Australian Government

NATIONAL SUSTAINABILITY COUNCIL

Summary of the Sustainable Australia Report 2013

SUSTAINABLE AUSTRALIA REPORT 2013:

CONVERSATIONS WITH THE FUTURE – IN BRIEF

This first report provides a picture of Australia—what we look like and who we are. It tells the story of how we have changed as a nation over the last 30 years. We have made great progress in many areas. Australians are living longer, our health and levels of educational attainment have improved. We have benefited from a strong economy, with low unemployment and increasing incomes. However, inequality has increased and the health of our natural environment has continued to decline in some key areas.

The report also highlights a number of trends in Australia and the world that are set to have a significant impact on the next generation of Australians. We need to plan for an ageing population, rising health costs, growing cities and changes in traditional work and family roles. Global population growth and the huge growth of the middle class in Asia will place massive pressure on energy, water and food systems but should continue to drive demand for our commodities, agricultural products and a range of services. New technologies will be integrated into our daily lives, providing opportunities for innovation, new jobs, and medical breakthroughs while impacting on our social relationships and family life. Climate change will increase the risks of drought, bushfire and extreme weather events. We will need to be more efficient in the use of resources and energy, more respectful of nature, and adapt to the consequences of climate change.

The National Sustainability Council intends to use the report as a starting point for a national conversation about our future and the kind of future we want for our children and grandchildren. The decisions we make today will determine whether our children and grandchildren are able to live lives that are at least as good as ours. The Sustainable Australia Report, the first of its kind in Australia, provides the evidence base we need for this conversation.

The decisions we make today will determine whether our children and grandchildren are able to live lives that are at least as good as ours

Sustainability and wellbeing

Most people understand that wellbeing goes beyond material living standards and depends on a combination of economic, social and environmental factors. Sustainability requires that future generations are able to enjoy at least the same levels of wellbeing as we do today.

One way of determining sustainability is to look at the quantities or stocks of the resources (or 'capital') on which our wellbeing depends and measure their change over time. This is the approach adopted in the report. We have measured indicators across five themes of social and human capital (skills and education, health, community engagement, employment and security); six themes of natural capital (climate change, atmosphere, land, ecosystems and biodiversity, water, waste and natural resources) and four themes of economic capital (wealth and income, housing, transport and communications and productivity and innovation). In addition the report provides additional information on key contextual indicators of population, cultural diversity, regional migration and land use.

The report also makes international comparisons on a number of these indicators. Australia performs very well on measures that emphasise social and economic dimensions of wellbeing. Australia ranks second in the world on the United Nations Development Program's Human Development Index, which measures education, health and income and first in the world on the OECD's *Your Better Life Index* that ranks quality of life and material living conditions.

However, Australia's comparative performance is lower based on some measures that include a stronger focus on the value of natural capital. For example the 2012 Inclusive Wealth Index ranks Australia lower than many other countries in its growth in all resources because of a decline in natural capital since 1990.

As well as maintaining wellbeing for families and communities, sustainability is important for business. Sustainable businesses recognise that one of the most significant threats to their longevity and performance over time is the failure to adapt to changing circumstances—whether those changes occur in the environment and society or through disruptive technologies or shifting customer preferences. Businesses that integrate sustainability in their planning and performance are likely to avoid unnecessary business costs and improve productivity, find new opportunities and markets, build reputation and support from employees and customers, minimise regulatory risk and compliance costs, and boost access to capital.

Trends and drivers

In developing this report, the Council has focused on the implications of current trends and drivers for the next generation of Australians—those born over the next few years and who will come of age in the early 2030s. These trends include global economic rebalancing, environmental and resource imperatives, the people economy, challenges of growing and ageing populations and the complex interconnectivity of the world.

The megatrends identified in the report highlight key challenges for Australia of embracing the Asian Century, improving productivity, planning for the growth of cities and managing change in our population as more of us become older, traditional work and family roles change, and our cultural and linguistic diversity evolves.

