



THINKING  
**BIG**

# Australia 2020 Summit

## Future Directions For The Australian Economy

April 2008

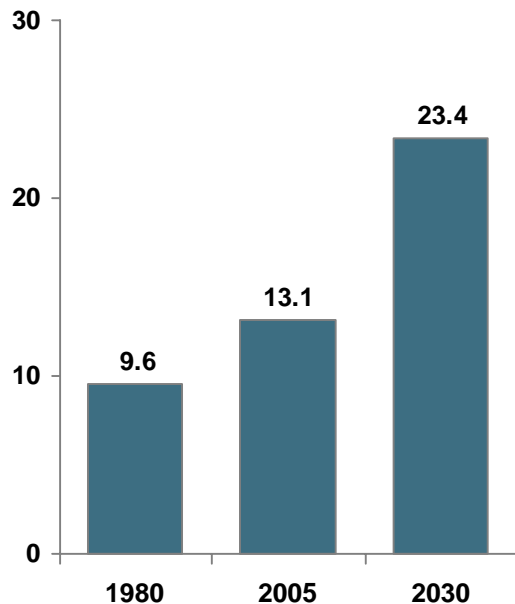
**These background materials aim to tell an evidence-based story about how Australia is faring. They are not intended to be definitive or comprehensive, but were put together to stimulate discussion on the main challenges and opportunities facing the country and the choices to be made in addressing them. They do not represent government policy.**

**The materials end with a set of questions. We hope that these, along with many other questions, will be the subject of conversation both prior to and during the Summit.**

# The Australian economy faces a period of significant change both domestically and internationally

## Demographic transition

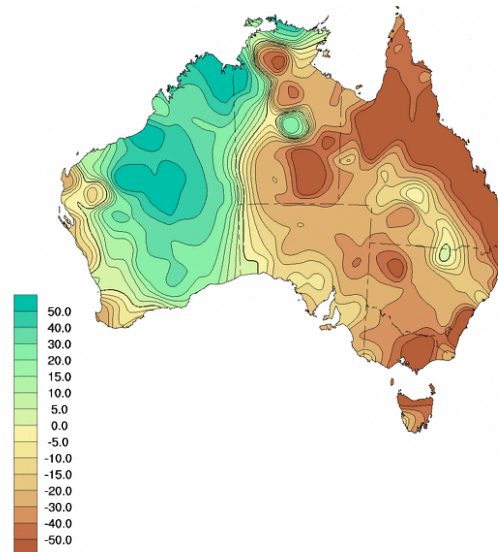
Proportion of population aged 65+ (%)



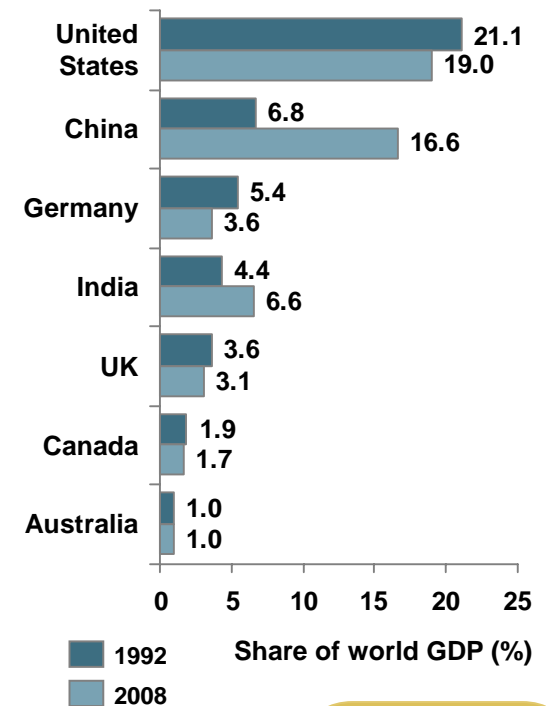
For more on Australia's demographic transformation and climate change, see *Population, Sustainability...*

## Climate change

Trend in annual total rainfall, 1970-2007 (mm/10yrs)



