



# PC update

No 50 | December 2011 | [www.pc.gov.au](http://www.pc.gov.au)



## Features



- ▶ **Early childhood development workforce**  
Final recommendations
- ▶ **Schools workforce**  
Draft report released
- ▶ **Overcoming Indigenous disadvantage**  
Are we closing the gap?
- ▶ **Independent policy advice**  
Speech by Gary Banks
- ▶ **Managing demographic change**  
A framework for analysis
- ▶ **Government assistance to industry**  
Latest estimates
- ▶ **Carbon emission policies in key economies**  
Estimating 'effective' prices



## Australian Government Productivity Commission

<b>Chairman</b>	Gary Banks
<b>Deputy Chairman</b>	Mike Woods
<b>Commissioners</b>	Jonathan Coppel Wendy Craik Robert Fitzgerald Angela MacRae Alison McClelland Siobhan McKenna (on leave) Warren Mundy Patricia Scott Philip Weickhardt
<b>Head of Office</b>	Michael Kirby
<b>First Assistant Commissioners</b>	Lisa Gropp (Melbourne) Alan Johnston (A/g) (Canberra)
<b>Principal Advisers Research</b>	Melbourne: <i>Vacant</i> Canberra: Jenny Gordon
<b>Media and Publications</b>	Clair Angel (Media Director) Ph: 02 6240 3239 maps@pc.gov.au
<b>Melbourne Office</b>	Locked Bag 2 Collins Street East Melbourne VIC 8003 Level 12, 530 Collins Street Melbourne VIC 3000 Ph: 03 9653 2100 Fax: 03 9653 2199
<b>Canberra Office</b>	PO Box 1428 Canberra City ACT 2601 Level 2, 15 Moore Street Canberra City ACT 2600 Ph: 02 6240 3200 Fax: 02 6240 3399
<b>Website</b>	www.pc.gov.au
<b>Email</b>	webmaster@pc.gov.au

Requests to be placed on the mailing list for PC Update are welcome. Contact the Media and Publications Unit (03 9653 2244 or email maps@pc.gov.au). Copies are also available on the Commission's website.

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians.

## Contents



Early childhood development workforce	3
Schools workforce	6
Overcoming Indigenous disadvantage	10
Independent policy advice and the Productivity Commission	13
Managing Australia's demographic change	15
Government assistance to industry	18
Carbon emission policies in key economies	20
Regulation reform	23
Multifactor productivity growth cycles at the industry level	24
Commission news	25
Recent releases	27
Current commissioned projects	28

# The early childhood development workforce

The Commission's final report on the early childhood development workforce has made key recommendations to assist Australian governments meet their reform goals for the sector.

In April 2010 the Australian Government asked the Productivity Commission to undertake a research study to examine the issues impacting the early childhood development workforce. After extensive research and consultation a draft report was released in June 2011. Following feedback and further research, the Commission's final report was provided to Government in November 2011.

The early childhood development sector plays an important role in fostering the education, health and care of young children, and provides services to over 1.5 million children. The sector includes early childhood education and care (ECEC) services as well as child health and family support services, with combinations of these services increasingly being provided in integrated settings. ECEC services in particular are currently the subject of significant reforms nationally. These reforms have substantial implications for the 140 000 strong ECEC workforce.

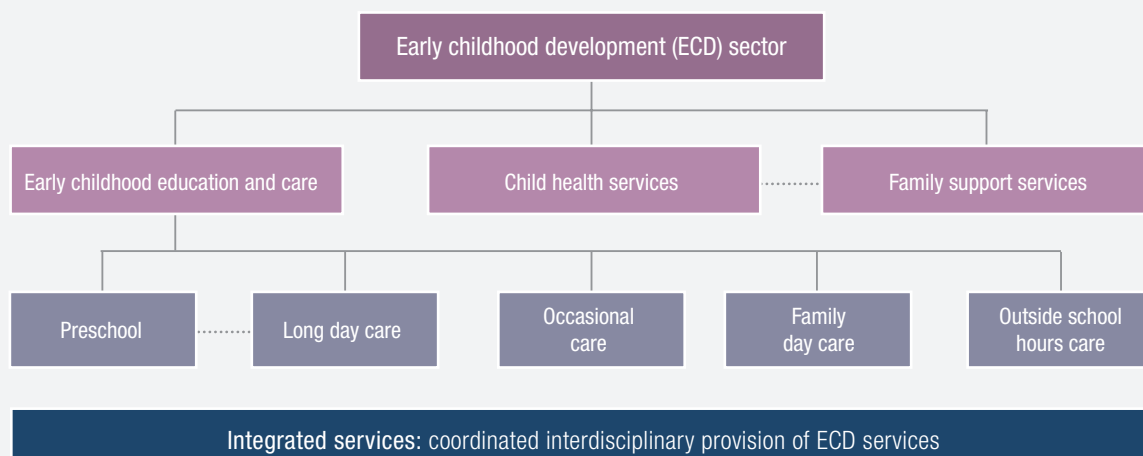
The Commission's recommendations and findings seek to support the future development of the early childhood development workforce required to underpin the nationally agreed reforms. In particular, guidance is provided on the provision of quality ECEC services to children with additional needs, Aboriginal and Torres Strait Islander children and children in rural and remote locations.

