



Business and Economy  
The Auckland Region

# Introduction

'Sustainability' – a buzzword, a concept, a mantra or a guiding principle? All of these: sustainability has a variety of meanings and prompts a variety of responses. Frankly, it's important to realise that talking sustainability is just as likely to turn people off as it is to excite them. So the key is to keep it real.



And it is real. While it continues to be a subject of much discussion and debate, thinking and theory, environmental sustainability has moved from the fringes of the green movement and is now mainstreamed in policies throughout the globe. In the private sector, after years of being dismissed as a secondary consideration, it has become a priority for both companies and consumers.

Things have moved so far that New Zealand now has a mainstream magazine dedicated to sustainable living. The launch issue of Good (also the country's first carbon neutral magazine) describes sustainability as being about 'combining the wisdom of the past with the technology of the future. It's a smarter way to live.'

Sustainability doesn't have to be about spending a fortune on reports evaluating your carbon status, or making your staff sit in the dark. It can be about making attainable, regular changes to the way we do things – changes that over time become habit forming, and usually end up saving money and increasing efficiency. Isn't that what successful organisations do: strive for and achieve continuous improvement?

For some organisations, particularly those that have a large impact on the environment, greater strides are required and desired, both by their customers and industry. Kiwis are great innovators, and some of the ways that Aucklanders have embraced the path to sustainability, whilst actually improving the success of their businesses, is a triumph.

For many, sustainability has actually become an enormous business opportunity. Far from being an expensive impediment, sustainability has brought about immediate cost savings, an increase in appeal and marketability to their customers, and has made them a more desirable employer for prospective staff.

This issue of Business and Economy attempts to take stock of sustainability issues as they relate to the Auckland region and its economy. We invite you to reflect on how these issues could affect the performance and future growth of your business or organisation.

Among the highlights of this edition, the Sustainable Business Network's David Clendon showcases some innovative businesses in the Auckland region that are becoming increasingly sustainable.

Catherine Murray reflects on the relevance of 'green jobs' to the Auckland region, and identifies certain sectors where there is potential for growth in the economy.

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Alison Reid explores the issues around sustaining Auckland's labour force.

Nick Jones presents findings from his 'Consumer who Cares' research, conducted within the Nielsen Media Research Panorama service. The research explores consumer demand for sustainable products and consumer attitudes toward broader sustainability principles based on their purchasing patterns.

We also look at Auckland's ongoing attempt to institute a programme guided by sustainable principles, through 'One Plan'.

This publication continues our reporting on recent economic trends within the Auckland region.

Building on previous years' articles on innovation, we put the spotlight on Auckland's weightless economy, characterised by high-value-added products and a shift away from energy intensive activities.

Sustainable economic development is central to the ARC's vision for the Auckland region. We hope you find this publication thought provoking and useful as you work to make your organisation – and ultimately Auckland and New Zealand – more sustainable.



Michael Barnett

Chair, Auckland Regional Economic Development Forum  
Chair, AucklandPlus

# Recent trends

New Zealand Institute of Economic Research



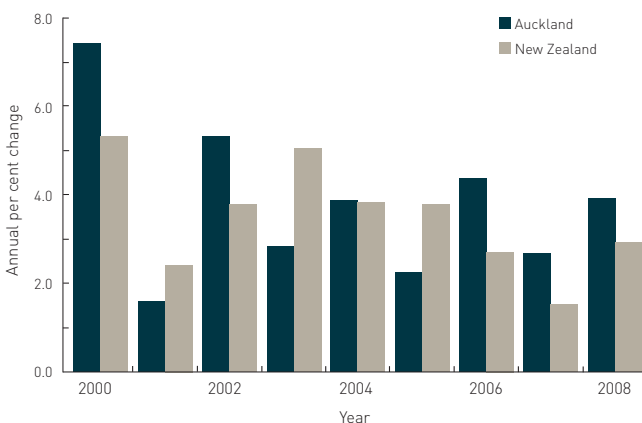
## GDP

Auckland's economy has consistently grown at a greater rate than the rest of New Zealand during the current decade. The region's Gross Domestic Product (GDP) has grown in real terms (i.e. excluding the effects of inflation) by an average of 3.6 per cent per annum since the March 2000 year, as against 3.2 per cent per annum nationally.

This was most pronounced in the latest year, when regional GDP grew by an estimated 3.9 per cent in the year to March 2008, above the national growth rate of 2.9 per cent.

**Figure 1** Gross domestic product

Source: Statistics New Zealand, NZIER estimates



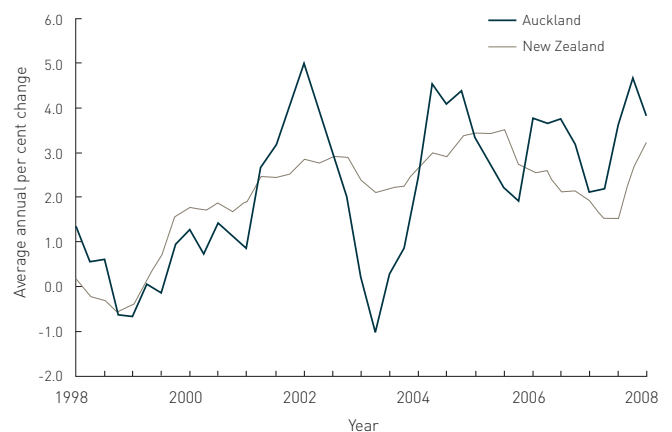
As the next section shows, above-average employment growth indicates that economic activity in the Auckland region was stronger than that nationally. Moreover, much of the region's growth has been in high-value-added industries, especially transport; storage and communications; and finance, insurance, property and business services.

## Employment

There was a monthly average of 677,000 people employed in the region over the year to March 2008<sup>(1)</sup>, representing growth of 3.8 per cent over the year.

**Figure 2** Employment

Source: Statistics New Zealand Household Labour Force Survey



This was above the national employment growth over the year of 3.3 per cent. Over the last decade, Auckland has largely followed national trends, although its employment has been more variable than has been the case nationwide. Employment in both the region and the country has grown by an average of 2.2 per cent per annum over the last decade – very high growth in historical terms.

(1) Employment displays strong seasonal trends, and as Statistics New Zealand does not provide seasonally adjusted data at a regional level, we have used annual averages for this and the next measure, to get an indication of trends excluding seasonality.

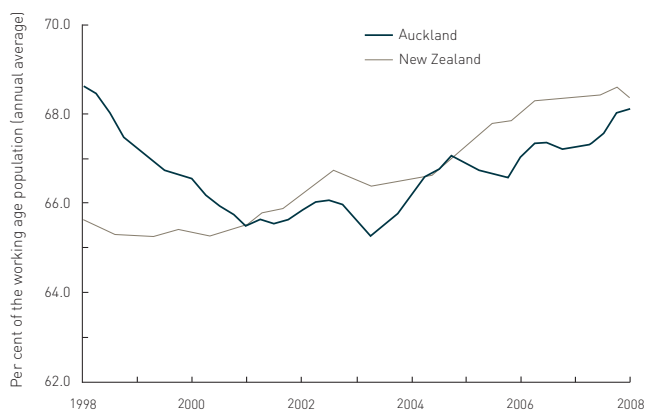
The growth in employment has attracted increasing numbers of people into the workforce. In the year to March 2008, an average 68.4 per cent of Auckland's working-age population (persons aged 15 and over) were employed or actively seeking work – a record level.

Auckland's participation rate is slightly below the nationwide average, and this has been the case since 2001. Prior to that time, the region had a significantly higher rate than the national average.

Historically, Auckland has had a relatively buoyant labour market, and this has led to a greater share of its working age population seeking and securing jobs. However, the very strong job growth throughout New Zealand during the current decade has enabled the rest of the country to catch up.

**Figure 3** | Labour market participation rate

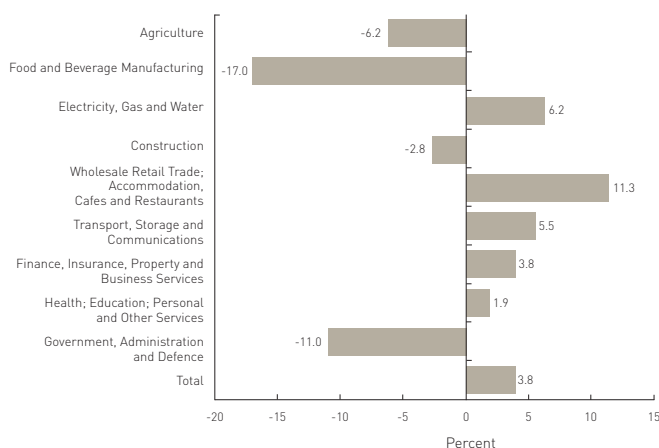
Source: Statistics New Zealand household labour force survey



In which industries did employment growth occur?

**Figure 4** | Employment change by sector, year ended March 2008

Source: Statistics New Zealand household labour force survey



The most important changes were in:

- Wholesale and retail trade; accommodation; cafés and restaurants – employment in these sectors increased by 16,300 (in spite of low growth in sales).
- Other manufacturing – an increase of 4,900 persons.
- Finance, insurance, property and business services – an increase of 4,900 persons.
- Health and community services; personal and other services; and education – an increase of 2,700 persons.

These increases were partially offset by:

- Food, beverage and tobacco manufacturing – employment fell by 2,700.

### Difficulty of finding labour

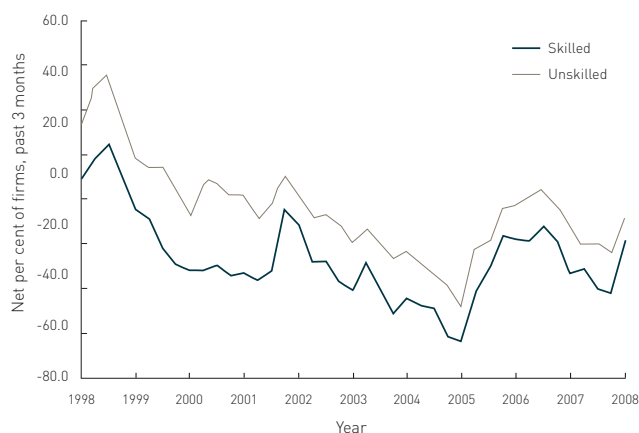
Results from NZIER's Quarterly Survey of Business Opinion (QSBO) showed that, on balance, fewer firms reported difficulty finding skilled and unskilled labour in the Auckland region in the March 2008 quarter than in the previous quarter. However, the measure still suggests relatively high difficulties by historical standards.

The net balance of firms reporting that it had become harder to find skilled labour went from 47 per cent in the December 2007 quarter, down to 26 per cent in the March 2008 quarter.

In terms of unskilled labour, a net 17 per cent of firms reported more difficulties in the March 2008 quarter, down from a net 31 per cent in the December 2007 quarter. The latest figure is still higher than the average for the past ten years, of 14 per cent.