## Evolution of the global economic landscape

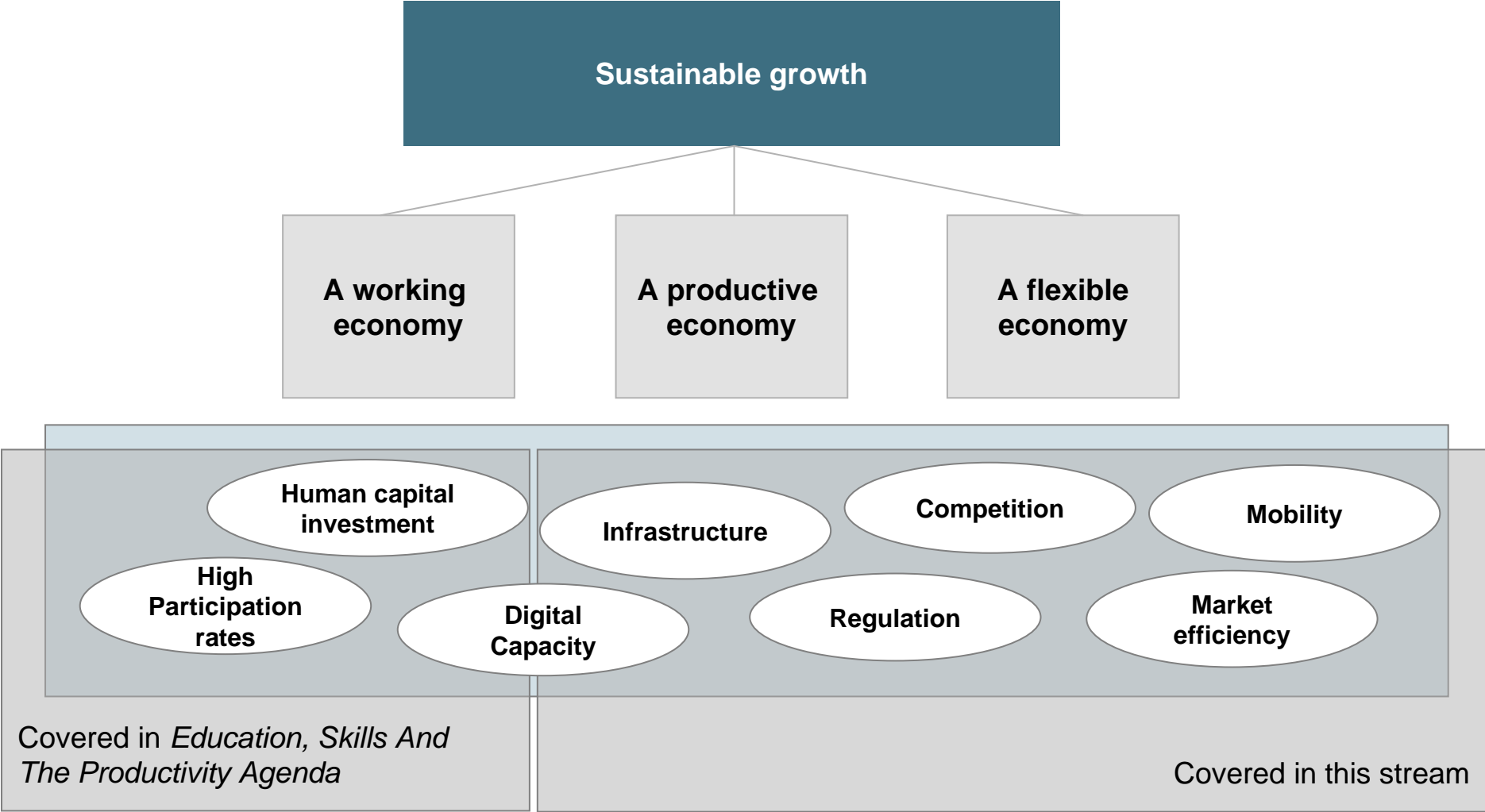


For more on the changing economic landscape, see *Australia's Future in the World* (p 1-3, 7)

**The Australian economy will need to adapt to meet coming challenges while grasping future opportunities**

Source: ABS 3222.0, *Population projections, Australia, 2004-2101* (2006); ABS 3201.0, *Population by age and sex, Australian states and territories* (2006); Australian Bureau of Meteorology (2008); IMF, *World Economic Outlook Database* (2007)