Key issues and challenges

The Council has identified a number of key issues and challenges that are revealed by the indicators in the report.

Population, cultural diversity and migration (pages 240–257)

The Australian population, of just over 23 million people, is increasing at a rate of 1.7% per year and is highly urban and mobile. Ninety per cent of the Australian population lives on just 0.22% of land and 80% live within 50 km of the coast. Australians move house more than people in most other countries. At the 2011 Census, 15% of the population had moved in the last year and 42% within the previous five years.

Australia has been transformed from a dominantly Anglo-Celtic society at the end of World War II to one of the world's most multicultural nations. Almost half of Australia's population are immigrants or the children of an immigrant, making it one of the nations most influenced by migration in the world. Twenty six per cent of Australians in 2011 were born overseas, with a further 19% first generation Australian-born. The last two decades have seen an increase in people of Asian (now 9% of the population) and African ancestry.

Australia is often depicted as a country of permanent settlement immigration, but there is also significant emigration. Of those emigrating from Australia, half are immigrants returning to their country of origin or moving to a third country and half are Australia-born residents departing. There are between 750,000 and one million Australians living in foreign countries.

Since the mid 1990s, temporary migration has increased in significance, with Temporary Business Skilled Migration (457 visas), working holiday-makers and students being the main groups of temporary migrants.

Aboriginal and Torres Strait Islanders (pages 249–250)

Aboriginal and Torres Strait Islanders numbered 548,370 in 2011 and made up 2.5% of the national population. There is a significant gap in life expectancy for the Aboriginal and Torres Strait Islander population compared to total Australian population (11 years for males). There are also higher levels of unemployment (17.1% compared to 5.6%), more people living in rental accommodation (66.5% compared to 28.5%) and proportion in low-income categories (41.5% compared to 28.1%) amongst the Aboriginal and Torres Strait Islander population.

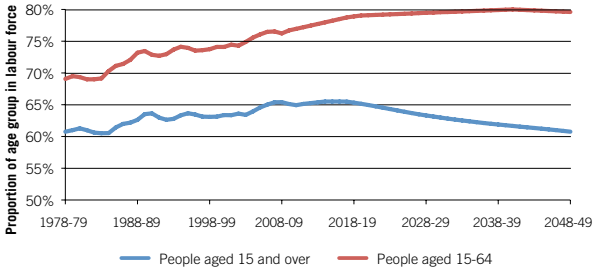
As Australia's demographics change, significant budgetary pressures are likely to occur on the age pension, health costs and aged care facilities

Planning for an ageing population (pages 49–54)

Life expectancy for older Australians has increased dramatically over the past 30 years. Between 1981 and 2011, life expectancy at age 50 increased almost seven years for males and five years for females.

Over the next 20 years, the number of Australians aged 65 and over is expected to increase by 84%. The dependency ratio of the number of people of working age to those over 65 has already declined from 7.5 in 1970 to 5.0 in 2010 and is projected to decline further to 2.7 by 2050. As Australia's demographics change, significant budgetary pressures are likely to occur on the age pension, health costs and aged care facilities.

Workforce participation rate, actual and projected, 1979 to 2050



Australian Government Treasury (2010) *Intergenerational Report 2010*, 'Australia to 2050: Future Challenges'.

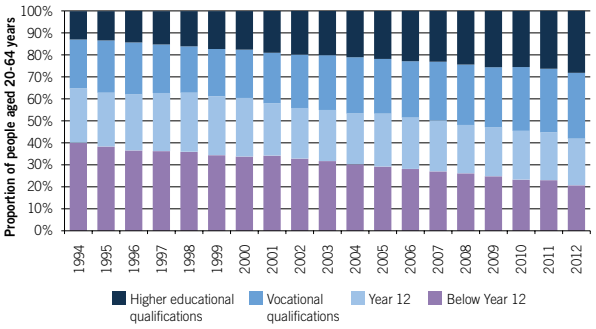
Government health costs are projected to rise 4.5 percentage points of GDP to reach 10.3% of GDP by 2044–45. This is driven in part by the effects of an ageing population and in part by increased demand and expectations of health services. Incidences of chronic diseases have increased sharply. The rates of obesity, asthma, hearing loss and high cholesterol for baby boomers aged 53 to 62 are double those of the previous generation. The diabetes rate has tripled, and the proportion of this age group with chronic health conditions—generally the most costly conditions to manage—is substantially higher than for the previous generation.