**Figure 5** | Difficulty finding labour in the Auckland region

Source: NZIER Quarterly survey of business opinion



# Recent trends

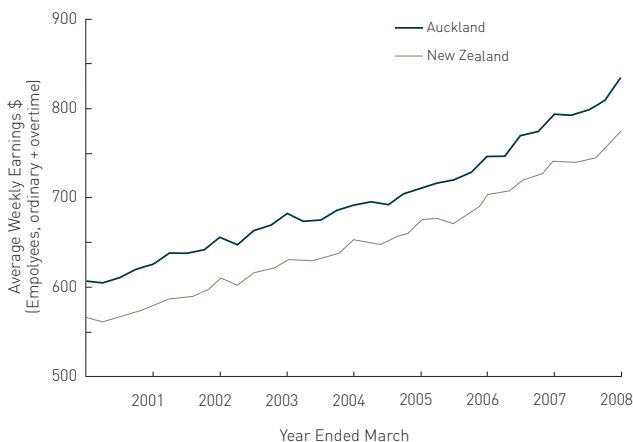
The data suggests that firms in Auckland do not find it as difficult to secure labour as those do nationwide, and the easing in the last quarter has been more pronounced in Auckland than in the rest of the country. A net 36 per cent of firms nationwide reported in the March 2008 survey that it had become harder to find skilled labour (compare this to the figure from the December 2007 quarter of 46 per cent). The equivalent figures for unskilled labour were a net 22 per cent and 33 per cent, respectively.

## Weekly earnings

In the March 2008 quarter, Auckland employees were earning an average of \$834 per week, 7.3 per cent more than the national average of \$777. Auckland earnings increased by 4.8 per cent between the March 2007 and 2008 years.

**Figure 6** Earnings

Source: Statistics New Zealand employment and earning survey



The recent pattern is typical, with Auckland employees earning above the national average but rising at roughly the same rate.

## Retail sales

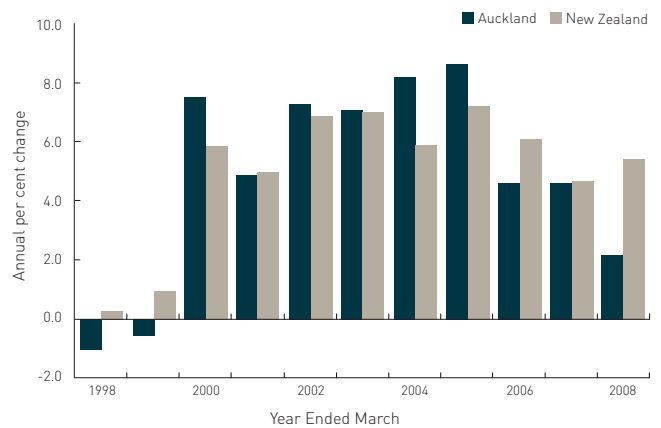
Retail sales in Auckland grew 2.2 per cent in the year to March 2008, to \$21.4 billion.

Auckland retail trends over the last decade have been similar to national trends, with total sales growth averaging 5.5 per cent per annum between the March 1998 and 2008 years, compared to 5.3 per cent nationally. Regional sales grew more strongly between the March 2000 and 2005 years, but have been growing more slowly since then.

This was particularly pronounced in the latest March year, when Auckland's growth of only 2.2 per cent was significantly below the growth of 5.5 per cent across New Zealand. Retail sales growth has been slowing in recent quarters, and this trend appears to have begun relatively early in the Auckland region.

**Figure 7** Retail trade

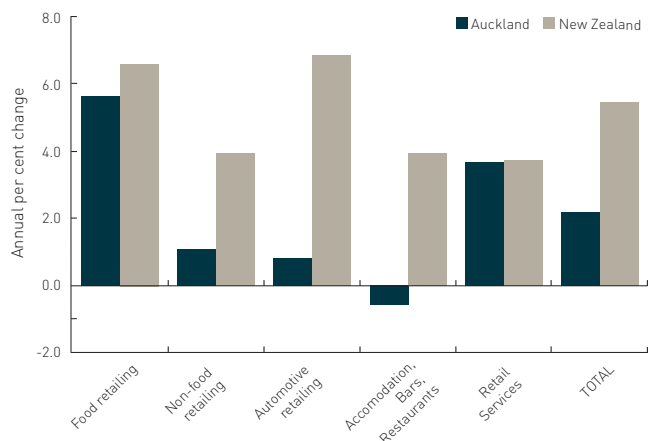
Source: Statistics New Zealand



Looking at store types, there was growth in most retail sectors, with the exception of spending on accommodation, bars and restaurants, which experienced a dip in Auckland region during this period.

**Figure 8** Retail trade by store type

Source: Statistics New Zealand





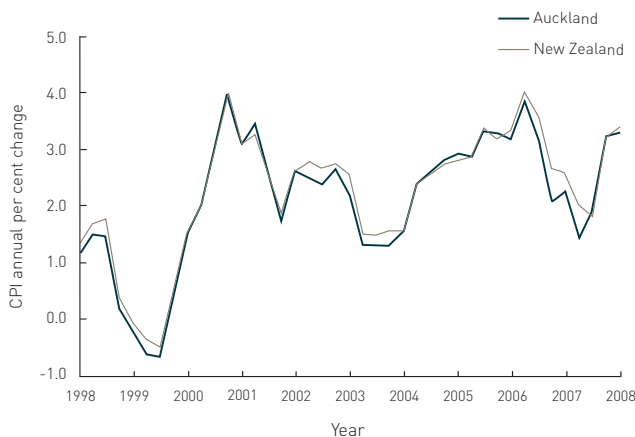
## CPI inflation

The Consumer Price Index (CPI) increased 3.4 per cent over the year to March 2008. The inflation rate remains above the Reserve Bank's target band of 1– 3 per cent.

In terms of the Auckland region, CPI annual inflation in the region is estimated at 3.3 per cent in the March 2008 year, up from 1.4 per cent, 1.9 per cent and 3.2 per cent in the June, September and December 2008 quarters, respectively.

**Figure 9** | CPI inflation

Source: Statistics New Zealand, NZIER estimates

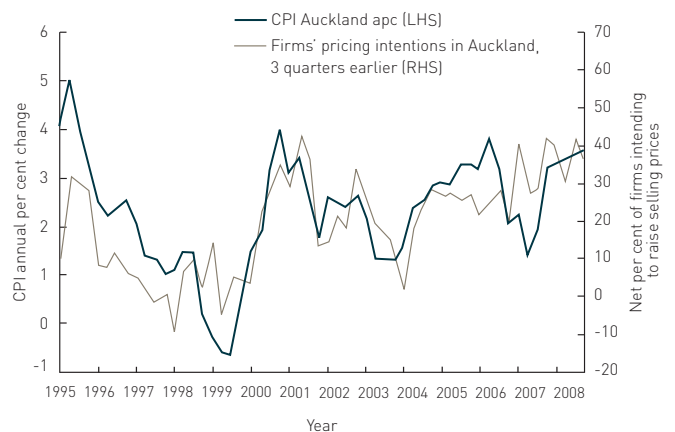


The latest annual increases in consumer prices were consistent with the results from NZIER's QSBO. The net balance of firms in the Auckland region intending to increase selling prices in the next three months was 33 per cent in the March 2008 quarter, well above the average of 22 per cent over the past ten years.

Movements in the pricing intentions indicator have reflected the movements in the CPI reasonably closely over time. This suggests that there remain strong, persistent inflationary pressures in the economy, and the CPI inflation is likely to stay high for the next few months.

**Figure 10** | CPI inflation and pricing intentions in Auckland

Source: Statistics New Zealand, NZIER estimates



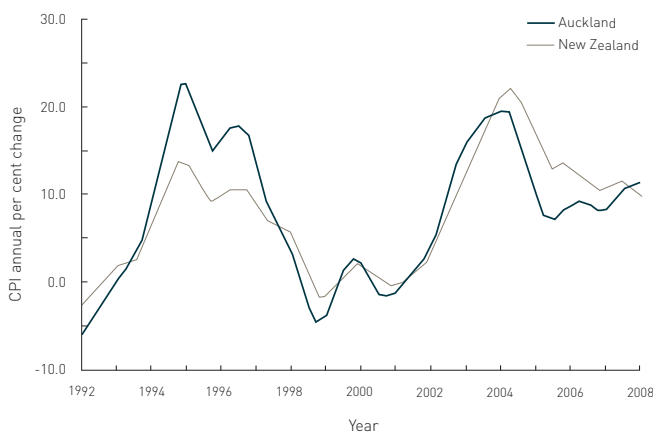
# Recent trends

## House prices

The current decade has seen exceptional growth in house prices, driven by strong economic growth and high inward migration. Capital values in the Auckland region doubled between the March 2001 and 2008 years, and at their peak in late 2003 and early 2004, were rising at a rate of about 20 per cent per annum. National trends have mirrored what has been happening in Auckland.

**Figure 11** House Values

Source: Quotable Value New Zealand, House Price index



The slowing economy, falling net migration, and high mortgage interest rates have resulted in lower property price inflation over the last three years. However, prices have continued to rise at or near double-digit rates over that time. This is in contrast to the previous boom, when prices went from growth of around 20 per cent per annum to falling prices within two years.

Other signs of a cooling house market (for example, falling numbers of house sales and lower selling prices) and the weakening economic situation suggest that low growth or actual falls in prices may eventuate in the immediate future.

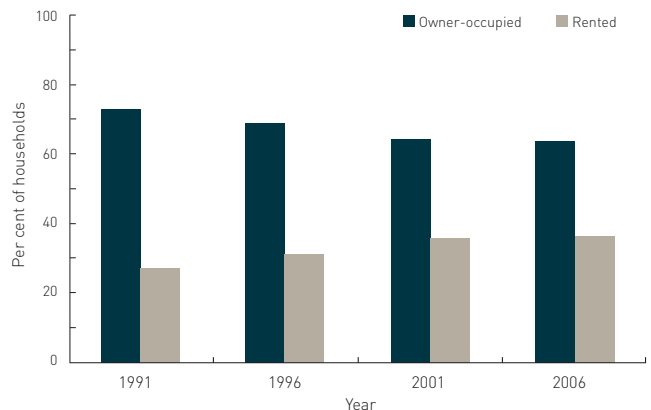
## Housing tenure

At the time of the 2006 Census, 63.8 per cent of households in the Auckland region owned and occupied their own homes (with or without a mortgage)<sup>(2)</sup>, and 36.2 per cent were in other (mostly rented) dwellings.

The share of home ownership has been falling over the period, with the biggest falls between 1991 and 1996 (-3.5 per cent) and 1996 and 2001 (-4.8 per cent). This suggests that home ownership is on a long-term downward trend, and belies the usual explanation – increasing house prices making the move from renting to ownership more difficult – as most of the fall in home ownership has occurred prior to the boom of the current decade.

**Figure 12** Housing Tenure in Auckland

Source: Statistics New Zealand Census of Population and Dwellings



Trends in Auckland mirror those nationally, with the share of home ownership falling from 73.8 per cent in 1991 to 66.9 per cent in 2006. Auckland has generally had slightly lower levels of home ownership than the rest of New Zealand, reflecting its higher house prices and greater number of immigrants.