# To meet these challenges, the economy will need to be flexible, productive, and highly participative

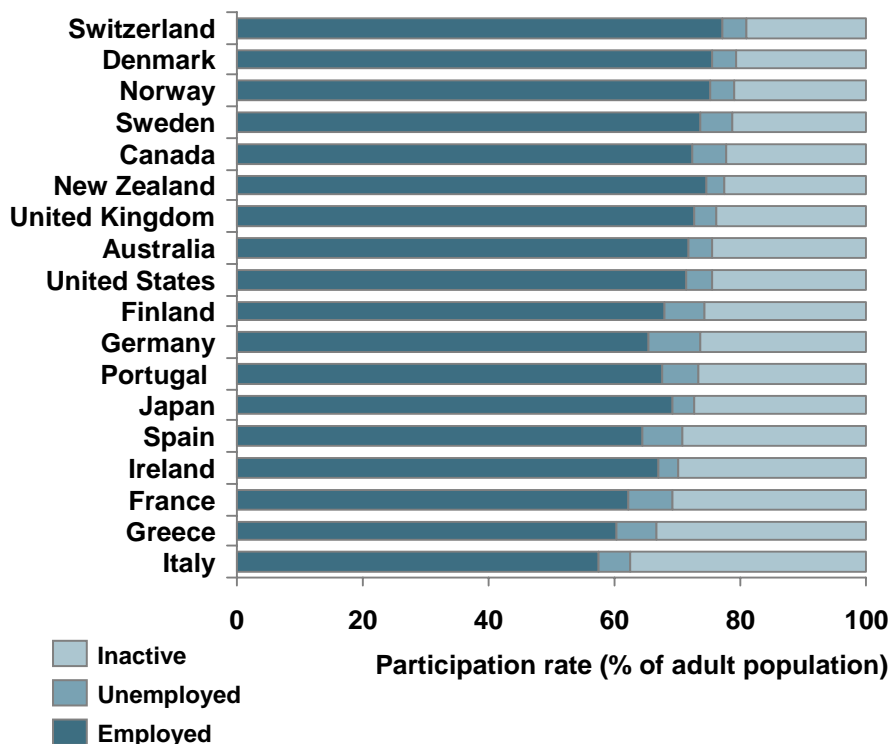


# Improvements in labour participation and productivity will be key drivers of our economic growth

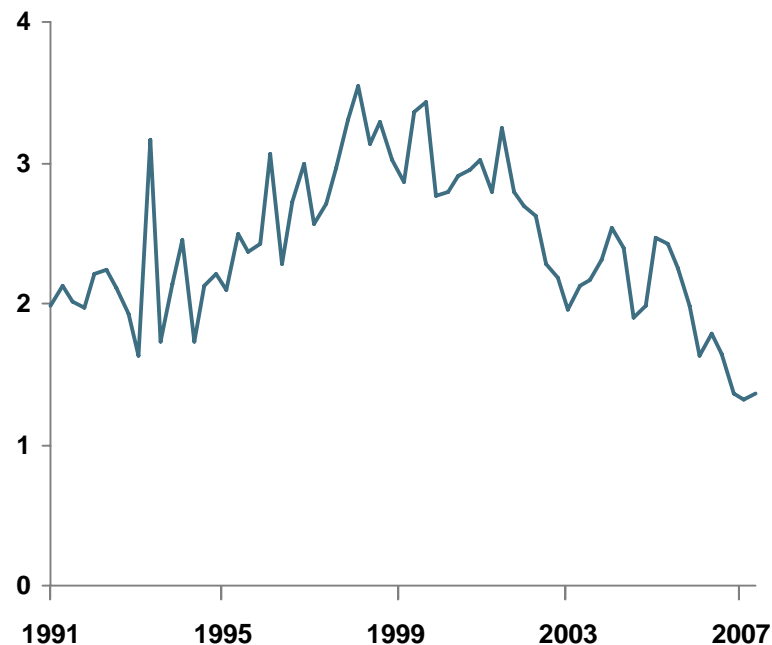
Relative to other countries, there is room to improve on our workforce participation rate

Productivity growth has been declining

Labour force participation rate, OECD countries 2005



Labour productivity growth - market sector: 1991-2007 (5-year rolling average) (%)