The Commission's findings include the observation that targeting relatively small additional amounts of funding



to certain aspects of the early childhood development workforce would deliver substantial additional benefits to the community. It also found that the anticipated increase in ECEC fees borne by parents (under existing funding arrangements) will reduce demand for some ►

## The early childhood development sector



ECEC services. Alternative childcare subsidy structures that target the most disadvantaged children and families would help to ensure access to services for those who would benefit most.

The Commission also found that to achieve the current reform goals:

- salary and conditions offered by long day care centres will need to be competitive with those offered to primary

teachers in the school sector to attract and retain a sufficient number of early childhood teachers

- wages for many educators will need to increase, particularly in long day care centres and community- and privately-managed preschools to attract and retain a sufficient number of educators with diploma qualifications.

### Children with additional needs

A substantial and increasing minority of children have additional needs, with around 4 per cent of children having chronic physical, intellectual or medical needs and 17 per cent speaking languages other than English in the home.

Many children, particularly those with a disability and those from culturally and linguistically diverse backgrounds, need additional support to access early childhood education and care (ECEC) services. This places particular demands on the mainstream workforce, and creates a need for different specialist workers to cater to children's specific needs.

Though a range of government policies support the inclusion of children with additional needs in ECEC services, significant gaps exist between ECEC opportunities for children with additional needs and those of other children. The gaps are partly due to insufficient support for the workforce that assists children with additional needs accessing ECEC services.

#### Key recommendations

To ensure that children with additional needs benefit fully from the current reforms, governments should modify the structure and operation of inclusion programs and reassess funding levels, and provide priority funding to provide inclusion support staff with the necessary skills.

Governments should ensure funding for early childhood development services for children with additional needs to sustain an appropriately skilled workforce of allied health and early intervention professionals.

### Aboriginal and Torres Strait Islander children

Indigenous children often experience significant disadvantage, and research suggests that disadvantaged children stand to gain the most from quality ECEC services. Indigenous children are under-represented in mainstream ECEC services, though this is offset in part by many Indigenous children attending Indigenous focused ECEC services. The under-representation of Indigenous children in mainstream ECEC services occurs for a range of reasons, including because these services may not meet the support or cultural needs of Indigenous families.

Many issues affecting the mainstream ECEC workforce affect the workforce for Indigenous children, and in many instances are more pronounced. There are also significant specific issues affecting the ECEC workforce for Indigenous children, particularly in remote areas. Indigenous focused services often have poorer infrastructure and resources, and fewer qualified staff.

#### Key recommendations

Governments should bring all Indigenous focused ECEC services into the scope of the National Quality Standard, before the review planned for 2014, and allocate additional funds to ensure these services achieve a rating of National Quality Standard or above within a specifically agreed timeframe, without the need for waivers.

Governments should give priority to the provision of quality ECEC services for Indigenous children, without passing on extra costs to parents.

ECEC services should consider offering more flexible employment arrangements, such as access to additional leave with adjusted pay arrangements for legitimate absences, to attract and retain Indigenous staff.

# The early childhood development workforce: the Commission's key recommendations

## Government involvement in the early childhood development sector

Governments should require ECEC regulators to publish all relevant information on service quality, and to publish a range of information about service waivers granted.

Governments should consider alternative structures for childcare subsidies that improve the targeting of childcare assistance, so that cost increases expected as a result of the current ECEC reforms do not reduce access to ECEC services by low-income families.