Among the various local authorities in the region, the highest levels of home ownership are in Rodney and Franklin Districts, with 73.6 per cent and 73.1 per cent, respectively, and the lowest level is in Auckland City (56.1 per cent). This is also a long-standing trend: home ownership has generally been highest in the outlying areas of the region, where most new housing development has been concentrated.

(2) This includes 13.1 per cent of households living in a 'dwelling held in a family trust by usual resident(s)', which is a new category of ownership introduced in the 2006 Census. Inclusion of this type of household in owner-occupied dwellings is consistent with Statistics New Zealand's approach, but we cannot be certain that all households in family trust dwellings were included in owner-occupied dwellings in previous Censuses.

# Sustaining the labour force



Labour force participation<sup>(1)</sup> is currently high across the Auckland region (68.4 per cent), unemployment is low (3.8 per cent), and the squeeze is on to find suitable workers. Many employers are reporting difficulties finding staff with the right skills. This article considers anticipated changes in the size and shape of the region's labour force over the next few decades.

Skills shortages may have positive benefits for those employed, and can signify exciting changes in an economy, with new technological processes, emerging new industries, or changes in consumer demand for products and services. However, the current employment climate in the Auckland region creates challenges for employers. Shortage of labour can constrain growth and expansion, and it raises issues in planning for future business development. Most importantly planning is required to divert a future skills crisis that could lead to both a loss in economic activity and businesses locating to other regions. It has been noted that eight out of ten workers of the national 2017 workforce are at work today<sup>(2)</sup>, so assessing current skill levels, and ensuring that

the existing workforce remains competitive in respect to their skill levels, is crucial.

Looking forward, broad regional and national demographic trends are anticipated to have an effect on the future size and shape of the region's labour market. The squeeze to find appropriate labour may continue. It is pertinent to question how the Auckland region will sustain its labour force over the next few decades.

The latest Auckland Regional Council (ARC) population projections indicate the regional population could reach two million by 2034. This would see an increase of around 700,000 people, or 53 per cent more than our current population of 1.37 million.

In line with other developed countries, the process of population ageing is occurring in New Zealand<sup>(3)</sup>. Projections indicate that by 2031 the median age of the region's population is expected to rise from 34 years (in 2006) to 38.4 years, and the proportion of the population aged 65 years and over could increase from 9.8 per cent to 17.1 per cent. The relative proportional changes across all age groups of the Auckland region is evident in figure 13 with the expansion of people in age groups over 50 years, and a correlating contraction of younger age cohorts.

(1) The labour force is made up of people who are working and people who are not in work but who are available and actively seeking work (the unemployed). The labour force participation rate is the percentage of all those aged 15 years and over who are in the labour force. The employment rate refers to the percentage of those aged 15 years and over who are employed full or part-time.

(2) Carol Beaumont of the Council of Trade Unions Secretary – quoted in the New Zealand Skills Strategy 2008 Discussion Paper.

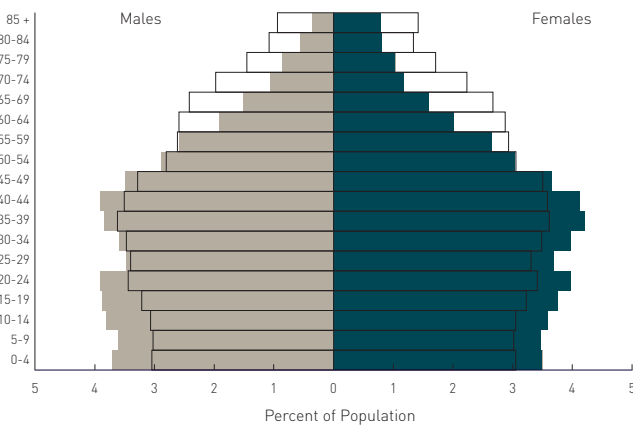
(3) This refers to the gradual rise of the average age of the population, and is caused by lower fertility rates and decreased mortality rates (people are generally living longer) resulting in an increase in the median age of the population, and in the number and proportion of older people.

# Sustaining the labour force



**Figure 13** Structure of population for the Auckland region in 2006 (shaded) and projected for 2031 (lines)

Source: Statistics New Zealand Census and ARC population projection model

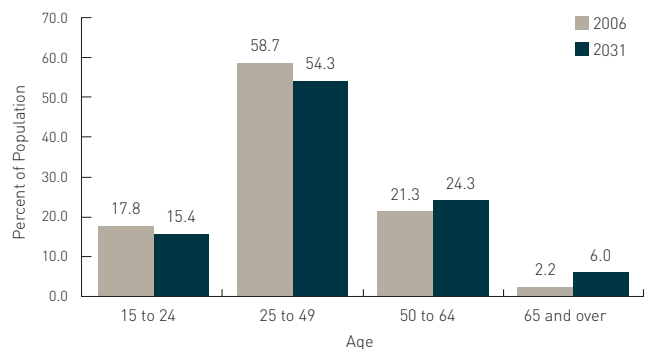


In line with this population growth, the Auckland regional labour force is expected to increase over the next few decades from an estimated 732,000 in 2006 to more than a million people by 2031<sup>(4)</sup>. However, expansion is expected to be rapid initially, in the years up to 2016 (approx 10 per cent), but then the rate of growth is predicted to settle at around 5 per cent between 2016 and 2031. The number of people engaged in employment as a percentage of population, is expected to increase from 45 per cent to 49 per cent between 2006 and 2031.

Ageing will have an influence on the labour force. Over the next few decades there will be greater numbers of workers in all age groups, but there will be a general shift towards an older workforce. Participation by 'older' workers in the labour force will increase and current expectations around work and retirement will change. This is already starting to occur as the baby boom generation enters the age of traditional retirement. Another interesting feature is the projected shift in gender balance: participation by older women (i.e. those aged 65 years and over) is expected to grow proportionately, from 38 per cent of all those aged 65 years and over in 2006 to 45 per cent by 2031.

**Figure 14** Projected age spread of Auckland regional labour force, 2006 and 2031

Source: Statistics New Zealand (2008): based on resident population of NZ in the labour force at June 2006



(4) Statistics New Zealand (2008) labour force projections, according to assumptions agreed to by the Auckland Regional Council.



The region's labour force will also continue to reflect the growing ethnic and cultural diversity of the region's population. Through both immigration and natural increase, the Auckland regional population is currently the most diverse in the country. As at the 2006 Census, 37 per cent of Auckland residents were born overseas, and residents identified with over 180 ethnicities. Over two-thirds of all New Zealand residents who identified with an Asian or a Pacific ethnicity live in the Auckland region (compared with one-third of the national population overall). While just over half (52 per cent) of the children in the region under 15 years are of a European ethnicity, 24 per cent are Pacific, 18 per cent Asian and 17 per cent Maori. The labour force of the future will be more culturally diverse than at present and it's vital that the region is able to capitalise on this diversity while ensuring that meaningful employment opportunities are available for all.

These ongoing changes in the labour force are likely to impact on the ability of employers to fill available positions. In an ageing world and in the context of shrinking working-age populations, New Zealand will be competing with many other developed countries for skilled workers, and in retaining its own workers. Many employers in the Auckland region have relied on the recent surge of immigration to the region to find the skills that they require in their workplace. The current indications are that the regional labour market will remain tight, so improving the supply of skilled labour is crucial. This requires ongoing training of the current labour force and strategies to diversify participation in the labour force.

A workforce approach to skills is required, alongside continued monitoring of skills gaps in the labour market.

For further information on demographics and the labour force, contact **Alison Reid** at the Auckland Regional Council on (09) 366 2000.

**Figure 15** Current and estimated labour force age spread of the Auckland region, 2006 and 2031

Source: Statistics New Zealand (2008): based on resident population of NZ in the labour force at June 2006

Age group	2006	2031
15-19	51,570	61,640
20-24	78,390	96,740
25-29	79,630	105,830
30-34	84,420	110,810
35-39	89,680	114,100
40-44	93,020	115,300
45-49	83,210	111,100
50-54	67,440	93,670
55-59	55,390	85,150
60-64	32,830	70,400
65-69	10,530	36,970
70-74	3,660	15,860
75+	2,260	8,860
All ages	732,000	1,026,400

# Sustainability and the Weightless Auckland Economy

Nancy So, David Waite and Preston Davies of Ascari Partners Ltd.



## The importance of economic sustainability

With growing global concern over the impacts of climate change, many countries are now focusing on how to become more sustainable. In New Zealand, sustainability has become a key policy plank for the current government. It has become such a core focus that it is difficult to find any policy document that does not contain the word 'sustainability'.

The United Nation's Brundtland Commission defined 'sustainable development as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs'<sup>(1)</sup>. This requires a pattern of resource use that aims to meet our needs while preserving the natural environment for future generations' needs. One implication of this is that, rather than focusing solely on environmental aspects, other dimensions such as economic development are also important.

As shown below, to be sustainable we need to ensure that we are economically well, socially well, environmentally well and culturally well. These are referred to as the 'mutually reinforcing pillars' of sustainable development by the United Nations<sup>(2)</sup>.

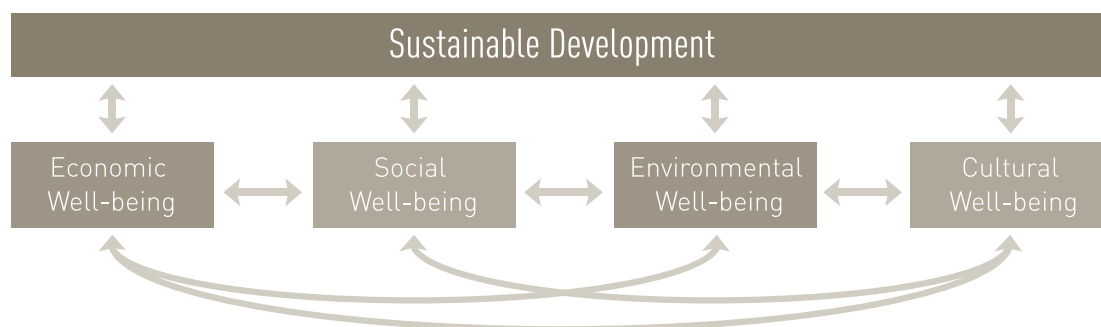
While historical economic development, based largely on energy intensive production, has no doubt contributed to climate-related issues today, economic progress is also a key enabler of our overall sustainability goals (including our social, environmental and cultural goals). There is no escaping the fact that economic progress is an essential means to finance our sustainability initiatives, especially as such initiatives (for example, recent policy around emissions trading and moving towards a higher mix of electricity generated from renewable sources) tend to be more expensive than the status quo.

Our focus should therefore be on making our economic activities smarter, more productive, more innovative and more environmentally-friendly. The concept of weightless economic activity is likely to be helpful when moving towards this goal.