For more on Australia's workforce participation, see *Education, Skills and the Productivity Agenda* (p15)

Source: ABS 6202.0.55.001, *Labour Force, Australia, spreadsheets* (2007); Productivity Commission, *Indexes of productivity and related measures* (2006); ABS 5260.0.55.001, *Experimental Estimates of Industry Multifactor Productivity, 2006-07* (2007); OECD, *Employment outlook 2006 Statistical Annex* (2006)



# Flexibility will be critical to future success...

## Flexibility of both labour and capital

A well educated, flexible labour force

A geographically mobile labour force

An education system capable of re-skilling people throughout their lives

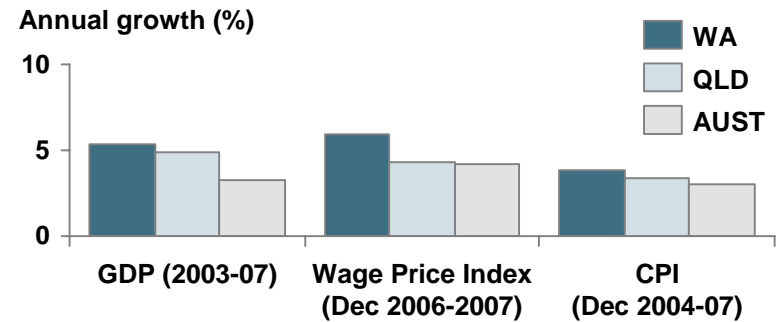
A creative workforce able to adapt to the new knowledge economy

A consistent and minimised set of business regulations

A policy of enabling business rather than "picking winners"

## Case study - Labour mobility

Strains on our resources are being more heavily felt in different parts of the country



Interstate mobility may be helping to reduce labour shortages and to moderate wage and price growth in QLD and WA, however a number of barriers to geographic mobility still exist

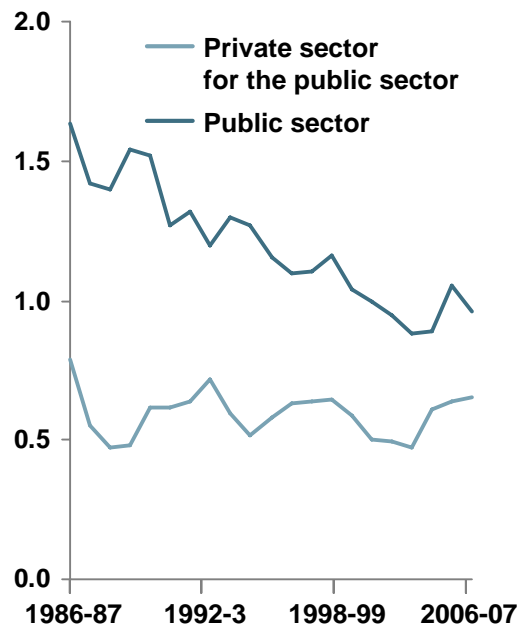
These include:

- Different occupation and business licensing arrangements across the states
- Varied workplace relations systems
- Differences in school systems

# ...as will infrastructure, where under-investment has contributed to capacity constraints

**Decreasing infrastructure investment as a percentage of GDP<sup>1</sup>**

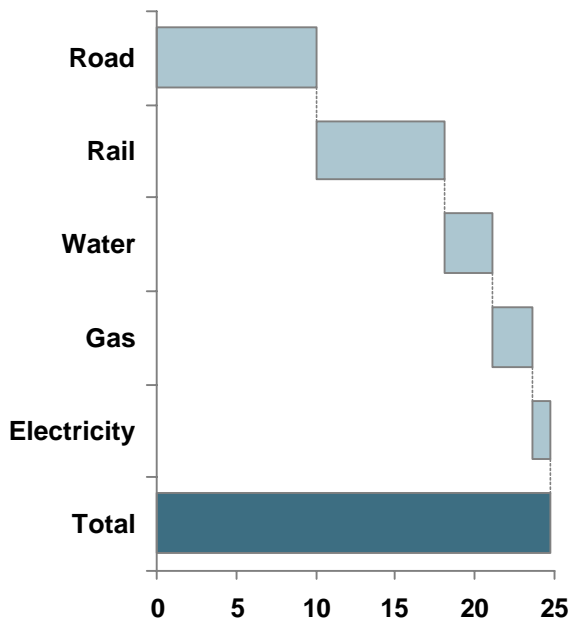
**Major infrastructure construction as % of GDP: 1986-2007**