There are no 'silver bullets' that will 'solve' Australia's ageing challenges, but a combination of actions is needed. In the past decade, labour participation rates for 65 to 74 year olds have doubled from 15% to 26% for men and 6% to 13% for women. Further increasing the participation rate of older workers will help. Ageing also presents opportunities for other contributions to be made by 'the young aged' to the community and to their families.

Education (pages 33–40 and 105–115)

Australia has experienced large improvements in levels of educational attainment over the past 20 years, prior to which Australia's educational attainment was relatively poor by high-income country standards.

Educational attainment, by highest qualification, 1994 to 2012

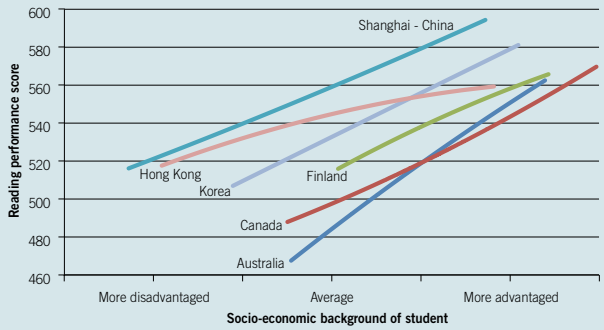


Australian Government Department of Sustainability, Environment, Water, Population and Communities analysis of Australian Bureau of Statistics data.

By 2012, 80% of people aged 20 to 64 had completed Year 12, a vocational qualification or higher qualifications, up from 60% in 1994. The proportion of women with higher qualifications (bachelors degree and above) has risen from 21% in 2002 to 30% in 2012. Australia is among the high-performing countries in the OECD for 15 year olds' competency in reading, mathematics and science.

However, increases in education levels have not been uniform across the Australian population. Students in more disadvantaged or remote areas are less likely to attain Year 12 or perform well. Only 74% of young people in the most disadvantaged areas have completed Year 12 or basic vocational qualification compared to 94% in the least disadvantaged areas. Australia has a stronger link between socio-economic background and the educational performance of students than other high performing countries. Despite some gains in Aboriginal and Torres Strait Islander education in recent years, Indigenous background is still closely associated with poorer education outcomes.

Social gradients in Programme for International Student Assessment (PISA) reading literacy by country, 2009



Organisation for Economic Co-operation and Development, *PISA 2009 Result: Overcoming Social Background*; Thompson, S. et al. (2011), *Challenges for Australian Education: results from PISA 2009: the PISA 2009 assessment of students' reading, mathematical and scientific literacy*, Australian Council for Education Research.

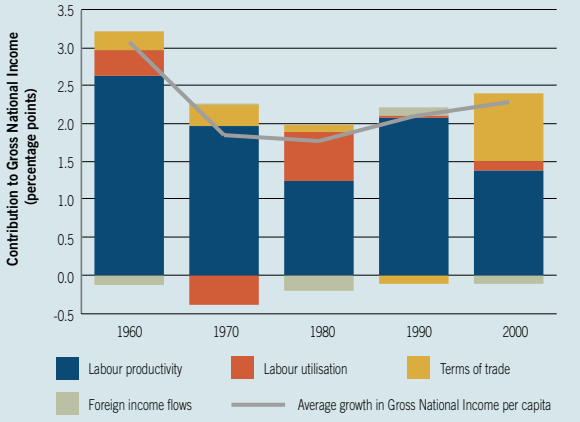
Despite Australia's relatively poor performance on measures of equity, we perform well in terms of upward mobility in the education system. As many as 41% of 25 to 34 year olds have attained tertiary education, despite being from socio-economically disadvantaged backgrounds and having parents with low levels of education. This is well above the OECD average of 20%.