(1) United Nations (1987). Report of the World Commission on Environment and Development. General Assembly Resolution 42/187, 11 December 1987. Accessed from: [www.un.org/documents/ga/res/42/ares42-187.htm](http://www.un.org/documents/ga/res/42/ares42-187.htm)

(2) United Nations (2005). 2005 World Summit Outcome. Accessed from: [www.who.int/hiv/universalaccess2010/worldsummit.pdf](http://www.who.int/hiv/universalaccess2010/worldsummit.pdf)

Figure 16 | Pillars of sustainable development



## Reconciling weightless economies and urban economics

The 'weightless economy', a term first used by former US Federal Reserve Chairman Alan Greenspan in 1996, describes an economy marked by a shift from traditional energy-intensive production using physical materials and human brawn, to the production of high-value-added products based on intellectual knowledge and innovation – products that are literally weightless. A prime example is business and professional services where outputs are intangible or in the form of ideas encapsulated in electronic documents, software or digital content.

Furthermore, not only are these activities weightless in themselves, they support new firm formation and stimulate innovation and productivity elsewhere in the economy, helping to make these products weigh less<sup>(3)</sup>. Borrowing from Alan Greenspan, examples of knowledge and innovation reducing the weight of other products include: small transistors replacing vacuum tubes in radios, fibre-optics replacing huge tonnages of copper wire, and advances in architectural and engineering design making it possible to construct buildings with much greater floor space but using significantly less physical material than the buildings that were built in the past<sup>(4)</sup>.

The weightless economy is characterised by an increasingly large service sector, the rise of intangible assets such as intellectual property, and lower transaction and transportation costs due to the use of information and communication technologies. Most economists agree that this weightless, or dematerialised economy, is not just physically lighter but also more efficient.

The sustainability advantages of a strong weightless economy are two-fold. Firstly, providing services and products virtually and reducing our dependence on

physical transportation to move products to market will lead to favourable environmental outcomes. Second, weightless economies can help increase New Zealand's competitive advantage within key global value chains, thus providing greater long-term economic benefits.

So, where are the spaces within which the weightless economy can most effectively advance? Given the advantages presented within agglomeration economies, is a big city a key place for weightless activities to take place?

Agglomeration theory suggests that the productivity advantages that can be achieved with increased urban scale or density might be particularly vital for weightless activities. It suggests that through input-output synergies, better labour market matching and knowledge spill-overs, increasing returns to scale can be achieved. For example, the business and professional service sector can benefit from knowledge sharing by locating professional services firms close to each other. Evidence suggests that even for the most technologically intensive sectors, proximity, and the possibilities afforded by face-to-face communications, cannot be substituted.

An emerging feature of agglomeration in large cities is the growth of functional specialisations. These refer to the concentration of activities, not in an individual industry or sector, but in particular activities that provide inputs to a range of industries and sectors. Weightless activities within business, financial and management services are notable examples.

## Towards a weightless Auckland regional economy?

Recent research suggests that agglomeration effects exist in Auckland, particularly in the CBD where there are much higher levels of productivity than in zones

(3) 'Best Practice in Sustainable Metropolitan Economic Development – Reflections from the West Midlands Experience'. Presentation given by Professor John Bryson (Birmingham University) on 9 May 2008, Auckland Regional Council Refresh Seminars.

(4) Remarks by Alan Greenspan on 'Technological advances and productivity', at the 80th Anniversary Awards Dinner of The Conference Board, October 16, 1996. Accessed from: [www.federalreserve.gov/boarddocs/speeches/1996/19961016.htm](http://www.federalreserve.gov/boarddocs/speeches/1996/19961016.htm)

# Sustainability and the weightless Auckland economy

with lower employment density<sup>(5)</sup>. Emerging evidence around the shifting composition of the regional economy – highlighting the growing creative and service sectors (which have significant intellectual inputs) – appears to support strong complementarities between weightless and agglomeration economies.

However, New Zealand's productivity growth in all service industries is low: at less than one per cent per annum over the 2000–2005 period, this ranks New Zealand 20th out of 28 OECD countries<sup>(6)</sup>. Our low ranking suggests that our weightless economy, based on high-value-added services, is still small, and that our services sector is currently predominately low-value-added services such as those in retail and hospitality. This is consistent with the recent findings of the New Zealand Institute that the weightless economy in New Zealand (and therefore Auckland), while growing, is small<sup>(7)</sup>.

## Possible avenues to grow the weightless economy in Auckland

Providing a strong digital backbone is fundamental for a prosperous weightless economy – particularly as improved broadband speeds, for instance, will improve connectivity between businesses domestically and with overseas markets. The Economist Intelligence Unit has

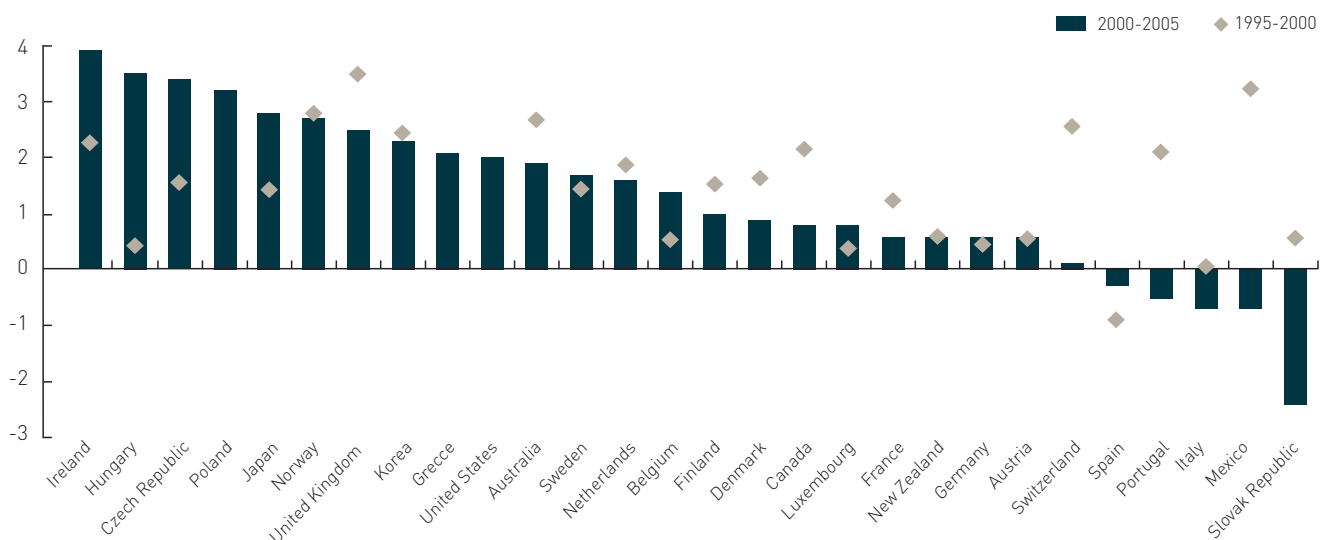
estimated that New Zealand could increase its GDP by \$13.1 billion by 2030 (approximately 10 per cent of current GDP) if it could move into the top quartile for broadband performance in the OECD by 2015<sup>(8)</sup>. At present, our broadband performance is ranked 20th in the OECD.

But more fundamentally, by definition, a weightless economy based on knowledge requires a highly skilled, productive and innovative workforce. This means that our education system needs to be fit for this purpose and be able to anticipate the skills that our future workforce will require. New Zealanders are known to be innovators, but as Professor John Bryson of Birmingham University pointed out at a recent seminar, expertise and innovation alone do not add value: it is the commercialisation of the expertise and innovation that is important.

The road to sustainability is currently not well lit. Concepts such as weightless economic activity and agglomeration effects might be helpful in illuminating the path. Given the high levels of investment that will be required to improve our national broadband performance and develop a world-class education and innovation system, it would seem sensible to concentrate New Zealand's investments in the city or cities that are most likely to provide the highest rates of return, rather than spreading them thinly across the country. Auckland has an obvious role to play.

**Figure 17** Productivity growth in services: Value added per person employed (annual percentage change)

Source: OECD Factbook 2008



(5) Ascari Partners Ltd (April 2007). Assessing Agglomeration Impacts in Auckland. Report to Ministry of Economic Development.

(6) OECD (2008). The OECD Factbook 2008. Accessed from: <http://lysander.sourceoecd.org/vl=3230592/cl=21/nw=1/rpsv/factbook/120303.htm>

(7) The New Zealand Institute (Sept 2007). Creating a Weightless Economy: Positioning New Zealand to Compete in the Global Economy. Accessed from: [www.nzinstitute.org/index.php/weightlesseconomy](http://www.nzinstitute.org/index.php/weightlesseconomy)

(8) IDC Market Research (2006). 'Economic Impact Report'. Cited in The Draft Digital Strategy 2.0, Ministry of Economic Development, April 2008

# Auckland's consumer demand for sustainability

Nick Jones – Nick Jones & Associates Ltd

Maintaining competitive advantage requires an understanding of consumers' needs and values. Consumers are constantly being influenced in both their personal and business lives by increasing coverage and awareness of societal, economic, environmental and cultural sustainability issues.

As greater awareness of these issues arises through the media and social networks, it appears that more and more consumers are taking care in what they purchase and who they purchase it from. Increasing numbers of people in New Zealand are buying from businesses that are supporting social or environmental causes.

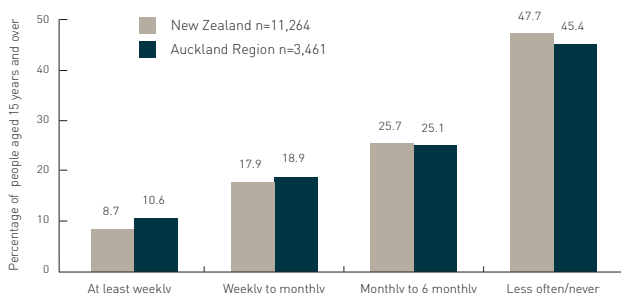
The 'Consumer who Cares' research, undertaken by Nick Jones and Associates Ltd, is based on 12,000 interviews and was conducted as part of the Nielsen Media Research Panorama service between January and December 2007. Fifty per cent of those surveyed agreed that when buying a product or service from a particular company, it is very important to them that the company shows a high level of social and/or environmental responsibility.

Seventeen per cent of people in the survey stated that they have 'purposefully avoided buying products or services from a company in the last month' because of a perceived lack of social or environmental responsibility. This creates opportunities as well as threats for businesses. The opportunities include tapping into the growing consumer market for socially and environmentally responsible products and services; the threats are consumers avoiding their products and services if businesses ignore these trends.

Consumer behaviour is increasingly driven by consideration of social and cultural values as well as environmental values. In fact, social values tend to score higher than environmental ones. Social values include benefits to health and well-being, social justice, fair trade, how a business relates to its staff and its community, and investments of time, expertise and money in community programmes.