Public sector infrastructure investment has fallen significantly since the 1980s

**Shortfall in Australian infrastructure**

**Level of under-investment in Australian infrastructure: 2003 (A\$b)**



Investment in infrastructure will yield significant economic benefits

**Port capacity starting to limit export growth**

**Export volume growth (%): 1984-07 (5-year rolling average,)**



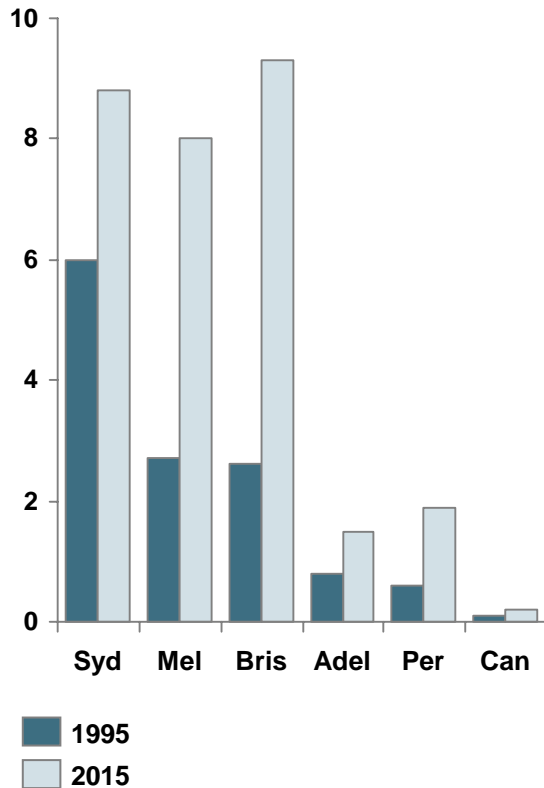
In the face of consistently high demand, infrastructure bottlenecks may be limiting our export growth

Source: ABS, *Engineering Construction Activity* (2007); ABS, *unpublished data* (2008); ABS 5204.0, *Australian System of National Accounts, 2006-2007*; CEDA, *Infrastructure, Getting on with the job* (2005)

# Providing for future infrastructure demand is a significant challenge

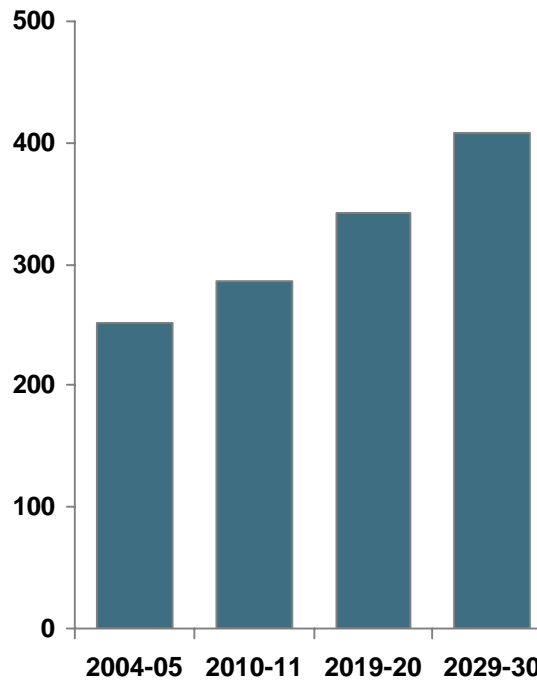
## The costs of road congestion are forecast to rise

Forecast costs of congestion<sup>1</sup> in capital cities: 1995-2015 (A\$b)