## The preschool, long day care and occasional care workforce

Governments should permit any 3-year-qualified teachers returning to or entering the workforce to deliver the preschool program, provided a plan is in place for them to upgrade their qualification to the equivalent of a 4-year-degree.

The review of the decision to exempt occasional care from ECEC reforms should involve a careful consideration of the full costs and benefits of including these services, particularly the impacts of any fee increases for parents, and resulting impact on participation by children from low-income families.

## The outside school hours care workforce

Governments should not impose additional mandatory qualification requirements or binding staff-to-child ratios on outside school hours care.

## The ECEC workforce in rural and remote areas

To meet the workforce goals of the current ECEC reforms, governments should assess the cost effectiveness of existing incentives aimed at increasing recruitment and retention in rural and remote areas and compare them against alternative strategies, and provide workers in remote areas with timely access to affordable housing.

## Training and development

The Australian Skills Quality Authority and relevant state vocational education and training (VET) regulators should take into account that the increased demand for VET qualifications within the timelines specified for the current ECEC reforms will pose risks to training quality.

Governments should ensure that VET programs that combine English language and ECEC training are available to educators from culturally and linguistically diverse backgrounds.

Governments should ensure that every member of the ECEC workforce has access to appropriate professional development and support programs. In some cases, additional resources will need to be allocated in order to achieve this.

## Planning the ECEC workforce

The Early Years Development Workforce Strategy should include clearly identified objectives, and evaluation of the costs and benefits of existing workforce policies to determine the most cost-effective instrument to address supply limitations.

## Child health workforce

Scholarships for postgraduate study in child health nursing should only be provided where they are targeted at nurses who would not otherwise have chosen to practice in demonstrated areas of workforce shortage.

Child and family health nurses should not be required to have qualifications in midwifery in addition to their qualifications in nursing and in child health, where such a requirement does not already exist.

Where governments cannot provide access to child and family health nurses in a location, other health professionals should receive training in child health.

## Workforce for family support services

Government funding for family support programs should support the successful recruitment and retention of staff and take into account relevant market wages and conditions.

## The integrated early childhood development services workforce

The Professional Support Program should provide introductory professional development in integrated ECD services to ECEC staff working in such services. Consideration should be given to the provision of similar courses for managers of such services.

## Early Childhood Development Workforce

> Productivity Commission Final Report

> Released December 2011



# The schools workforce

This most recent draft report in the education workforce series recommends several improvements to the schools workforce reform agenda.



In pursuit of improved schooling outcomes, Australian governments have embarked on a series of schools workforce and other education reforms. In the third of a trio of education workforce studies, the Commission has been asked to advise on:

- factors affecting the supply of, and demand for, school workers
- whether the knowledge and skills of the workforce, and its deployment within and across schools and regions, are appropriate to meet the community's needs
- whether current or proposed policy, governance and regulatory arrangements are conducive to maximising the efficiency and effectiveness of the schools workforce and, if not, what changes may be required.

The Commission's draft report was released in November 2011. The final report will be sent to the Government in April 2012.

## Schools workforce reform agenda

As in other countries, Australia's schools workforce reform agenda focuses heavily on improving teaching quality and promoting equity in educational outcomes – that is, providing all students with equal opportunity to realise their educational potential irrespective of their individual, economic or social circumstances. The specific reforms seek to address various weaknesses such as teacher shortages in some areas and subjects, inadequate performance management within schools and impediments to workforce flexibility and greater school autonomy.

## The Commission's approach

Many of the schools workforce reforms are very recent, thus limiting the scope to make definitive judgements on their merits. And further changes are in prospect, including in response to the current Review of School Funding.

*(continued on page 9 ►)*

## How do Australian schools perform?

Overall, Australia's schooling system delivers good outcomes. The foundation skills of the 'average' Australian student are towards the top of the international rankings, while total expenditure on schools education, as a percentage of GDP, is marginally below the OECD average.

However, there is clearly room for improvement.

- Despite higher spending per student, there is evidence that student numeracy and literacy has declined somewhat.
- Socio-economic status (SES) explains more of the variation in student performance than in some other educationally high performing OECD countries.
- Students with disabilities and those living in rural and remote areas – whatever their SES background – can face significant difficulties in accessing quality school education. For Indigenous students – who often experience multiple layers of disadvantage – these difficulties can be particularly acute.

