

CITIES WORTH LIVING IN

A bipartisan report calls for action to create sustainable cities.

Story: Andrew Dawson

Millions of Australians living in our cities are facing a bleak future. But they won't need to if concerted national action is taken soon to alleviate a multitude of looming problems in our cities.

That is the stark message coming from a new bipartisan parliamentary report *Sustainable cities* by the House of Representatives Environment and Heritage Committee. The 187-page report details a litany of environmental statistics that paint a damning picture of extensive unsustainable practices in many of our cities.

On average each Australian creates 620kg of waste annually, second only to the United States. Australians are using 1,540 kilolitres of water per person, the most in the world—even more than those traditional champions of excess the US at 1,510kl or Europe's 665kl.

The burgeoning new suburbs on our city fringes also mean that many Australians are driving 60 per cent further than they were in 1980. And Australians are getting fatter and less active, with obesity costing the economy up to \$1.2 billion per year.

The report makes 32 recommendations including the scrapping of tax breaks for company or leased cars; lowering tariff concessions on imported four-wheel-drives; boosting Commonwealth funding for state public transport systems, especially city rail networks; federal funding for cycle paths; increasing the first home owners grant to \$10,000 for people buying greener homes; and establishing a new Australian Sustainability Commission to oversee these changes nationally.

Committee Chair, Mal Washer (Member for Moore, WA), stresses a national approach is needed by Australians living beyond their means, before it's too late.

"Australia, as one of the most urbanised countries in the world, faces enormous challenges, with water shortages, transport congestion and high energy demands," Dr Washer says.

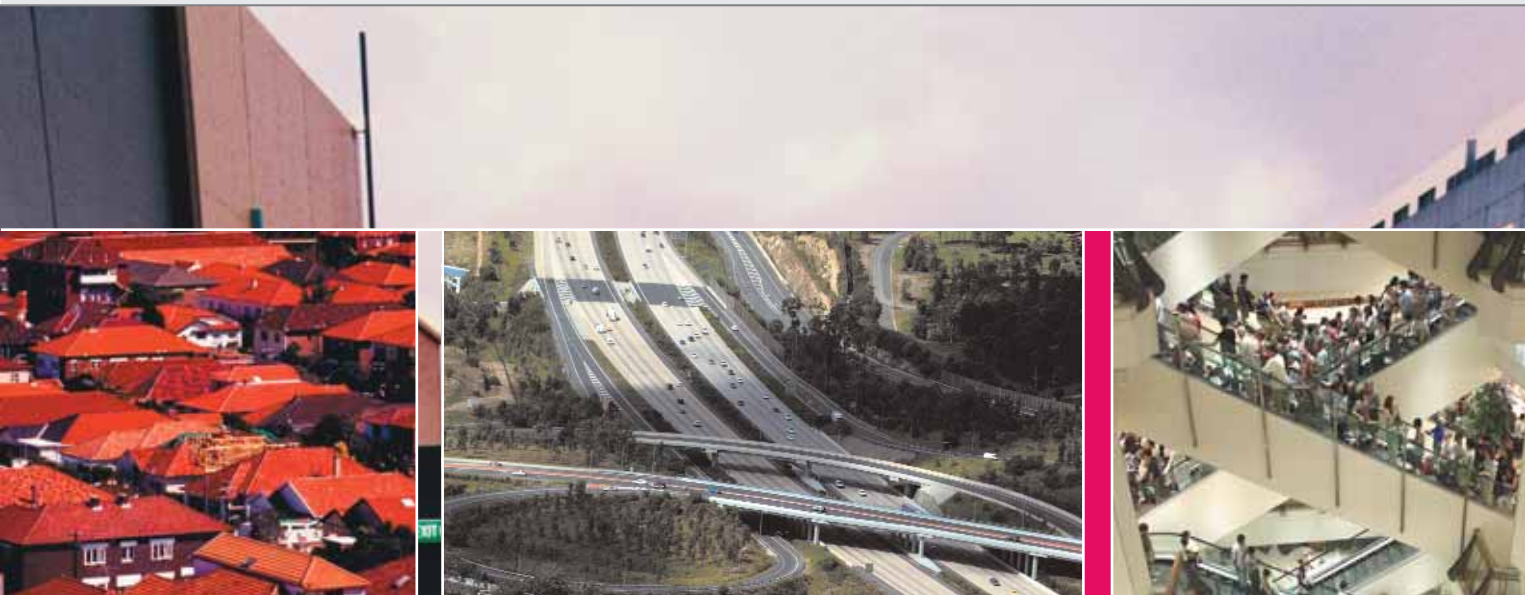
"Healthy living cities are a community issue—it's about our health, our well-being, our future and our children. We have to engage the community and not just at a government level."