Although skill shortages are less widespread than they have been over the last six years, recruitment difficulties continue in occupations such as engineering and the trades. Looking forward, there is expected to be a widening gap between the supply of higher-level skills and industry demand, with implications for Australia's productivity performance.

Sustainable growth and prosperity through innovation and engagement (pages 41–48 and 227–234)

Throughout the 2000s, high terms of trade became as significant as labour productivity in contributing to income growth, providing a 'windfall gain' for Australia. In the coming years, higher productivity growth will be required to maintain Australia's strong economic growth and rising living standards. That productivity growth will need to come from improving human capital and innovation.

Contributions to growth in average incomes, 1960s to 2000s

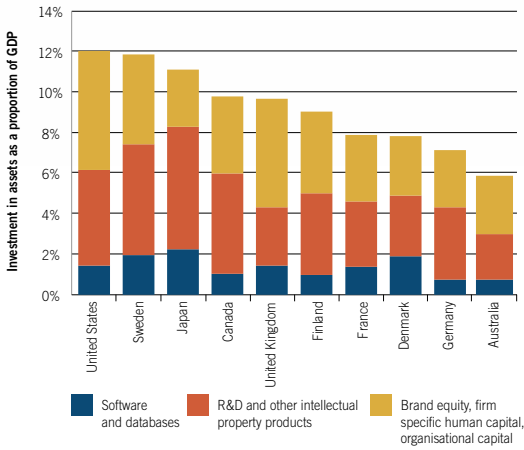


Gruen, D (2012) *The Importance of Productivity.* Speech to the Productivity Commission – Australian Bureau of Statistics Productivity Perspectives Conference, 20 November 2012.

Australia's strong education and research and development systems provide a good foundation for productivity growth however the research is much more likely to come from government than business and Australia has not been good at translating research inputs into business innovation outcomes. Higher levels of investment in 'intangible assets' (software, R&D, organisational capital) are needed to boost the sophistication of the Australian economy and encourage innovation.

There is a stark, and growing, divide between the opportunities provided to residents of the inner suburbs and residents in outer urban areas

International comparison of investment in intangible assets, by selected countries, 2006



Organisation for Economic Co-operation and Development (2012) *Measuring Innovation: A New Perspective.*

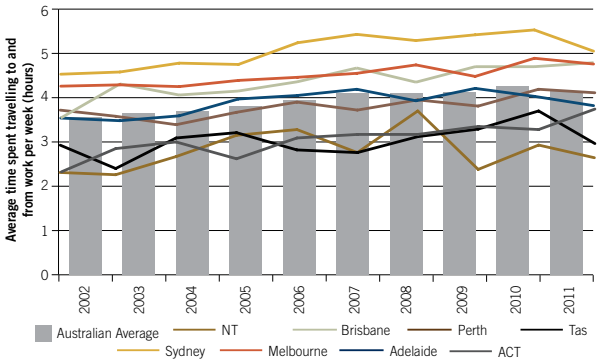
Innovation is about cumulative and collective know-how, so collaboration and connectivity are critical. As an urbanised, geographically vast and remote economy, Australia is likely to be particularly dependent on effective mechanisms for collaboration and connectivity. Wider access to high speed broadband, and the sharing of knowledge and ideas that this enables, represents a transformative opportunity for innovation and productivity across the nation.

Australia's prospects for sustainable growth are linked to the emergence of Asia as a rapidly growing economic power. While Australia is among a number of countries that are projected to benefit from rapid increases in Asian demand, it will need to better develop relevant skills, new business models and new relationships for opportunities to be fully realised.