**Figure 18** Frequency of purchase of products and services that support environmental charities and worthy causes

Source: Nielsen Media Research Panorama Jan-Dec 2007/Nick Jones Associates Ltd



The 'Consumer who Cares' research shows that Auckland consumers aged over 15 years are slightly above the national average in terms of stated purchasing patterns of products or services from companies that display social and/or environmental responsibility. This also includes supporting charities. For example, 11.9 per cent of surveyed Aucklanders stated they make socially responsible purchase decisions and 10.6 per cent environmentally responsible purchase decisions on a weekly basis, compared to 9.8 per cent and 8.7 per cent nationally. Consumers will also pay slightly more for these products or services, or they will avoid buying from specific companies because of what the companies stand for socially or environmentally, although the cost differential was not included in this survey.

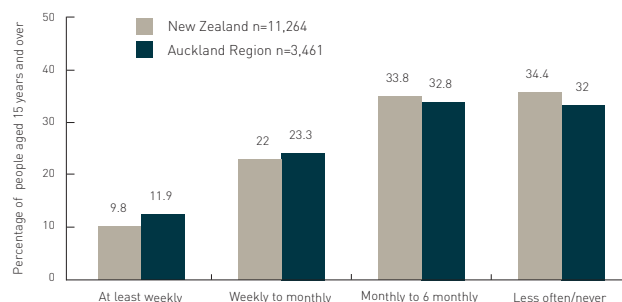
This suggests that Auckland businesses are operating in an environment where, when given a choice, these 'Consumers who Care' will shop based on their social and environmental needs and values even if it does cost them slightly more. This behaviour does vary according to number of factors: 'Consumers who Care' behaviour is more prevalent in the 20-49 age group, larger households and females.

It appears from the research that business has an opportunity to fill an information gap for these consumers. At a national level, 51 per cent of those surveyed agree they would like companies to tell them more about how they (the companies) are making a positive difference to society or the environment, so they can support these companies. This indicates a consumer demand for businesses to improve their communication on how they approach sustainability.

Businesses that have embraced sustainability have entered a new generation of innovation and product design. As more consumers try to make a difference through leveraging their spending power, these businesses will minimise their future risks when they focus on the values-based 'Consumer who Cares'.

**Figure 19** Frequency of purchase of products and services that support social charities and worthy causes

Source: Nielsen Media Research Panorama Jan-Dec 2007/Nick Jones Associates Ltd



# The emissions trading scheme

## Implications for Auckland

Peter Neilson - New Zealand Business Council for Sustainable Development



An emissions trading scheme is one way to force a change in approach to managing the environment. The cost of excess greenhouse gas emissions is what an economist calls an externality, a cost or benefit that is not being charged for. For the first time, however, an emissions trading scheme will impose a cost for using the atmosphere.

That will be good news for Auckland. The resulting emissions price on transport fuels will encourage people onto public transport, and a regional fuel tax will help fund new road, rail, ferry and bus services to reduce congestion. This will not only reduce emissions, but, as a consequence, the pollution contained in Auckland's air.

Expect emissions trading to be just one of a suite of measures which will use pricing to achieve changes in behaviour and improve the environment and quality of life in both the region and the country. Measures will eventually cost water, waste to landfill, and emissions to air other than greenhouse gases.

The same transport sources of greenhouse gases are also the main ones for the fine particle air pollution which Auckland health authorities cite as being responsible for 436 premature deaths a year – 58 per cent of them due to motor vehicle emissions. The region also suffers from the

world's fourth highest asthma rate, this condition afflicting up to 23 in every 100 adults and 25 in every 100 children<sup>(1)</sup>.

The eventual imposition of an emissions charge on fuel users will trigger significant changes in driver behaviour. In a ShapeNZ poll, over half of those who responded stated that by the time 91-octane petrol or its diesel equivalent reaches \$2.20 per litre, they will need to make a significant reduction in fuel use<sup>(2)</sup>.

The changes in behaviour induced by emissions pricing may also usher in opportunities for rejuvenated car pooling. Other incentives, especially at central government level, to encourage people out of 10–15 year-old fuel-inefficient, high-emission vehicles by paying them cash to scrap their vehicles and buy more fuel efficient, low emissions vehicles are also a possibility. Moves to improve air quality mean the region can continue to grow and live within its air-quality limits.

The prospects of not being able to safely open a childcare centre beside a motorway – or having to limit commercial activity - will hopefully disappear as emissions and air-quality pricing provide the incentive for firms to adopt best international standard lower emission practices and technology.

The price disincentive on electricity, fuel and other inputs, coming as a result of emissions charging through the trading scheme, might prompt households and major users to adopt more energy efficiency measures,

(1) The air quality figures have been taken from the Auckland Regional Council's website. See [www.arc.govt.nz/environment/air-quality.cfm](http://www.arc.govt.nz/environment/air-quality.cfm)

(2) The New Zealand Business Council for Sustainable Development undertakes polling on various topics. See [www.shapeNZ.org.nz](http://www.shapeNZ.org.nz)



thus lowering costs and carbon use. In some major US cities, the focus on emissions and reducing energy bills has produced major savings; for example, one city reduced its annual power bill by US\$800,000 simply by switching all its traffic lights to LED ones. The pertinent question relates to the cost-benefit analyses of 'going green': accurate costings of procurements required for sustainable practices require product life-cycle accounting rather than simply using day-one prices.

Until recently some elected local authority leaders may have been quick to scoff at climate change and attempts to develop sustainability policies. However, the vast majority of electors polled (between 78 and 82 per cent) are deeply concerned over climate change, want action now or urgently, and want business and others to help them solve the problem. It is easy to be distracted by three-year election cycles and loud headlines from those seeking special privilege as the prices of externalities are imposed.

The emissions trading scheme, and a host of other measures we take collectively and as individuals, can reduce emissions – and we hope by enough to keep the global temperature rise to between 1 to 2 degrees. Other measures include:

- A new levy on solid waste going to landfill to be implemented, and a \$90 million per-year fund to be developed to help drive innovation in waste disposal, recycling and 'cradle-to-cradle' product stewardship.

- Pricing on discharges to water, and new, easier ways to transfer existing water allocations so water available for commercial use, once human and environmental allocations are guaranteed, is not just technically assigned but actually used.
- Regional fuel taxes to fund more efficient roading and public transport projects, and so to also lower emissions.
- The rapid take-up of new policies and activities which will see the construction of green homes and office buildings, thus improving comfort and reducing ill-health.

What will this mean to business in the Auckland region?

- If businesses use large amounts of energy or fresh water, or produce significant volumes of organic or construction waste, it is wise to implement energy and fuel efficiency improvements to cut emissions. Redesigning processes to reduce water use or to recycle it into a useable product is also prudent.
- New businesses built around supplying, installing and maintaining low-carbon technologies will boom in the next 10 to 20 years.
- Sustainable business practices in Auckland will attract 'green dollar' investment; they will also provide the magnet to attract high income people from around the world who value a quality environment in the place they make home.

Emissions trading and its related measures will deliver immense opportunities for new jobs and a better quality of life.

# Sustainable businesses in Auckland

David Clendon - Sustainable Business Network



The sustainability word has moved, apparently very suddenly, from the 'fringe' to the mainstream of business awareness. In an article published earlier this year, an Auckland business leader confessed to being 'wary and weary' of the word. However, as the article unfolded, it was apparent that the weariness and cynicism was in fact related to 'greenwash', the practice of adding a decorative green pigment around the margins of a business or practice with very little in the way of actual changed behaviour or infrastructure.

There are numerous national and international examples that demonstrate the pitfalls for companies who resort to image management rather than making real efforts to embed sustainability into their brand. It is equally clear that there are financial, reputational and, of course, environmental benefits generated when companies do address the substance rather than the form.

This can be demonstrated with three examples of companies in the Auckland region who won categories in the Sustainable Business Network Northern Region Awards in 2007. While on the surface they are very dissimilar, these three companies have in common a commitment to finding the most sustainable options, both in the services they provide and in the management and administrative structure that underpins their core activities.

Urgent Couriers is a privately owned 'on demand' courier service, established in 1989. The managing director rather wryly noted in the company's sustainability report in 2001 that 'operating in an industry that burns fossil fuels as the foundation of its operation provides a significant challenge to an organisation contemplating sustainability'. Urgent's response to that challenge over recent years will certainly be paying dividends as fuel prices continue to climb.

The company has increased both the number of cycle couriers in its fleet and the area in which they operate. Increasing the number of low-emission vehicles in the fleet, and a strategy of favouring the smallest engine size fit for purpose, has also enabled the company to grow the business by 25 per cent while increasing emissions by only 4 per cent. Furthermore, by purchasing forest regeneration carbon credits from Landcare's CarboNZero programme to account for all unavoidable emissions, Urgent is now New Zealand's only certified carbon-neutral courier service.

In addition to these environmental initiatives, Urgent has also undertaken a responsible approach to pricing in order to maintain both the company's financial viability and the viability of its contracted couriers. Investing in training and supporting people is understood to be a means of ensuring good customer service and improving retention rates – the value of which will be obvious to anyone who knows the cost of recruiting and inducting new staff.

Sinclair Knight Merz is an engineering sciences and project delivery company, with its Auckland operations based in Newmarket. It is part of a larger global concern, in which each operation is wholly owned by employees. This business model has proven to encourage innovation, and sustainability is a key aspect of this.

The company's CEO launched a sustainability strategy in July 2007 that included a project vision and guiding objectives. Unsurprisingly for a company whose core business is project management, the company took a strategic, team-based approach to rolling out its sustainability initiatives. The project was closely aligned with the company's value base, and considerable effort was made to encourage and facilitate staff 'buy in'.

The company considered the sustainability challenges, opportunities and risks related both to the internal conduct of its business, and externally through the projects undertaken for its clients. The company has on occasion made the hard call to reject contract opportunities that did not appear to 'fit' with its approach and values, and individual staff may raise objections to accepting specific contracts.

The company has sought ways to 'green' its offices, business travel, procurement, and reporting of policies and practices. The location of its premises is, in part, driven by proximity to public transport, and a travel plan is in place for the Auckland office. The vehicle fleet has been evaluated and less-fuel-efficient vehicles are being phased out. A series of energy and waste minimisation initiatives are in place, and targets are being set to reduce air travel in favour of alternatives such as video- or audio-conferencing.

State of Grace is a Waitakere-based funeral services company in only its second year of business. As a 'start up' company it took the opportunity to embed sustainability into every aspect of the business.

The business grew from the principals' personal experiences with the funeral industry, and from a desire to offer an alternative that was a socially and environmentally sustainable service to the community, yet one that also returned a reasonable profit.

The company has actively lobbied for a natural burial ground, and for the right to use cardboard caskets for cremation which they maintain would markedly reduce emissions compared to a conventional wooden casket.

The company offers caskets made from solid sustainable-timber options, or else woven from willow grown in New Zealand. Linings are made from unbleached calico and biodegradable cornstarch and plastic, while mattresses are made from recycled wool batting. Casket handles are made from rope or recycled wood, rather than silver-painted plastic.