Deputy Chair Jennie George (Member for Throsby, NSW) says sustainability

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goes way beyond environmental issues. "Sustainability is not just a feel good issue, but also a very important economic imperative," Ms George says.

"We see the sustainability agenda as being a really important driver of economic and productivity growth into the future. As important as the environmental outcomes are, there is also economic imperative that goes with it."

Australian Conservation Foundation executive director Don Henry praises the raft of measures outlined in the *Sustainable cities* report.

"It's encouraging to see bipartisan support for the initiatives outlined in this report, some of which have the

potential to make a big difference to the sustainability of Australian cities," Mr Henry says. "If implemented, these recommendations could significantly cut energy and water wastage in our cities and improve the efficiency and liveability of urban environments."

As city temperatures appear to soar to new heights with every summer, concerns are also growing about the dwindling supplies of fresh water for Australia's expanding cities.

"There is no doubt a number of Australian cities are in imminent danger of running out of water," Dr Washer says. "We urgently need to substantially increase the amount of wastewater that is recycled."

As anyone driving to work in Australia's major cities can attest, more and more cars, trucks and buses are clogging up roads during peak hour.

"We need more funding for public transport," Dr Washer says. "The committee heard evidence that if all the people who do travel by train to the Sydney CBD every day were to drive, Sydney would need to build another 65 lanes of freeway and more than 780 hectares of additional car parking."

These concerns about the nation's biggest cities are echoed by Sydney MP, Malcolm Turnbull. The Member for Wentworth has been vocal on a number of issues, especially Sydney's water supplies.

"It is important to bear in mind that the neglect of sustainability in our major cities impacts on the whole of Australia," Mr Turnbull says. "In my own city of Sydney, which is the largest single engine room of the Australian economy, the neglect of water and of mass public transport is putting significant strains on the city and its sustainability."

"Every Australian has an interest in the sustainability of all of our cities. We can't put it off and say that it's just a concern for NSW, or that's just a concern for Queensland."

While most of the areas covered are traditionally the preserve of the states and territories, the committee believes it is time for the federal government to take more of a leadership role.

To oversee Australia's move towards sustainability, the committee recommends the establishment of an

Australian Sustainability Commission and an Australian Sustainability Charter. The committee wants the proposed commission to explore the concept of incentive payments to the states and territories for sustainability outcomes, along the lines of the National Competition Council model.

"There is a lot happening on the ground, and the committee was heartened to see that, but what is missing is coordinated action," Dr Washer says. "The message of the report is that sustainability is the responsibility of every Australian, but mechanisms need to be put in place for the Commonwealth, together with the state and territory governments, to promote a 'blueprint' for our cities of the future."

Harry Jenkins (Member for Scullin, Vic) says the inquiry wasn't "just about the environment but economic and social issues—that's what cities are really about".

"A leadership role for the Commonwealth became obvious early in the inquiry," Mr Jenkins recalls. "It's also about partnership and cooperation because there are many authorities out there such as state governments, councils and local communities themselves trying to come to grips with a host of issues that this report highlights."

Mr Jenkins notes the spiralling cost of petrol is already forcing people to seek alternative ways of getting to work. "We see people worrying about whether they can afford to get to work or take their family places, which means issues such as public transport ring even louder," he says.

"We see a great opportunity for the Australian government to enter into agreements with other levels of government, with local communities and industry to ensure that cities around Australia are more sustainable and are truly more liveable."

The Member for McMillan (Vic), Russell Broadbent, is hopeful this report and its recommendations will prove a catalyst for change.

"People's actions don't change by rules, regulations or by force, but by desire and I hope this report is about the desire of the Australian people to do something together," Mr Broadbent says.

"This is a great opportunity for us as a young nation to turn these cities around to become more sustainable cities in the future." ■





WATER

“Sydney is probably the worst case, recycling less than three per cent of its wastewater and pumping about 450 billion litres or nearly 75 per cent of its annual water usage out to sea as barely treated sewage.”

Sustainable cities report

The management of water is one of the most critical issues Australian cities face today and into the future.

While every city's situation and water resources are different, all Australian cities are facing a growing water deficit as population growth drives demand and, most ominously, climate change causes a reduction in rainfall and a much greater reduction in run-off. For example, the mean yearly stream flow in the Perth catchment since 1911 has almost halved in recent years. Worryingly it has dropped from 285 billion litres between 1911 and 2003 to just 164 billion litres between 1975 and 2003.