Sustainable cities
(pages 55–64 and 213–225)

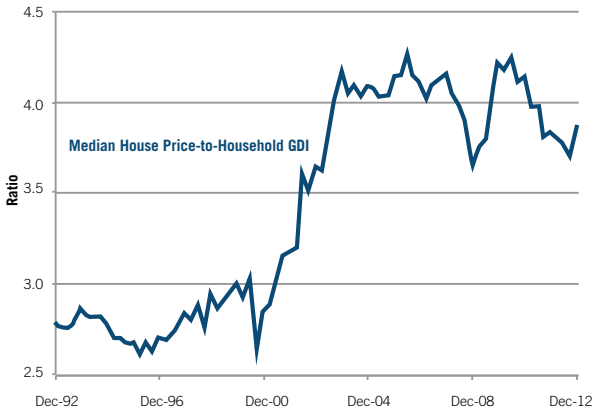
Our cities are among the most liveable in the world, but lag behind on some aspects of sustainability. Key issues for our cities in becoming sustainable are energy consumption, car dependency and equity. Australian cities still have relatively low population densities, and are highly car dependent. Reducing vehicle kilometres travelled in our cities will improve population and environmental health. Housing supply is not keeping pace with demand and dwelling prices have risen substantially since 2000. There is a stark, and growing, divide between the opportunities available to residents of the inner suburbs and those available to residents in outer urban areas.

Travel time to work, by capital city/territory, 2002 to 2011



Melbourne Institute of Applied Economic and Social Research, Household, Income and Labour Dynamics in Australia Survey 2002 to 2011. Note: For ACT, NT and Tasmania, data includes whole state/territory as capital city only data is not available.

Housing affordability: ratio of median house price to household gross disposable income, 1992 to 2012



Australian Treasury analysis of: Australian Bureau of Statistics, *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0), HIA data, RP Data-Rismark Home Value Index.

Three quarters of Australians live in the nation's 18 major cities, which are growing rapidly. As our cities grow, there are impacts on agriculture, on natural waterways and on habitats. Some devastating climate-related events have been experienced by our cities in recent years, including floods and bushfires. Sea level rise is a real risk for many of our cities, located in coastal regions. Building resilience and adapting to climate change must be a high priority.

Regional Australia (pages 65–71 and throughout chapters 13 to 16)

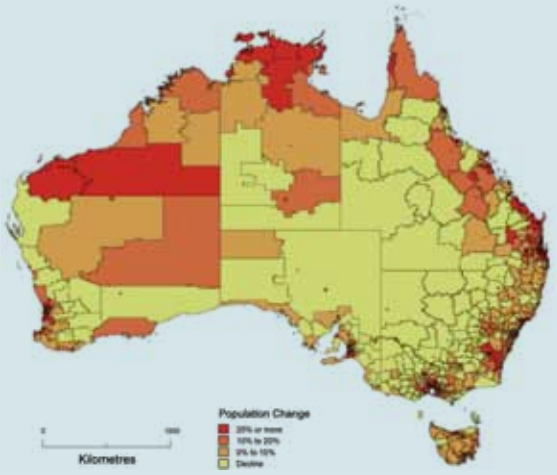
Almost eight million Australians live in regional areas—outside our capital cities. This population is distributed unevenly, influenced by a range of demographic, environmental, economic and social factors. Some areas of regional Australia are struggling to accommodate population growth and associated demands on infrastructure and services, while others are faced with large population declines.

Regional communities face a diverse range of issues, which give rise to distinct sustainability challenges in different communities. Performance against social and health indicators is often lower for regional Australians than for their urban counterparts. Indicators of community engagement, however, suggest that regional communities enjoy higher levels of connectedness and social capital.

Volunteering, by region, 2010

Australian Bureau of Statistics, *Voluntary Work, Australia, 2010* (cat. no. 4441.0).