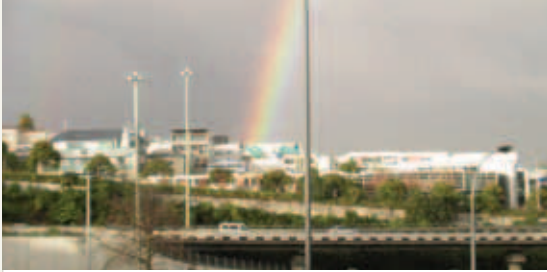
Buying New Zealand-made product reflects the company's commitment to supporting local business and reducing their carbon footprint, and while this often incurs a price premium, this is something they (and their customers) see as worthwhile.

The service encourages and supports customers to care for their loved ones at home, in a safe and familiar environment. (This was, and indeed still is, traditional practice for many cultures despite the more recent tendency to rely wholly on professional services and facilities).

These few examples all lend weight to claims that any business can (and should) seek to put itself on the most sustainable footing possible. One certainty in business is that things will change. The more resilience and self-sufficiency we can build into individual businesses, and the business sector generally, the better equipped we will be to survive challenges and maximise the opportunities that lie ahead.

# Green jobs in Auckland

## Urbane Employment



One of the goals within the Auckland Sustainability Framework<sup>(1)</sup> is to 'create prosperity through innovation'. This requires a shift in collective thinking, ensuring that sustainability is used as a point of difference to capitalise on global market opportunities.

Many of those in Auckland's workforce embrace a challenge of sustainability on a daily basis: getting to work; striking a work-lifestyle balance; aligning routines in accordance with sustainability beliefs; minimising environmental impact; and upholding cultural institutions. Individuals are innovating, and change is occurring – within the private sphere, within the workplace and how business is conducted. Increasingly, there is evidence of this changing behaviour at the industry level – businesses, like individuals, are rethinking how the current economy and society operate within a dynamic environmental and cultural setting. But how should the environmental impact of an individual job be evaluated? In the early years of environmental debate, there was a trade-off identified between 'jobs versus the environment'. This trade-off has been investigated, showing that the converse is true<sup>(2)</sup>. Symbiosis between society, the environment, culture and the economy sustains a workforce, and attention is now focused on what has been termed 'green jobs'.

## Classifying green jobs

Internationally, there is an evolving dialogue on green jobs. They have been defined as 'positions in agriculture, manufacturing, research and development, administrative, and service activities aimed at alleviating the myriad of environmental threats faced by humanity'<sup>(3)</sup>. In their simplest form, green jobs are those that reduce the negative impact made on the environment. They include jobs that protect and restore ecosystems and biodiversity; reduce energy, materials and water consumption through efficiency measures; decarbonise the economy and minimise forms of waste and pollution; are knowledge intensive and influence sustainable outcomes; and are associated with services which facilitate environmental improvement. Classifying green jobs can be a subjective process, as it is very much an evolving area of interest. For example, jobs associated with bio-fuel generation might have been considered green a number of years ago, but due to displacement effects of growing certain fuel crops – the fuel versus food debate – the (first generation) bio-fuel industry is not considered sustainable.

It is also important to consider who is doing the classifying. On an individual level the self-assessment of the worker or employee's behaviour can reveal 'greening' of the workplace: employees may consider themselves as environmentally benign because of the way they travel to work, or because they practice recycling and energy conserving.

(1) The Auckland Sustainability Framework is a long-term strategy, developed by collaboration between Auckland region's councils and central government agencies. It focuses on developing a resilient region based on strong communities and robust ecological systems, with an element of flexibility in the economy, infrastructure and buildings. More details are available at [www.sustainingauckland.org.nz/](http://www.sustainingauckland.org.nz/)

(2) Rennings, K., A. Ziegler and T. Zwick (2001). Employment changes in environmentally innovative firms. ZEW Discussion Paper No. 01-46. Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=329120](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=329120) Kammen, D. and K. Kapadia and M. Fripp (2004). Putting Renewables to Work: How many jobs can the clean energy industry generate? University of California, Berkeley: Goldman School of Public Policy.

(3) UNEP (2008). Green Jobs: Towards sustainable work in a low-carbon world – Preliminary Report. December 21st 2007. A joint UNEP, ILO, ITUC Green Jobs Initiative. Available at [www.unep.org/civil\\_society/PDF\\_docs/Green-Jobs-Preliminary-Report-18-01-08.pdf](http://www.unep.org/civil_society/PDF_docs/Green-Jobs-Preliminary-Report-18-01-08.pdf)

On a management and corporate level, behaviour encouraging and allowing for sustainability principles can be quantified. Examples include flexibility in working hours and being able to work from home. On a sector level there can be strategic shifts to green technologies such as eco-innovation or a carbon-based economy switching to a renewable energy base. Integration of behaviour from the individual to the collective or industry level is a major challenge of sustainability, i.e. getting the institutions aligned and integrated. Within the context of the Auckland region, there are certain environmental improvements that can be made, and therein lies the potential for short-term green jobs in the region.

## The potential for green jobs in Auckland

Transport accounts for 78 per cent of the total mass of ambient pollutants (excluding carbon dioxide) in the Auckland region over an annual period, while 11 per cent is attributed to industry and 11 per cent to domestic sources of air pollution<sup>(4)</sup>. Jobs created while reducing these pollutants could be considered green. These include jobs associated with switching from the high-polluting diesel fleet of vehicles to cleaner, smaller more efficient vehicles, or jobs associated with reducing vehicle kilometres travelled and increasing public transport patronage. Inefficient heating appliances, such as domestic fires that contribute a high rate of pollutants in winter, are a component of Auckland's unsustainable housing stock. Energy use is not optimised, and there are opportunities for green jobs in the construction sector – retrofitting houses with insulation, for example. The Intergovernmental Panel on Climate Change<sup>(5)</sup> identifies buildings as having the single largest potential of any sector for the reduction of greenhouse gases, with a large capacity to reduce emissions. There is also potential in services such as architecture, engineering and design.

The Energy Efficiency and Conservation Authority identified the potential within the Auckland region for an increase in the use of alternative energy technologies; this would also create green jobs<sup>(6)</sup>.

Considerable advancements in waste management have taken place in recent years in the Auckland region, with the proliferation and expansion of domestic recycling schemes and the use of technology to convert gas from organic waste to electricity. There is scope to reduce

the amount of waste going into landfill, and potential for resource recovery of certain products. Auckland has national significance (given the levels of technology in recycling plants) in the recycling of paper, plastics and glass. There is further scope for the recovery of tyres, organic waste, used oil and demolition waste. It is envisaged that between 200 and 300 further jobs could be created if a resource recovery network was established for the Auckland region<sup>(7)</sup>.

These examples illustrate the potential for short-term green jobs, given the current environmental problems faced by the region. Further drivers of green jobs come from technological advancements and eco-innovations that mitigate future environmental impacts. Countries such as Germany, the USA and Japan have invested heavily in eco-innovations, while the EU is focusing largely on renewable energy sources<sup>(8)</sup>. These can be described as product- and market-led innovations, rather than green jobs created as a residual to environmental management and ecosystem conservation. Denmark and Sweden are forerunners in developing a unique 'green jobs strategy', with specific job-creating objectives in green technology<sup>(9)</sup>.

The Auckland Sustainability Framework implicitly envisages an eventual shift in the regional economy. A sustainable economy would avoid future environmental degradation and, in such a scenario, most jobs could be considered green. At present an environmental or green sector does not exist as a discrete entity. Within the Auckland region there is no formal industry clustering around eco-innovation and environmental service provision. Rather there are individuals and businesses becoming more sustainable, innovating in the face of scarce energy and environmental resources. Traditionally economics focused on productivity, using labour as a proxy indicator. However, energy and materials productivity are gaining importance, with the concepts of doing more with less materials and more with less environmental disturbance. Moving towards employment in green jobs for the Auckland region entails a radical approach to the labour market, but can be considered urbane employment.

For further information on green jobs in Auckland, contact **Catherine Murray** at the Auckland Regional Council on (09) 366 2000.

(4) See [www.arc.govt.nz/environment/air-quality/air-quality.cfm](http://www.arc.govt.nz/environment/air-quality/air-quality.cfm)

(5) [www.ipcc.ch/ipccreports/ar4-syr.htm](http://www.ipcc.ch/ipccreports/ar4-syr.htm)

(6) EECA (2007). Renewable Energy Assessment Auckland Region. Final Report, 16th March 2007. See [www.eeca.govt.nz/eeca-library/renewable-energy/report/regional-renewable-energy-assessment-auckland-07.pdf](http://www.eeca.govt.nz/eeca-library/renewable-energy/report/regional-renewable-energy-assessment-auckland-07.pdf)

(7) Envision (2004). Reclaiming Auckland's Resources. See [www.envision-nz.com/](http://www.envision-nz.com/) See also Covec (2007). Recycling: Cost Benefit Analysis. Report prepared for the Ministry for the Environment, April 2007.

(8) ECOTEC (2002). Analysis of the EU Eco-Industries, their employment and export potential. A final report to DG Environment. Available at [http://ec.europa.eu/environment/etap/pdfs/main\\_report.pdf](http://ec.europa.eu/environment/etap/pdfs/main_report.pdf)

(9) See Optimate (2004). Green Jobs Strategy Review. This identifies strategies adopted by different OECD governments for job creation in sustainable industries. Available at: [www.scotland.gov.uk/Resource/Doc/17002/0029575.pdf](http://www.scotland.gov.uk/Resource/Doc/17002/0029575.pdf)

# A genuine progress indicator

Garry McDonald – Market Economics and New Zealand Centre for Ecological Economics

Vicky Forgie – New Zealand Centre for Ecological Economics



The Genuine Progress Indicator (GPI) is a concept becoming increasingly popular worldwide as a measure of human welfare. Over the last decade the GPI has been promoted internationally as an alternative to the Gross Domestic Product (GDP) measure. Proponents of the GPI argue that GDP is inadequate as an authoritative gauge or yardstick of a nation's welfare. In this article we consider why alternatives to GDP are required, provide a brief overview of the GPI, discuss the imminent release of a New Zealand GPI by the New Zealand Centre for Ecological Economics (NZCEE), and discuss initiatives underway to generate regional GPIs.

## Why consider alternatives to GDP?

Since the release of the 1953 System of National Accounts, substantial attention has been devoted to Gross Domestic Product (GDP) as an indicator of economic welfare<sup>(1)</sup>. As noted in a critique of modern economics by Daly and Cobb, GDP has become 'the standard measure of economic success accepted by economists, politicians, financiers, humanitarians, and the general public. It is enormously important<sup>(2)</sup>.' However, interestingly, GDP was never intended to be the universal measure of welfare that it has become. Simon Kuznets, the inventor of GDP, is himself reported as saying: 'The welfare of a nation can scarcely be inferred from a measurement of national income as defined [by the GDP] ... Goals for more growth should specify of what, and for what<sup>(3)</sup>.'