The report stresses water has to be regarded as a vital, valuable commodity. The problem, says the report, is “of wasteful, unsustainable and environmentally irresponsible management of water”.

Australian cities have an urgent need for an integrated approach to water management which:

- reduces water use by more efficient use of water;
- recycles wastewater; and
- adds to the water supply of our cities through better harvesting of run-off.

The report considers water management as three elements: water efficiency and education; water sensitive urban design; and decentralised water delivery.

The committee says Australia urgently needs to substantially increase the amount of wastewater which is recycled. While some communities in Australia do recycle a substantial amount of their wastewater, overall



Australia's record on recycling is very poor and compares unfavourably with the position in other, comparable, developed countries. Sydney is probably the worst case, recycling less than three per cent of its wastewater and pumping about 450 billion litres or nearly 75 per cent of its annual water usage out to sea as barely treated sewage.

Another of the major options for increased water supply currently being investigated in a number of cities is desalination.

Hugh Ralston of the Warren Centre for Advanced Engineering says while desalination may be a good option for Perth, in a city such as Sydney much more needs to be done with water infrastructure and re-use before genuinely considering desalination.

The NSW government has announced that construction could commence by mid-2006 on a desalination plant on the Kurnell peninsula, capable of producing 500 million litres per day, unless there is a break in the drought. The consultant's report published by Sydney Water projects a capital cost of \$1.75 billion for the plant to produce 180 billion litres of freshwater at a cost of \$1.44 per kilolitre or \$252 million per annum.

Deputy Chair Jennie George says, by comparison to overseas countries, “Australia recycles a very low percentage of water and there is this community resistance to the notion of using recycled water”.

“We are saying there is not one option or one technology for supplying water that will meet all the requirements of the future,” she says. “It's not just the option of desalination because there are other technologies that ought to be investigated and we think the National Water Commission could serve the nation's interest by looking at the range of options.”

The bulk of water used in Australian homes is not consumed by

humans, but is rather used on the garden, flushing lavatories, washing cars and for many other purposes that do not involve drinking of the water. While there is no scientific or medical obstacle to rendering recycled water safely drinkable (as is the case in many overseas cities such as Singapore), there is perceived to be public reluctance to allow recycled water directly into the drinking water system.

Environment Business Australia comments: “Water recycling and stormwater capture and use should be top priorities instead of allowing polluted water to leak into waterways or to be discharged via deep ocean outfalls.”

The committee notes that other cities similarly situated are embracing recycling and that Sydney's persistence in disposing of almost all of its wastewater as partially treated sewage is almost without counterpart.

Recommendations

The committee made five water-related recommendations including that:

- the Council of Australian Governments (COAG), as part of the National Water Initiative, fund an education campaign educating the public about the benefits, economics and safety of using recycled water; and
- the National Water Commission, in consultation with the states and territories and the public, prepare an independent and transparent report on water options for each of the Australian capital cities and major regional centres. ■



TRANSPORT

“Higher-income groups tend to be located in well-served, inner urban areas where they are mobility-rich; while lower-income groups tend to be located in poorly-served areas, often at the fringe of cities where they are mobility-poor.”

Planning Institute of Australia



Australian cities have largely been constructed around the car, creating a culture heavily reliant on private automobile use. The consequences of this over-reliance on cars are:

- environmental—urban sprawl, smog and air pollution;
- economic—billions of dollars spent on urban infrastructure such as freeways and tollways; and
- social— isolation, socio-economic stratification of suburbs and reduced access to public services.

The transport sector demands plenty of energy such as fuel, which contributes to greenhouse gas emissions, and devours large tracts of public land to build infrastructure such as roads.

So encouraging more city-living Australians out of their cars, or company cars, and onto public transport is one of the core issues for the *Sustainable cities* report.

The committee wants a review of fringe benefits tax concessions to ensure these tax breaks are not simply encouraging people to use their cars instead of public transport. They question the wisdom of tax laws that encourage people claiming cars as part of a salary package to gain extra tax breaks for the increased kilometres they drive.

Bicycle NSW says more than \$750 million is spent every year subsidising car use and, if the government removes these FBT concessions, then the millions in savings should be used on upgrading public transport and cycleways. Dr Chloe Mason estimates that 50 per cent of cars on Sydney roads during peak hour are claiming FBT concessions.

Committee Chair Mal Washer says “that is not environmentally what we want to achieve, people burning up fuel to increase their kilometres to achieve the tax advantage”.