Population change in Australia, 2001 to 2011, by Statistical Area 2 (SA2)



Australian Bureau of Statistics, *Population by Age and Sex, Regions of Australia, 2011* (cat. no. 3235.0).

Climate change (pages 72–78 and 159–168)

Climate change is a long term and intergenerational concern, with consequences that extend across our economy, society and environment. Per capita, Australia's greenhouse emissions are higher than any other developed country. Climate changes at global and local scales are set to continue over the coming decades, with major consequences for Australia. In addition to rising average temperatures, climate change is expected to increase the risk of bushfire, drought, extreme weather events, rising sea level and ocean acidification.

The results of these changes will be broadly felt. Australia's ecosystems may experience major structural shifts that could undermine critical ecosystem services as well as the cultural values we attach to biodiversity. Our primary industries will be impacted, changing what we are able to produce and where we can produce it. Regional communities are likely to face significant economic and social challenges, potentially contributing to urban migration. Infrastructure is likely to be threatened by extreme weather conditions and events, as well as inundation from sea level rise. The security of our water supplies may be threatened as precipitation decreases and population increases. More frequent and severe natural disasters are likely to have financial, social and health implications for us all, as well as a disproportionate impact on our most vulnerable people.

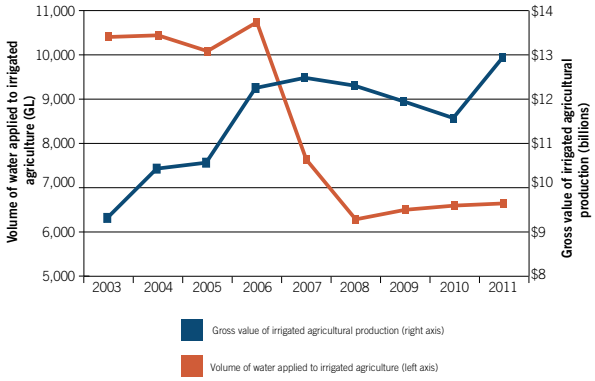
To sustain the long term wellbeing of Australia's population, we need to find ways of supporting economic growth without degradation of the environment

Reducing the environmental impact of economic growth
(pages 80–86 and 159–208)

Traditionally, economic growth has been highly resource-dependent, resulting in resource depletion and adverse environmental impacts. In addition to resources, natural environmental systems provide a range of products and services that are essential for life and underpin wellbeing. For Australia to sustain the wellbeing of its population over the long term, we need to find ways of supporting economic growth without degradation of the environment.

One success story in this area is the improvements in the efficiency of water use over the past decade. The value of agricultural production has increased, while simultaneously water extraction has decreased. Households reduced their water consumption by 35% in the decade to 2011.

Decoupling water consumption from production in the irrigated agriculture sector, 2003 to 2011

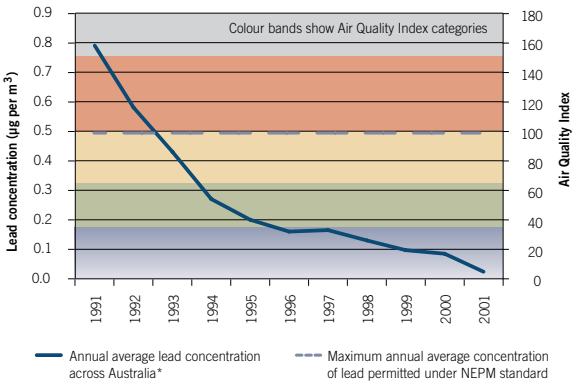


Australian Bureau of Statistics, *Value of Agricultural Commodities Produced, Australia* (cat. no. 7503.0) 2002 to 2011 issue.

Overall, our economy is also becoming more energy efficient, however, this is not occurring uniformly across all sectors. The services, manufacturing, transport and residential sectors have been most successful in decreasing their energy intensity. While our energy intensity is reducing, our greenhouse gas emissions are continuing to rise. Thus, there remain significant challenges in decoupling economic growth from emissions.