The standard definition for GDP is the total market value of all final goods and services produced within a nation. Generally speaking, economic and GDP growth is projected as positive, with little consideration given to the way in which this growth is achieved. In regards to natural resources, the consequences of this are aptly described by Repetto: 'A country could exhaust its mineral resources, cut down its forests, erode its soils, pollute its aquifers, and hunt its wildlife and fisheries to extinction, but measured income [GDP] would rise steadily as these assets disappeared ... the result could be illusory gains in income and permanent losses in wealth'. It is also obvious that many activities creating a positive contribution towards GDP are associated with negative influences on human health and social well-being<sup>(4)</sup>. Growth in output from heavy industry, for example, may increase economic outputs but reduce air quality and thus public health. Increases in crime will also increase GDP through greater expenditure on policing and prisons. Furthermore, important social contributions such as unpaid household, involuntary and community work are not enumerated.

## The genuine progress indicator

The GPI was first developed in 1995 by the non-profit organisation Redefining Progress. Like its forerunner the Index of Sustainable Economic Welfare (ISEW), the GPI is promoted on the grounds that it attempts to undertake a more holistic measure of a nation's welfare. It incorporates aspects of the non-market economy, separating welfare-enhancing benefits from welfare-detracting costs, correcting for the unequal distribution of income, and distinguishing between sustainable and unsustainable forms of consumption<sup>(5)</sup>. Among the nations for which a GPI has been developed are the US, UK, Germany, Australia, China and India.

(1) Welfare and well-being are regarded as interchangeable terms when used in the GPI.

(2) Daly, H. and J. Cobb. (1989). *For the Common Good*, page 4. Boston: Beacon Press.

(3) Kuznets, S. (1934). *National Income, 1929-1932*. Senate document no. 124, 73d Congress, 2nd session, 1934.

(4) Repetto, R., (1988). *Resources and economic accounts*, page 2. Paris: OECD Environment Committee Group on the State of the Environment.

(5) Talberth, J., C. Cobb and N. Slattery. (2006). *The Genuine Progress Indicator 2006 - A Tool for Sustainable Development*. San Francisco: Redefining Progress.

However, the GPI is not without its difficulties. As yet no handbook, as exists for GDP under the System of National Accounts, has been produced to standardise the calculation process. This makes comparison of GPI calculations between different studies difficult, and has led to claims of arbitrariness in regards to the aspects of welfare chosen for inclusion in a particular study. At a conceptual level, there is also a concern that the practice of summing or netting the different components of the GPI implies that human-built capital is an available substitute for natural capital. Moreover, the GPI relies on monetary valuations of resources that traditionally fall outside of the paid market economy, and as such is subject to well known criticisms in regards to valuation techniques. Even so, after taking into account all these difficulties, the calculation of a GPI is a valuable exercise, bringing us closer to a realistic picture of how we are actually progressing.

### The development of a New Zealand GPI

In July 2008 the first GPI study for New Zealand, developed collaboratively by the New Zealand Centre for Ecological Economics (NZCEE) and Market Economics Ltd, is due for release. This study will track New Zealand's GPI over a 35-year period, from 1970 to 2005.

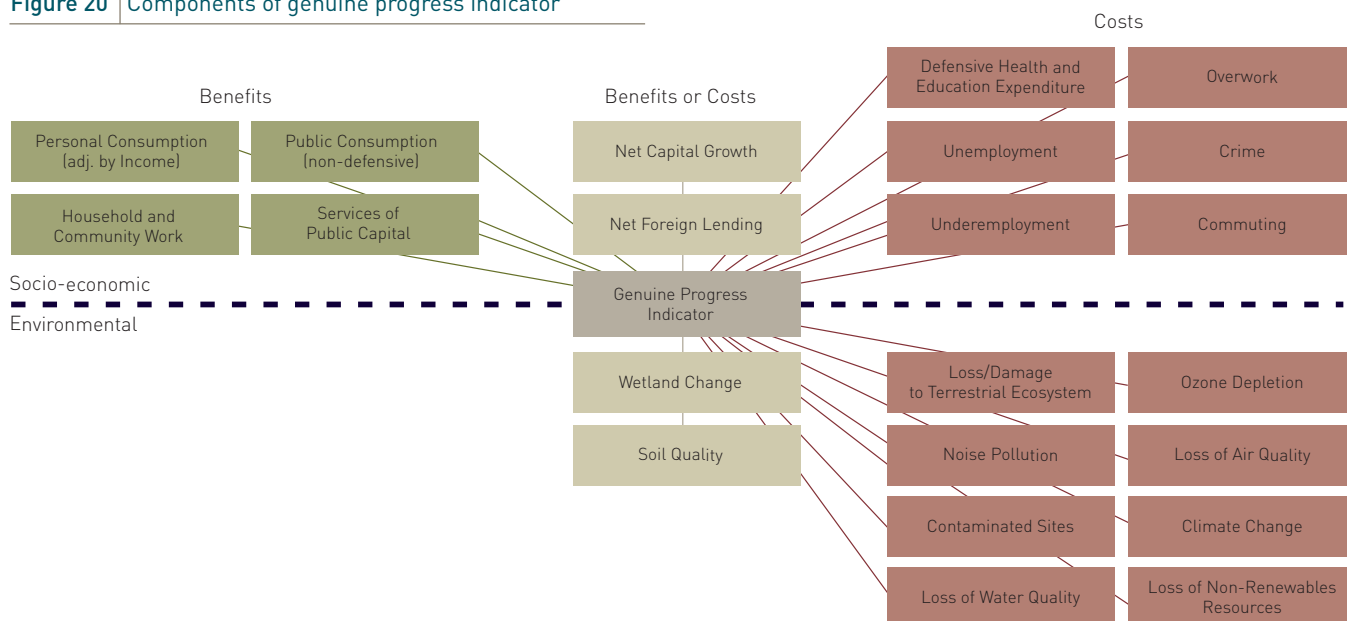
Like a number of other GPI studies, the computation of New Zealand's GPI begins with estimates of total personal consumption expenditures for each year of the study; these are then weighted by an index of income distribution to account for the social costs of inequality, and the diminishing returns to income received by the

wealthy. A total of twenty-one additional socio-economic and environmental components of welfare are then taken into account, with every component representing either an addition or subtraction to the base value for each year (see Figure 20). The majority of these components, such as ozone depletion and the costs of commuting and crime, are considered negative influences on welfare and therefore represent subtractions. On the positive side, the valuations of public consumption, unpaid household and community work, and services of public capital represent additions. Four of the categories, including net capital growth and changes in wetlands, are valued as either benefits or costs (additions or subtractions to the GPI), depending on the year of the study.

### The development of a regional GPI

With funding provided by the Foundation of Research Science and Technology, NZCEE and Market Economics Ltd, in conjunction with the Auckland Regional Council, now plan to develop a GPI specific to the Auckland region. The approach that will be utilised will be similar to that employed in the New Zealand study, but will involve the development of economic and social accounts specific to the circumstances of the Auckland region. It is intended that this study will be completed by June 2009, and will form part of a wider initiative to formulate regional level GPIs within New Zealand. The purpose underlying this initiative is, of course, to help provide regional councils, to whom the responsibility of promoting their communities well-being is charged, with vital information for holistic and integrated policy making.

**Figure 20** | Components of genuine progress indicator



# Instituting sustainability

## One Plan for the Auckland Region

The One Plan for the Auckland region (One Plan) emerged from two different but ultimately interdependent imperatives – the need to deliver better on current regional priorities and the need to institute the principles and spirit of sustainability into the region's decision-making process.

The necessity to build a region capable of weathering the effects of climate change and other environmental and socio-economic challenges is a key feature of the Auckland Sustainability Framework (ASF). Endorsed by all the region's governing bodies, the ASF provides a shared commitment to sustainable development for the Auckland region over the long term.

Improving Auckland's delivery of major regional infrastructure, such as public transport, roading and broadband, is a major theme in the Metro Action Plan – a plan developed in 2006 to improve the region's economy. The Strengthening Auckland's Regional Governance project, finalised shortly after, proposed a single plan to address both short- and longer-term needs. The 'One Plan' was to focus on a prioritised set of regionally significant programmes of action, yet be able to encompass the vision of the ASF and current regional strategies.

Work on One Plan began in late 2007. A new forum, the Regional Sustainable Development Forum (RSDF), was established to bring central government together with mana whenua, local and regional government to develop and deliver the plan.

The draft first version of One Plan is scheduled for approval by the RSDF in mid-2008. This One Plan is tailored to achieve some immediate improvements while the Royal Commission of Inquiry into Auckland Regional Governance conducts its review. Although the Royal Commission is an independent process, the work and experience gained in the production of One Plan will inform the findings of the Commission (scheduled for release in December 2008). The Royal Commission's findings will in turn influence the future of One Plan through the recommendations it makes to central government.

One Plan is proposed to contain three key features. The first feature is the alignment of an integration of seven programs, each build around a major in initiative. The seven programmes are:

- Improving Public Transport – a programme built around the electrification of the Auckland region's rail network.

- Completing the Network – a programme built around the construction of the Western Ring Route motorway network.
- Digital Auckland Region – a programme built around public and private investment in broadband.
- Destination Auckland Region – a programme built around regional investment and development related to the Rugby World Cup 2011.
- CBD and Waterfront – a programme built around developing the Auckland region's centre.
- Building Communities – a programme built around strengthening local Auckland communities, with a focus on Tamaki.
- Developing a Skilled Labour Force – a programme built around developing and up-skilling Auckland region's labour force.

The second feature proposed is an infrastructure plan. Ultimately, the infrastructure plan will integrate and prioritise public investment in the region and incorporate sustainability into decision making. However, the first version of One Plan will likely deliver an inventory of regional priorities for transport, water and energy infrastructure.

The third feature of the One Plan is the identification of a number of issues critical to the future success of the Auckland region. These priority issues are:

- Social Development
- Maori Aspirations
- Open Space
- Cultural Heritage
- Water Infrastructure
- Energy and Climate Change, and
- Growth Strategy Implementation.

However, as of mid-2008, these issues have not yet been sufficiently developed to be included in One Plan version 1. The intention is to address these issues in One Plan, either by building them into in the current One Plan programmes, and/or by including them in future Infrastructure Plans, or by developing new One Plan programmes for One Plan version 2, due in June 2009.

For more information on the Auckland Sustainability Framework, the Regional Sustainable Development Forum or One Plan for the Auckland Region, please contact **Hamish Glenn** at the Auckland Regional Council on 366-2000, or visit the One Plan website at [www.aucklandoneplan.org.nz](http://www.aucklandoneplan.org.nz).

# Review of prospects over the next year

New Zealand Institute of Economic Research

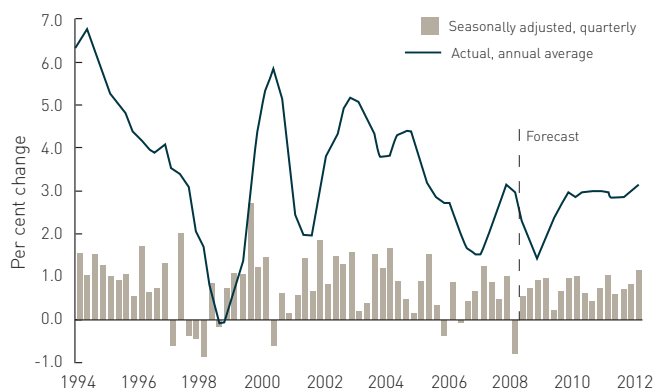


## National outlook

New Zealand's real economic growth is forecast to be 1.9 per cent in the March 2009 year. This is down from 2.9 per cent estimated for the year to March 2008, and well below the five-year average of 3.4 per cent. The low point in the cycle will be in the December 2008 year when annual average growth will be just 1.4 per cent.