Committee member Malcolm Turnbull agrees with removing the FBT incentives for greater car use. “We shouldn’t be encouraging or promoting the use of one transport mode over another,” he says. “We certainly should not be encouraging car use over public transport, given the environmental and other costs of excessive dependence on automobiles.”

Another distorting federal government policy is the reduced tariff rate on imported four-wheel-drives. Originally conceived to assist primary producers, the concession is now subsidising vehicles that according to the Bayside City Council are creating “additional, unnecessary environmental impacts and reducing the sustainability of Australian cities”.

This is because, while once mainly used by farmers, four-wheel-drives are now increasingly common on urban roads, making up more than 20 per cent of new car sales. The tariff rate on four-wheel-drives is 10 per cent lower than for all other imported cars, providing “an incentive to the urban use of the least efficient, most polluting and dangerous forms of passenger transport”.

Noting the Commonwealth commitment to spend \$11.8 billion on AusLink, including a massive upgrade of Australia’s east coast road and rail networks, Mr Turnbull says the federal government also needs to invest in urban transport systems.

“The recommendation is that the federal government boost its funding commitment for public transport systems—particularly for rail in the major capital cities—and extend the funding for roads to include funds for active transport such as bike tracks,” Mr Turnbull says. “There is no logical reason why the Roads to Recovery program should not include bike tracks and other methods people use to move around their cities.”

Recommendations

The committee made seven transport-related recommendations including that:

- transport infrastructure funds provide finance specifically for sustainable public transport infrastructure for suburbs and developments on the outer fringes of our cities;
- the federal government review the current FBT concessions for car use with a view to removing incentives for greater car use and extending incentives to other modes of transport; and
- the federal government review the tariff policy on four wheel drive vehicles with a view to increasing the tariff rate on four-wheel-drive vehicles, except for primary producers and others who have a legitimate need for four wheel drive capability. ■



URBAN PLANNING

“A city cannot function if nurses, teachers, labourers and waiters cannot afford to buy a home.”

Sustainable cities report

Australia has a culture and an expectation of home ownership. But as Australian cities grow, the prices of land and housing in established inner city areas rise beyond the means of most new residents who look to buy in the more affordable newer suburbs on the city outskirts. This is why the issue of housing affordability is so relevant to discussions on creating liveable cities.

The strong desire for home ownership is not unique to Australia. Seventy per cent of Australians either own their home outright (30 per cent) or are paying off a mortgage (40 per cent). This is a marginally higher than the United States (67 per cent) and United Kingdom (69 per cent), but lower than New Zealand (71 per cent) and Spain (83 per cent). France (55 per cent), Germany (45 per cent) and the Netherlands (51 per cent) are significantly lower.

Despite the increased difficulty of entering the housing market in most cities, close to 90 per cent of Australians still aspire to owning their own home. It is an integral part of the traditional “Aussie dream”.

The drift to urban fringe areas where land prices are lower makes the “dream” of home ownership possible for many Australians. The Productivity Commission reports that because house prices are outpacing incomes, the affordability point beyond which houses are affordable for families on average weekly earnings has moved several kilometres away from the city centre in both Sydney and Melbourne. But most economists or potential home buyers don't appear to take into consideration the longer term transport costs associated with living in some outer suburbs, where public transport services are often poor.

The inquiry generated substantial debate about desirable levels of housing density in our cities, the provision of services to greenfield sites, housing affordability, and how we develop communities rather than only build housing estates.

The development of urban infill and higher density housing in our cities remains a particularly emotive issue for town planners to contend with. Much evidence to the committee considered the move to higher density housing as detrimental to the liveability of a city, destroying the character of areas and leading to social isolation and a number of social problems. Much of the community concern about higher density development relates to the increasing traffic and parking congestion as a consequence of more residents moving into a suburb. Improving the provision of public transport is certainly one solution to traffic chaos.

One submission to the inquiry says sustainability cannot be achieved without limits to city growth and population numbers, but warns that in a free society it is simply not possible to prevent people from living in a city if they choose to do so. But restricting development in a city, with a view to constraining population growth, runs the risk that lower income earners are simply priced out of the city. A city cannot function if nurses, teachers, labourers and waiters cannot afford to buy a home. A large part of the answer lies in swift, reliable and affordable public transport.

Another challenge for the future is halting the growing incidence of preventable diseases and conditions, many of which are linked to urban living patterns. Obesity, diabetes, heart conditions, depression, mental illness and high blood pressure have increased markedly in the last few decades, in particular in urban areas where the rate of physical activity is reduced and social isolation is increased. Urban areas need to be designed with recreational spaces and a variety of active transport options that encourage a fit and healthy population.