Another success story is lead concentration in the atmosphere. Since the phase-out of leaded petrol in 1993, lead concentrations have declined from levels that exceeded air quality standards to almost negligible amounts today.

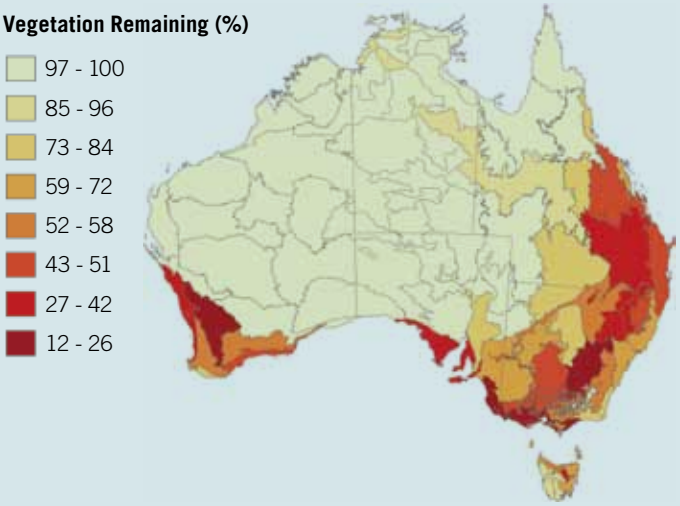
Decline in average lead levels in Australia, 1991 to 2001



Australian Government Department of Sustainability, Environment, Water, Population and Communities (2010) *State of the Air in Australia 1999–2008*.

However, Australian ecosystems have been dramatically changed, particularly in areas around human settlement. Declines in population size, geographic range and genetic diversity are being seen among a wide range of species. In many populated parts of the country, less than a quarter of pre-European settlement native vegetation is remaining. Almost all biodiversity indicators examined by the 2011 State of the Environment Report were rated 'Poor' or 'Very-poor' with deteriorating trends.

Native vegetation remaining: proportion, by biological region, 2012



Australian Government Department of Sustainability, Environment, Water, Population and Communities, National Vegetation Information System data.

Food and agriculture—sustainable production and productivity in a changing landscape (pages 87–95, 185–194, 259–260)

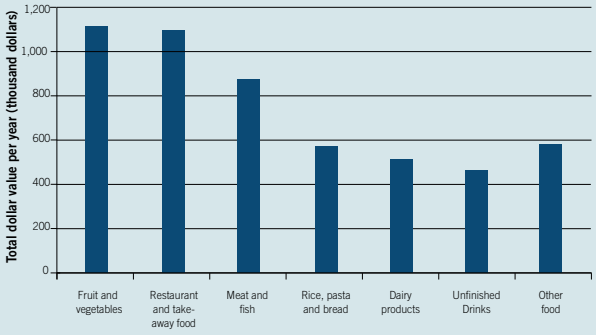
The food and agricultural sectors continue to be important contributors to Australia's economy and society, especially in regional communities. The value of Australian farm exports has increased at an average of 5% over the past three decades, although the number of farmers and the number of students studying agriculture has been declining.

Farmers are land managers of over half of the Australian landmass, thus their management techniques have significant implications for the health of our environment and natural resources. Increasing numbers of farmers are adopting practices to improve productivity and deliver higher quality ecosystem services.

Demand for food in Asia is projected to double by 2050, presenting opportunities for Australia's agriculture sector in the future. Increases in food production in Australia, to meet the needs of our growing population and growing global demand, need to be managed carefully to avoid adverse environmental and social impacts. Increasing agricultural production risks placing greater pressure on our natural resources and will likely occur alongside expanding demand for these resources for other purposes, such as urban development. Climate change impacts are also likely to be significant. Adapting to these future challenges will depend on Australia's agricultural know-how, which also has the potential to make a significant contribution to global food security.