**Figure 21** Economic growth

Source: Statistics New Zealand, NZIER quarterly predictions, June 2008



The sharp contraction in growth in the current year (to March 2009) will be driven by a decline in the growth of real private consumption, which will be static this year after growing by 3.7 per cent in the year to March 2008.

As private consumption expenditure makes up approximately 60 per cent of GDP by value, zero growth in this component of national expenditure will contribute significantly to the low overall level of economic growth this year.

The combined impacts of high interest rates, and high fuel and food prices, have been squeezing household budgets in recent months. As happened in 2006, the increase in these costs (which have relatively

inelastic demand) has squeezed the rest of consumers' expenditure baskets.

Economic growth will recover reasonably quickly after the March 2009 year to reach 2.8 per cent by the March 2010 year, and 2.9 per cent and 3.1 per cent, respectively, in the following two years.

There has been increasing pressure on the Reserve Bank to start easing monetary policy with a clear slow-down in economic activity underway.

However, the Bank's policy focus is to control inflation, and in the year to March 2008, the CPI rose 3.4 per cent – well outside the Bank's target band. Inflationary pressures remain pronounced. Indicators of inflationary risks include:

- Rising intentions to increase prices and high capacity utilisation statistics in NZIER's March 2008 Quarterly Survey of Business Opinion.
- Wages growth – the Labour Cost Index (LCI) rose 3.4 per cent in salary and wage rates (including overtime) in the year to the March 2008 quarter; this is the largest annual increase since the series began in the December 1992 quarter.
- The stimulus to consumption from the Government's announced tax-cut package in this year's Budget.
- World oil, food and other commodity prices which continue at high levels.
- Loose monetary conditions in the United States, and to some degree in the United Kingdom, which will lead to a more inflationary world over the next twelve months.
- The weakening of the New Zealand dollar, especially against the Australian dollar, which will put upward pressure on prices of tradable goods and services. Any easing in monetary policy would lead to the New Zealand dollar weakening further and exacerbating this inflationary stimulus.

In view of the Reserve Bank needing to balance these countervailing pressures, it is most likely to be the final quarter of 2008 before it will cut the Official Cash Rate. However, further increases before the next downward move are unlikely.

# Review of prospects over the next year

Other key trends include:

- Residential investment is on a downward track, and will decline modestly over the next two years, to March 2010. Even so, the forecast decline is mild and house construction will still be at relatively high levels compared to the 1990s.
- After a decline in the March 2007 year, non-residential investment is estimated to have recovered in the year to March 2008. There will be another small rise in the March 2009 year, to be followed by stronger growth in the three subsequent years.
- The world economy still seems poised for continuing growth. Monetary loosening by the Federal Reserve Bank means that the downturn in economic activity in the US will be moderate, and this is not expected to lead to material declines in growth in the rest of the world. China, in particular, is forecast to continue growing strongly.
- The international situation will mean that exports will continue growing respectably at over 3 per cent (in real terms) for the next 3–4 years. Recovery of farm output from the recent summer drought will be a significant positive influence.
- Dairy prices have exhibited spectacular growth during 2007, with Fonterra increasing the dairy payout from \$4.46 per kg of milk-solids in 2006/07 to \$7.90 for the season that has just been completed. It has announced an opening forecast of \$7.00 for the 2008/09 season, indicating continuing strong global demand.

## Auckland's prospects

What does the national forecast imply for Auckland in the next year, to March 2009?

Given Auckland's share of the national economy (33 per cent), and its integration with other regional economies, it is to be expected that the region will follow national trends reasonably closely. Historically, it has grown more rapidly, albeit exhibiting greater variability from year to year. So the region will not be immune to the national slow-down.

The key factor that will shape the impact of the national slow-down is the static outlook for private consumption. Auckland-based businesses will be disproportionately affected, as manufacturing, distribution and service provision for the domestic economy is largely based in Auckland.

Nationally, part of this downturn will be offset by growth in agricultural exports. However, the immediate effect of this will be higher incomes in non-urban regions. The Auckland region will not directly benefit from this, although it will still secure some benefit from the flow-on of other regions' demand.

Other important factors include:

- The downturn in migration, which is forecast to become

zero or negative in the March 2009 year; this will dampen consumption and housing demand in Auckland.

However, the key driver of this trend is increased outward migration of New Zealand citizens (especially to Australia), rather than a pronounced fall in immigration. Departing Kiwis tend to be drawn from across New Zealand, whereas the majority of new arrivals settle in Auckland; so the effect will be more muted than might first appear.

- Many of the region's manufacturing companies will face continued pressure from the high value of the dollar against the US dollar, as well as other ongoing cost pressures. Furthermore, these companies will not have the advantage of the high commodity prices of some primary products that are mitigating the value of the currency for manufacturing exporters in provincial centres. Those exporting to or competing with imports from across the Tasman will have some relief from the weakening of our currency against the Australian dollar.
- Infrastructural investment in the region will support economic activity, with continuing expansion of the region's road construction programme, and other major capital expenditures such as the upgrade of Eden Park and the expansion of Auckland International Airport.

On balance we forecast that Auckland's GDP will grow at 2.3 per cent in the year to March 2009, above the national rate of 1.9 per cent. The subsequent lift in economic activity in the March 2010 year will be stronger in Auckland, at 3.8 per cent compared with a 2.8 per cent forecast for New Zealand.

**Figure 22** Summary of Auckland region economic forecasts

Source: Statistics New Zealand and NZIER forecasts

	Actual		Forecast	
	2007	2008	2009	2010
Real GDP growth (aacp)	2.7	3.9	2.3	3.8
Unemployment rate (%)	3.9	3.8	3.8	4.0
CPI inflation (%)	2.2	3.3	3.1	2.9

Notes: aacp = annual average per cent change

GDP data for 2007 and 2008 are NZIER estimates

Trends in unemployment for Auckland closely follow the national pattern, with the unemployment rate slightly above that across New Zealand (+0.2 per cent) in the last two years.

The slow-down in economic activity will lead to higher unemployment nationally and in Auckland. However, the rise will not be substantial – demand for labour will still be strong, and the higher unemployment rate will still be at low levels compared with our experience over the last two decades.



## Auckland Regional Council's environment awards

### Sustainable Environmental Award Winners 2007

The ARC Sustainable Environment Awards celebrate those individuals, groups, schools and business in our community who care for our environment and heritage and who work towards a sustainable Auckland region.

#### Individual category

##### Winner/Supreme Winner

Jack Harper - Catalyst for Environment Enhancement on the Awhitu Peninsula

##### Highly Commended

Daoud Kadhim - Arabic Waste Minimisation Programme

#### Environmental education category

##### Joint Winner

Lois Williams, Papakura Normal School - Environmental Project

##### Joint Winner

Nicki Elmore, Meadowbank School - Education for Sustainability

##### Highly Commended

Lauren Mcleod, Beachlands School – Kaiawa Gardens and Wormfarm

#### Youth category

##### Winner

Churchill Park School- Zero Waste Project

##### Highly Commended

Henderson Valley School - Stream Team

#### Sustainable urban communities category

##### Winner

Friends of Oakley Creek, Te Auaunga - Restored and Protected as a natural eco system

##### Highly Commended

Waitakere Ranges Protection Society - Protecting Waitakere Ranges

##### Highly Commended

Project Twin Streams - 5 Community Contract Organisations

#### Sustainable rural communities category

##### Winner

Rosemary and John Cotman - Kawakawa Bay Weka-Watch

##### Highly Commended

Great Barrier Island Charitable Island Trust - Rat and feral cat eradication Project

#### Sustainable business category

##### Winner

Higgins Contractors - Auckland Asphalt Plant

##### Highly Commended

Three Kings Quarry - Winstone Aggregates

##### Highly Commended

Smales Farm Technology Office Park

#### Sustainable public sector category

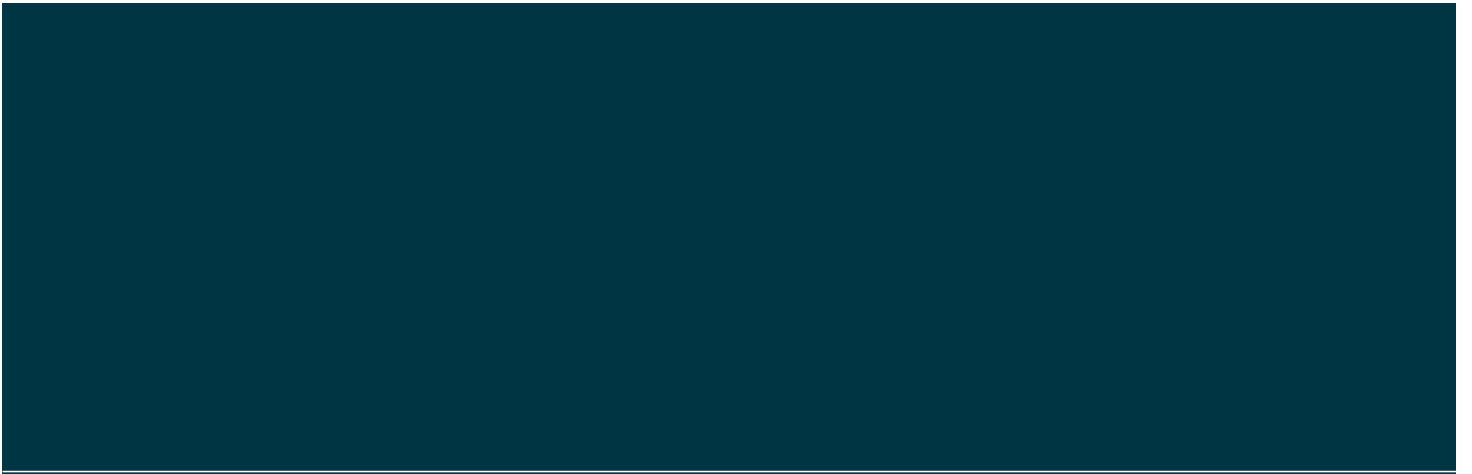
##### Winner

Auckland City Environment and Utility Management - Waikarua Wetland Restoration

##### Highly Commended

HNZC - Northcote Community Renewal: Demonstration Community Garden

For more information these individual projects and what they achieved, visit the funding and awards section on our website: [www.arc.govt.nz/environment/](http://www.arc.govt.nz/environment/)



If you require further information or extra copies of this report please contact Catherine Murray on (+64 9) 366 2000 ext. 8778 or [catherine.murray@arc.govt.nz](mailto:catherine.murray@arc.govt.nz)

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