## The schools workforce

On a full-time equivalent basis, Australia has more than 250 000 teaching staff and principals and nearly 80 000 teacher assistants and administrative staff. There is also a sizable volunteer workforce. This workforce has been changing in various ways:

- the proportion of teachers in non-government schools has been growing
- the workforce is ageing, with age-related exits expected to rise further
- the workforce has become more feminised, and evidence

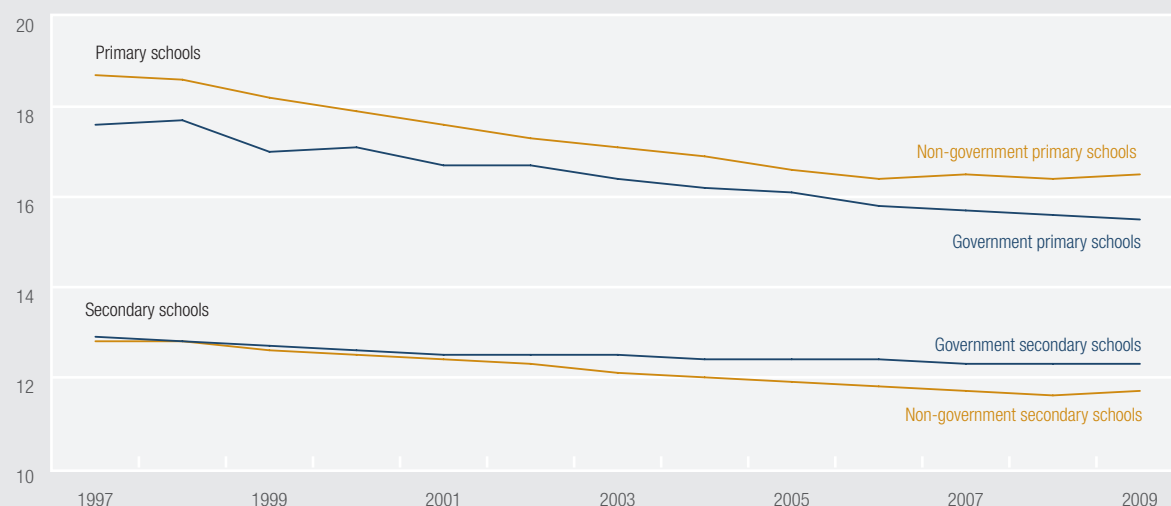
suggests a marked decline in the average literacy and numeracy skills of females entering teacher training courses

- class sizes and hence student-teacher ratios have been progressively reduced (see chart).

However, there is still relatively little explicit differentiation in teachers' pay on the basis of performance, or of short-ages in particular subject areas. Also notable is that increases in teachers' pay do not appear to have kept pace with those in many other professions.

### Student-teacher ratios, 1997–2009

Student/teaching staff ratio



Source: Productivity Commission 2011, *Schools Workforce*, Draft Report

## What makes for 'quality teaching'?

Fully understanding what constitutes quality teaching and how best to promote it remains an ongoing policy challenge. In part this is due to the diversity of ways that individual students learn.

Even so, the available evidence consistently suggests that effective teachers:

- create an environment where all students are expected to learn successfully
- challenge their students and have high expectations of them

- have a deep subject understanding
- direct their teaching to student needs and readiness
- provide continuous feedback to students about their learning
- reflect on their own practice and strive for continuous improvement.

Significantly, these sorts of skills and behaviours were also prominent in the commentary on quality teaching by the Victorian Student Representative Council in its submission to the Commission's study.

## The current schools workforce reforms

As part of Australia's human capital agenda, various reforms are being implemented to improve Australia's schooling system and the outcomes it delivers for students. And more reforms are on the horizon – including in response to the Review of Funding for Schooling. Most of these reforms are being implemented by State and Territory Governments and non-government school operators, and include policies intended to:

- boost recruitment in areas of shortage – through scholarships and employment incentives for students; by fast tracking teacher training for certain individuals; and by targeted initiatives to increase the number of Indigenous school workers
- increase early career retention – through more rapid salary progression, stronger classroom support and mentoring, and greater access to professional development
- help get quality teachers into hard to fill positions – through allowances, retraining and incentives relating to future placements
- enhance the quality of teachers and school leaders – through new national professional standards (see below); new pre-service training courses; minimum entry-level numeracy and literacy standards for courses; improved performance management systems; programs to build leadership skills and through school autonomy initiatives

that support and benefit from the exercise of sound leadership.