Food waste is a significant sustainability issue. Globally it is estimated that roughly one third of food is lost or wasted. In Australia, households waste approximately 15% of the food they purchase each year. This amounts to an estimated 361 kilograms of food waste per person each year, with an estimated annual value of $5.2 billion.

Value of food wasted each year, by food type



Environment Protection and Heritage Council and the Australian Government Department of Environment, Water, Heritage and the Arts (2009) *National Waste Policy: Less Waste More Resources*.

Inequality and disadvantage—implications for wellbeing and sustainability (pages 97–104, 209–214)

While Australians generally enjoy high levels of financial wealth and security compared to those in most other countries, the gap between rich and poor has been rising. Australia has experienced

While Australians generally enjoy high levels of financial wealth and security, the gap between rich and poor has been rising

almost two decades of continuous economic growth but inequality has risen.

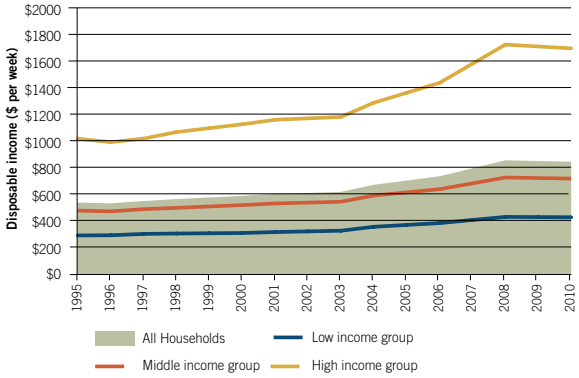
Real household incomes rose overall by 57% between 1995 and 2010, but low income households rose by 47% while high income households rose by 67%. Internationally Australia is ranked 26th among OECD countries on the Gini coefficient measure of income inequality. In 2010 the wealthiest 20 per cent of households held 62% of total household net worth, a 36% increase from 2004. In contrast, the poorest 20% held only 1% of total household net worth, a 10% increase from 2004.

Inequality and disadvantage can limit the capacity of individuals to engage in, and contribute to, society. This affects both individual and community wellbeing – now and into the future. Risk factors for poor health are more prevalent amongst the more disadvantaged parts of society. Smoking and obesity rates are higher amongst the disadvantaged, rural people and the Aboriginal and Torres Strait Islander population.

Unemployment and underemployment are concentrated among a number of groups that are also at risk of social exclusion due to other factors. Unemployment rates vary greatly across Australia, including differences within and between cities. In September 2012, more than half of local areas recorded an unemployment rate of less than 5% while 9% of areas had an unemployment rate of 10% or more.

Multiple types of disadvantage can interact, leading to complex impacts on wellbeing that can be difficult to address. A good education can provide a pathway out of disadvantage, However learning outcomes can vary significantly depending on socio-economic status, increasing the risk of entrenched disadvantage. Young people in disadvantaged areas are much less likely to achieve Year 12 education or a basic vocational qualification (74%) than those from the least disadvantaged areas (94%). Disadvantage starts even before school with 32% of children from socio-economically disadvantaged areas identified as developmentally vulnerable in the first year of school, compared to just 16% of children in least disadvantaged areas.

Household disposable income, by income group, 1995 to 2010



Australian Bureau of Statistics, *Household Income and Income distribution*, Australia, 2009–10 (cat. no. 6523.0), Australian Bureau of Statistics, *Measures of Australia's Progress*, 2010 (cat. no. 1370.55.001).

Conclusion

The data on which all of these trends are based are presented in the report along with an in-depth analysis of the key issues and challenges. The Council invites all Australians to examine the report and consider whether they agree with our assessment. Questions are included at the end of each of the chapters to stimulate thought and we will provide Australians with an opportunity to engage in discussions about the type of future we would like for our children and grandchildren.

The progress outlined in this report gives us hope for the future. The Council is optimistic that Australians can make the decisions that are needed to meet the challenges outlined in the report and set us on a path for a sustainable Australia.

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