and almost all stay in our cities. They are likely to take the lessons home.

What, then, makes a city sustainable? Sustainability is such a buzz word today that some people claim it has lost its meaning. Certainly one can dispute what a city needs to be sustainable.

No cities, for example, are able to sustain themselves, if by that you mean the ability to supply all its needs. If any city in the world was cut off from the farmlands around it, or even from its trading partners, it would starve within weeks.

However, when people talk about making cities sustainable they usually have more modest goals – they aim to ensure that the city takes no more from the Earth, and produces no more waste, than the planet is able to handle in the long term

Even on this measure, there are few cities worldwide, and none in Australia, that could claim to be sustainable. Australians are the heaviest producers of carbon dioxide in the world per person. Our home and office designs require huge amounts of electricity for heating, cooling and lighting, while the shape of our cities encourages car use.

Cities can also be assessed for socially sustainability, providing affordable housing with access to jobs. Australian cities do better here than on environmental measures. We do not have the huge slums or widespread poverty of the developing world, and we have far fewer homeless people sleeping on our streets than equivalent cities in America or parts of Europe.

Nevertheless, on many measures Australian cities are becoming less socially sustainable, with fewer people able to afford to buy a house, or sometimes even rent. The price for this is borne not just by those directly affected. There is plenty of evidence that cities with greater inequality have much higher crime rates and lower health standards than cities where everyone feels included.

According to Kate Colvin of the Victorian Council of Social Services (p.23): “A first step towards change is to acknowledge that the current piecemeal strategies are not working, and to commit to a target that will demonstrate success”.

However, at the moment that acknowledgement does not seem to be very widespread. In June the Third World Urban Forum in Vancouver brought together more than 100 speakers from nearly 30 countries examining the future of cities. An initiative of the United Nations, it looked at how developed and developing cities are dealing with problems of growth, inequality and environmental pressures. Yet not one of the speakers was from Australia. Afghanistan, Belgium and Paraguay all had something to say to the world about their cities, but it seems Australia did not.

Transport

Probably the most hotly debated question in regard to sustainable cities, at least in the developed world, is how to get around them. One-sixth of Australia's greenhouse gases are a result of transport, mostly within cities. This proportion is rising, and in the rest of the world is generally even higher as they don't produce as much of their electricity from coal.

Prof Peter Newman (p.6), transport consultant Dr John Cox (p.11) and Janet Rice (p.17) all take a look at this question, but they do not all reach the same answer.

Cox says that public transport is in an inevitable decline. “Public transport is not a big deal in most people's lives, as indicated by the fact that Australian households... in 2003–04 spent \$3.91 per week, or only 3% of their total transport costs, on public transport fares,” Cox argues. He believes that the downward trend in public transport as a proportion of all travel cannot be reversed, and attempts

to do so waste money on those living in the inner cities rather than the poorer populations on the city edge.

Newman, who is the Chair of the Western Australian Sustainability Roundtable, comes to a very different conclusion. He believes that public transport will become increasingly necessary as the world runs out of oil, but that our cities need to be redesigned to make it work. Newman looks around the world and concludes that “density variations” between cities are “enormous and tend to follow the opposite of transport fuel use. Thus dense cities use cars less and sprawling low density cities use cars a lot.” Australian cities are not as low density as those of the United States, but are still among the world’s least dense, and this has led to a dependence on the car.

Janet Rice, Mayor of the City of Maribyrnong in Melbourne, reports on a study tour of some of the world’s most public transport-friendly cities. She is convinced it is possible to reverse Australia’s dependence on the car. The cities that will emerge will be not only more viable in a world lacking oil and burdened with a warming atmosphere, they will also be more pleasant places to live. “All the cities I visited are facing similar issues to us, and are making choices as to how to tackle them,” she writes. “Different choices lead to different outcomes!”

Urban Design

Dimity Reed, one of Australia’s leading experts on urban design points out that new housing estates will determine how sustainable our cities will be. However, most of the time we are not making these decisions well. “The owner of the land is interested in the best possible financial return, and unfortunately that means not investigating the best possible outcomes for the community that will soon be living there,” Reed says (p.30). “Houses should be orientated to maximise sunlight and daylight” in order to make an energy-wise future possible.

Prof John Minnery and architect Paul Downton consider two success stories closer to the centre of town. Minnery looks at the reusing and recycling of urban waterfront areas (p.26). Around the world many of these have become available as 19th century port facilities became obsolete. In Brisbane, buildings along the riverfront have been turned into popular residential accommodation. Environmentally these projects have been a success – using the shells of the old buildings requires few resources, and their locations mean reduced travel for residents. However, the soaring house prices that result from these developments have had a cost, often forcing poorer residents from the

areas nearby.

Downton is the designer of Christie Walk, an urban village in Adelaide (p.32). The project packs 27 dwellings onto land the size of two outer suburban blocks, but it’s unlikely that the residents will feel cramped as the roof gardens, easy access to parks and shops, and a highly developed community look set to make this a place where people will want to live even if they don’t value the environmental features, such as solar panels and water recycling.

Water

Recent droughts across southern Australia have drastically increased water awareness. At current rates, and with the current climate, our water use is barely sustainable. A growing population and the effects of global warming mean that something has to shift, but there is heated debate as to what should be done. Prof John Quiggin, Australia’s most cited economist and one of our most-read bloggers, looks at the options under consideration for each of our largest cities, and the environmental and agricultural claims with which the cities must compete (p.41).

Pessimists look at the fact that we live in the driest inhabited continent on Earth and decide that we will never have enough water – or other resources such as energy for that matter. However, Professor Ian Lowe (p.45) makes the case that sustainability is not only possible but will cost less than we think, and lead to a nation, and a world, that will be far more pleasant to live in.

However, short-term costs and the inertia of people thinking “but we’ve always done it this way” usually get in the way. Each of us has to decide whether we want to live in a southern Los Angeles or a city built from 1000 Christie Walks.

ABOUT THE COVER

The CH2 building, opened in August by Melbourne City Council, is expected to cut electricity and gas consumption by more than 80% compared with five-star buildings – even more compared with ordinary office blocks. Water use will be reduced by three-quarters. The innovative cooling system is expected to slash sickness among employees and make CH2 a more pleasant place to work. These features raised the cost of the building by \$11.3 million, but in the long term will more than pay for themselves in lower bills and reduced absenteeism.