Many of the reforms have now been brought under national umbrellas by CoAG or the Ministerial Council on Education, Early Childhood Development and Youth Affairs.

Underpinning the reforms have been the broad educational goals articulated in the 2008 'Melbourne Declaration' by Australian Education Ministers and in the National Education Agreement (NEA). Key objectives are to promote equality of educational opportunity and to ameliorate educational disadvantage. Accompanying the NEA are several National Partnership Agreements that make additional Australian Government funding available to the States and Territories to facilitate and/or reward reform initiatives agreed to be of national significance.

To support these arrangements, steps have been taken to enhance national level performance reporting and assessment, including through the compilation and publication of more data on student and school performance. Governments have also endorsed national professional standards for teachers and principals – developed by AITSL – and have agreed to the introduction of a national curriculum, which is being developed by the Australian Curriculum, Assessment and Reporting Authority.





Clearly, changes to school resourcing could have significant impacts on the number, quality and distribution of workers across schools and their rates of remuneration and working conditions.

Given this, the Commission has put forward a small number of targeted measures that build on current reforms, address seemingly problematic approaches, or address aspects of workforce arrangements that have received insufficient policy attention. Amongst other things, the Commission is recommending that:

- Two year graduate entry teacher training courses remain as an option rather than be mandated. A longitudinal data collection is required to assess the effectiveness of the different pre-service training, induction and professional development approaches in terms of their impacts on student outcomes..
- The Australian Government defer full-scale implementation of its proposed national bonus scheme for the top 10 per cent of teachers. The Government should instead support more extensive trialling of performance pay arrangements and efforts to improve performance appraisal.
- The Australian Institute of Teaching and School Leadership undertake research on school workforce innovation. While the roles of teachers, principals and other school workers have been evolving, most of the changes have not been purposefully driven by education authorities to achieve better student outcomes or greater cost-effectiveness.
- State and Territory Governments, where not already doing so, support school autonomy initiatives with measures to help ensure that schools have the necessary leadership skills and school governance arrangements.

---

The Commission draft report identifies educational disadvantage as an area that must be a high priority for schools workforce reform. Deputy Chairman, Michael Woods, noted that ‘despite a long history of policies in this area, there is limited understanding of what is most effective. The Commission has therefore called for a comprehensive evaluation of programs that target disadvantaged students, as part of a wider push to embed robust evaluation in the policy process for school reform.’

---

The Commission has also made several policy-related findings, including on:

- explicit remuneration incentives to help address workforce shortages, including in hard to staff schools and in particular subject areas such as mathematics and science
- greater flexibility in the industrial relations regime for school workers to allow for greater responsiveness to the needs of particular schools

Further input is requested on the issues associated with establishing a performance-based career structure for teachers.

## Schools Workforce

> Productivity Commission Draft Report, released November 2011

> Contact: Leonora Risse 03 9653 2198

> Email: schools@pc.gov.au

## Education and Training Workforce

*Commissioned study*

In April 2010, the Australian Government asked the Productivity Commission to undertake a study of the education and training workforce. The study's focus is on the issues impacting on the workforces of the following sectors:

- Vocational education and training – final report released May 2011
- Early childhood development – final report released December 2011 (see pages 3-5 in this issue)
- Schools – final report to be released in April 2012.

# Overcoming Indigenous Disadvantage

There has been progress in some areas, but wide gaps in outcomes between Indigenous and other Australians persist.



Photo courtesy of Reconciliation Australia, image by Wayne Quilliam.

The 2011 *Overcoming Indigenous Disadvantage: Key Indicators* (OID) report is the most recent in a series of reports commissioned by the Council of Australian Governments to track the extent to which government policies and programs are making a difference to the lives of Indigenous Australians.

In 2007 and 2008, COAG committed to six targets to close the gap in Indigenous disadvantage:

- closing the life expectancy gap within a generation
- halving the gap in mortality rates for Indigenous children under five within a decade
- ensuring all Indigenous four year olds in remote communities have access to quality early childhood education within five years
- halving the gap for Indigenous students in reading, writing and numeracy within a decade
- halving the gap for Indigenous 20–24 year olds in year 12 attainment or equivalent attainment rates by 2020
- halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.