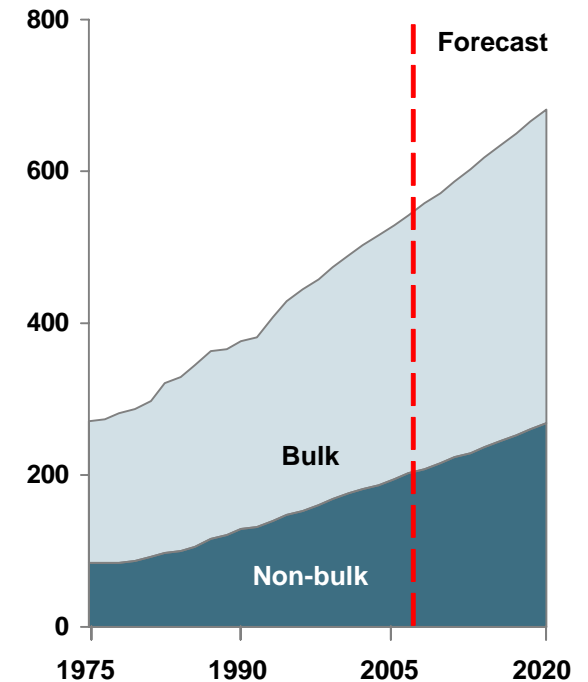
## New electricity generation capacity is required

Projected future energy demand: 2004/05-2029/30 (TWh)



## Freight haulage is growing dramatically

Billion tonne-kilometres (all modes)



1. Costs of congestion are calculated as the cost of additional travel time lost and resource costs (for instance, petrol used) given forecast congestion conditions above those costs under completely free-flow traffic conditions

Source: Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Information Sheet 14 (1999)*; Port Jackson Partners, *Reforming and Restoring Australia's Infrastructure, (2005)*; BITRE, *Freight measurement and modelling in Australia (2006)*; ABARE, *Australian Energy, national and state projections to 2029-30 (2006)*

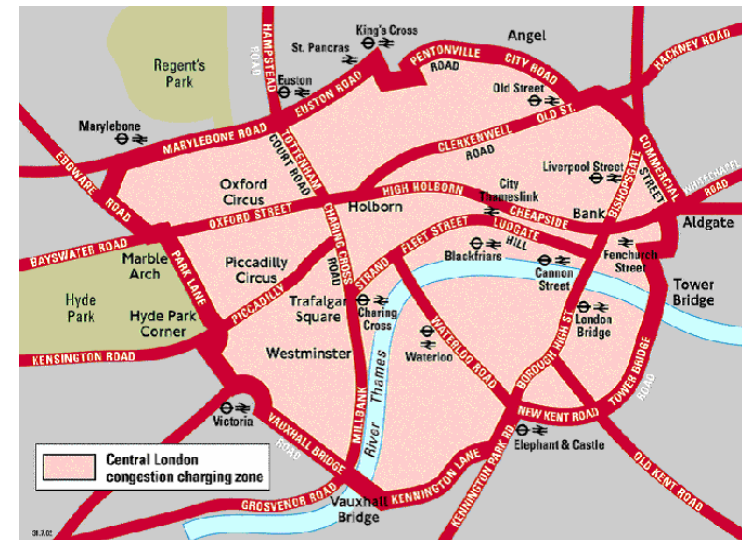
# New and existing infrastructure can also be made to work harder

Examples of measures that could make infrastructure work more efficiently

- Service delivery measures, for example, co-location of services, enhanced consumer price signals (in areas such as public housing, health care)
- Congestion road pricing: charges which vary to reflect the full cost of using transport infrastructure (e.g. higher in peak travel periods or in certain areas)
- Pricing of natural resources (e.g. water, energy), to reflect full economic and environmental costs of provision

## Case study - demand management in central London

Since 2003 drivers entering or driving within a cordon around central London (below) on weekdays have been charged £5 (increased to £8 in 2005)