Committee member Jackie Kelly (Member for Lindsay, NSW) says higher density housing is a result of city growth.

“To keep homes affordable, you go high-rise, you get strata-title, to keep

the land costs of your housing down,” Mrs Kelly says.

“However there are certain things that governments and urban planners need to take account of. If you don't have a backyard, you need greater playing areas and better transport infrastructure, car parking and public transport.

“You need to make sure that the high density housing is still liveable—that a single mum with two kids can still raise them without going completely spare. Sure we can build all this new housing but we have to look at the impact of these developments on the surrounding homes and suburbs.”

Deputy Chair Jennie George says public transport planning remains a key component.

“A lot of young people are moving into my electorate in the Illawarra because of the unaffordability of housing and land prices in metropolitan Sydney,” Ms George says.

“We have something like 18,000 people commuting out of the Illawarra into Sydney for work every day so we really need to upgrade the rail infrastructure of these areas, where more and more young people are moving to.” ■





ENERGY

“Heating and cooling account for 39 per cent of total residential energy consumption.”

CSIRO

To meet future consumption needs and manage air emissions, the sustainable city must diversify its sources of energy generation and where possible incorporate renewable energy sources.

The heating, cooling, lighting and insulation of buildings can considerably increase or decrease the energy consumption of cities.

Currently in Australia, heating and cooling account for 39 per cent of the total residential energy consumption and 15 per cent of residential sector greenhouse gas emissions, according to the CSIRO. This can be reduced by good building design and insulation.

Inefficient street lighting makes a significant impact on a city's energy use. The committee was told of estimates that one third of all US light is wasted at a total cost of about 30 million barrels of oil valued at about \$US 2 billion per annum.

Australia's climate makes solar energy an attractive renewable energy source. While the *Sustainable cities* report welcomes the federal government's commitment in its last budget to provide \$11.4 million over two years to extend the Photovoltaic Rebate Programme, it calls for the rebates to be doubled. This program offers incentives to property developers of up to \$1 million for installation of solar power systems in residential

property developments, on private homes and on community use buildings such as schools.

In 2003, Germany enacted a law forcing utility companies to pay higher rates to commercial and residential premises that generate solar or wind energy and feed it back to the grid. With this source of guaranteed revenue, solar panel installation has become commonplace in Germany. The law forces utility companies to buy all wind and solar power generated by all users at a price 10 times higher than the rate that users are charged for the electricity provided by the utilities from other forms of power such as coal.

The committee also sees merit in the United States' Million Solar Roofs Initiative, which was launched by President Clinton in 1997. The objective is to facilitate the sale and installation of one million 'solar roofs' by 2010.

Deputy Chair Jennie George says people are more accepting of renewable energy. “We are lucky in our electorate that we have the first wave-to-energy prototype that is being developed in Australia so a lot of people understand renewable energy,” Ms George says.

Recommendations

The committee's energy-related recommendations include:

- the federal government double the photovoltaic rebate to further encourage the uptake of photovoltaic systems; and
- the federal government investigate US and German initiatives in the area of solar energy generation and purchase, and, where appropriate, implement or emulate them. ■



BUILDING DESIGN

“A home that uses 50 per cent less energy than an average house will save its occupants around \$800 per annum.”

Origin Energy

By moving towards more sustainable residential buildings, Australia can improve the sustainability indicators of its cities as a whole.

In Victoria, all new homes are required by legislation to meet 5 star energy ratings. All homes in the ACT are rated for energy efficiency at the time of sale.

The report supports these concepts, pointing out that mandatory disclosure of energy efficiency at point of sale would empower consumers and enable them to take energy efficiency into their living choices.

Origin Energy highlights the savings that can be made with energy efficient homes: for example, a home that uses 50 per cent less energy than an average house will save its occupants around \$800 per annum.

Recommendations

The committee made nine building design-related recommendations including that:

- the federal government encourage the states and territories to mandate disclosure of the energy efficiency and greenhouse performance of residences at point of sale and point of lease; and
- the federal government increase the First Home Owner grant to \$10,000 for those homes that meet a high standard of specified sustainability criteria. ■



A blueprint for sustainable cities

The *Sustainable cities* report by the House of Representatives Environment and Heritage Committee is available at www.aph.gov.au/house/committee/enviro/cities/report.htm or for more information email environment.reps@aph.gov.au or phone (02) 6277 4580.