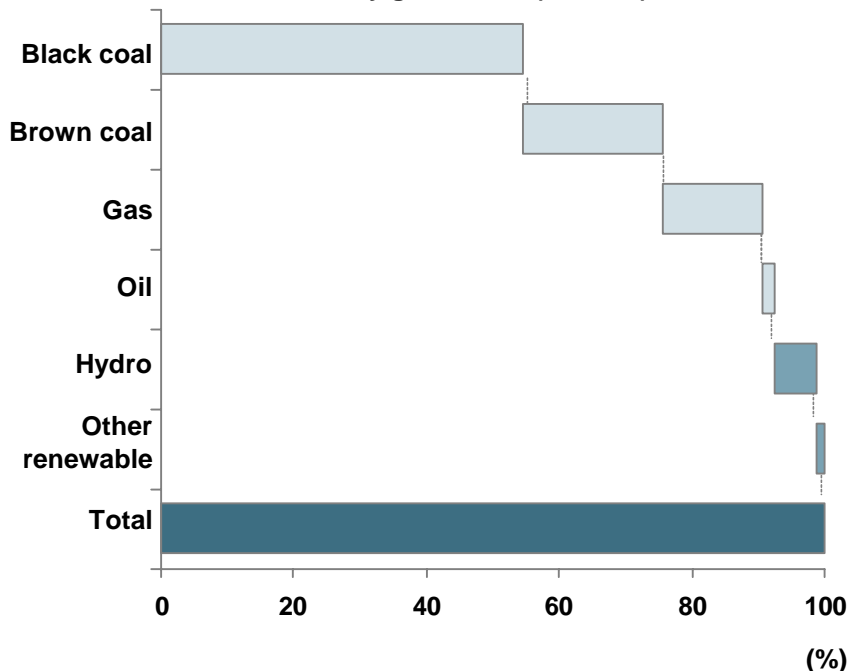


After the introduction of this charge, congestion inside the charging zone declined by 30%, car speeds rose and public transport use and reliability increased

# Climate change presents a number of challenges, but also opportunities

**Electricity generation is carbon intensive – we will need to look at new, cleaner energy sources**

Share of Australian electricity generation (2005-06)



**To meet future carbon emission targets our electricity generation will need to move towards lower and zero carbon sources**

**We have a number of advantages in a carbon constrained world**

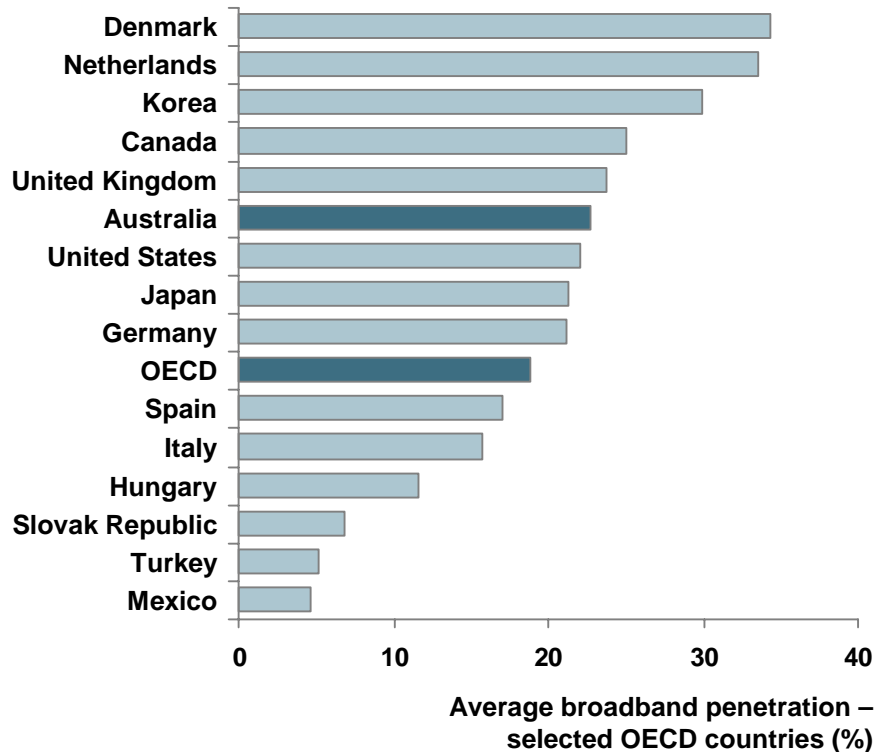
- Demand for low emission technologies like carbon capture and storage (CCS), geothermal, solar and other renewable sources will increase, presenting huge opportunities to our researchers
- Demand for gas, a commodity Australia has in abundance, will grow significantly
- Provision of "ecosystem services" like carbon abatement and biodiversity may open up new markets in which Australia is well positioned to succeed
- Investments occurring in clean coal technology

For more on the challenges climate change represents, see *Population, Sustainability...* (p1-6)

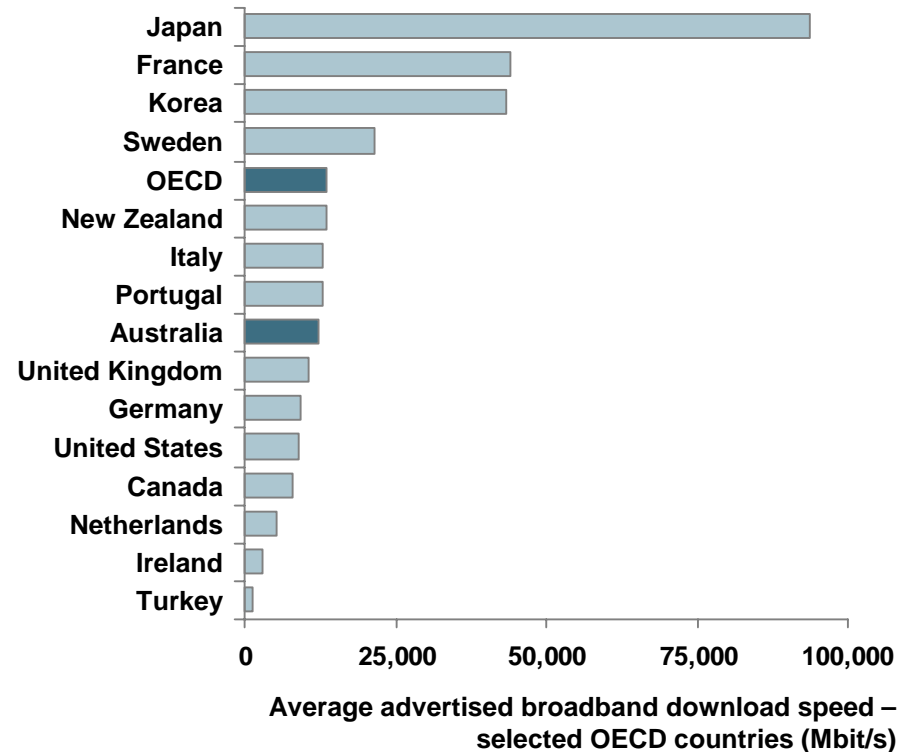


# The digital economy will also be vital, but Australia currently lags in broadband penetration and speed

Our broadband penetration leads the OECD average but trails the leaders...



...our speed is below average compared to international peers



# To capitalise on the growing digital economy, we need to consider:

## Connectivity

### Infrastructure and technology

- Computers in schools
- Digital TV transition
- Convergent services and devices
- Spectrum planning and licensing

## Capabilities

### Ensuring all potential users have the skills to access the digital economy

- Digital/ICT literacy
- Community readiness/connectivity
- ICT skills training (students and teachers)

## Confidence

### A secure and trusted environment for digital information

- E-security
- Cyber-safety
- Identity management
- IPv6
- Service reliability
- Anti-spam

## Content

### Opportunities for innovative content creation for community and commercial use

- Content regulation (online and convergent devices)
- Codes of practice (broadcasting and internet regulation)

# Questions

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**Is Australia in a position to respond to the challenges and opportunities that we know about?**

**What events might be over the horizon that we cannot forecast? How should we prepare for them?**

**In which areas could governments cooperate to achieve reforms that will boost Australia's productive potential?**

**Is there scope to make greater use of market mechanisms to regulate access to natural resources?**

**Are current regulatory regimes the best to respond to future challenges and opportunities?**

**Are there impediments to the movement of labour and capital that we can address? Are governments responsive to a changing population distribution?**

**What options should we be exploring in energy production?**

**What will be the future roles of the Government and private sectors in financing, building and managing public infrastructure?**

**Do we have a shared understanding of infrastructure investment priorities - across sectors (e.g. social services, transport, environment), and across state boundaries?**

**Are there opportunities to get more international players into infrastructure, introducing true markets to replace existing oligopolies?**

**What can be done with policy incentives to make our existing infrastructure work "smarter"?**

**What does a modern infrastructure network designed to incorporate sustainability challenges look like?**

**What can we do to ensure ongoing universal access to high quality communications infrastructure?**

**How can we drive productivity growth and competitiveness so that we can succeed in the world economy?**