The OID report is more than a collection of data. It draws on extensive evidence to identify the areas where government policies can have the greatest impact. Over time, the report measures the broad effects of those policies and reveals where more effort is required. ►

## What has changed for Indigenous people?

Outcomes have improved in several areas:

- In those jurisdictions with long term data, the mortality rate for Indigenous people declined by 27 per cent between 1991 and 2009, leading to a narrowing (but not closing) of the gap with non-Indigenous people in those jurisdictions.
- Indigenous infant and young child mortality rates declined by 45 per cent between 1991 and 2009 in the three jurisdictions for which data are available: WVA, SA and the NT.
- Nationally, Indigenous home ownership increased from 1994 to 2008.

- Indigenous people are also achieving better outcomes in post-secondary education, employment and income, but outcomes in these areas have also improved for non-Indigenous people, leading to little or no closing of the gaps.

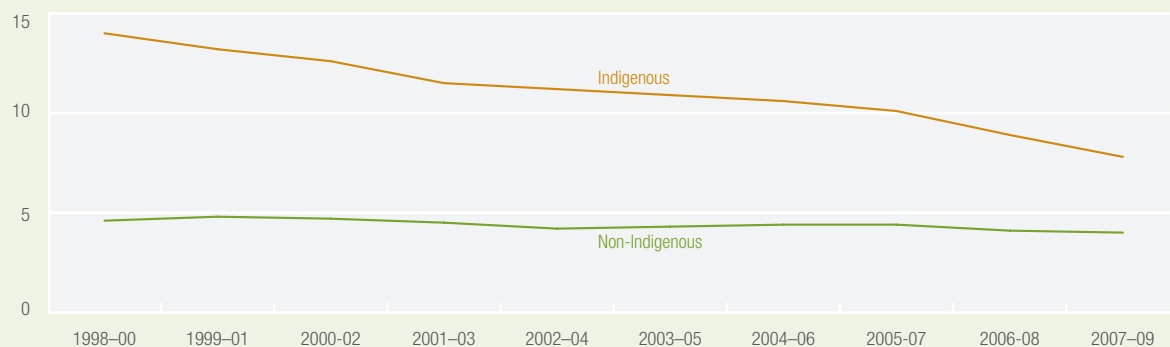
In other areas, there has been little or no progress:

- There has been little change in literacy and numeracy, most health indicators, and housing overcrowding for Indigenous people.
- Rates of child abuse and neglect substantiations, and adult imprisonment have increased for Indigenous people – but there has been recent improvement in juvenile detention rates.

## The gap in infant mortality rates has narrowed

### Infant mortality, 1998-2000 to 2007-09

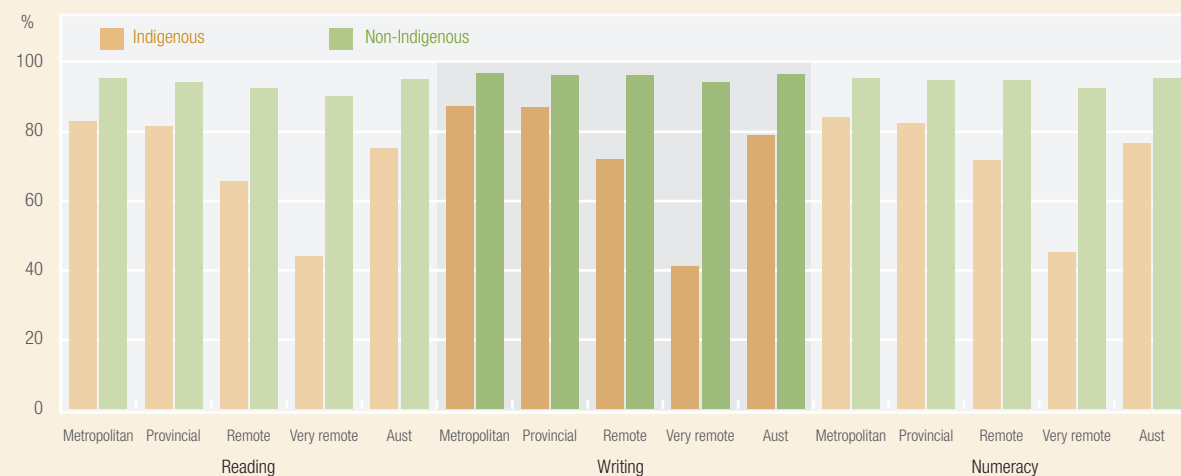
Infant mortality per 1000 live births



Source: *Overcoming Indigenous Disadvantage: Key Indicators 2011*, figure 4.2.4

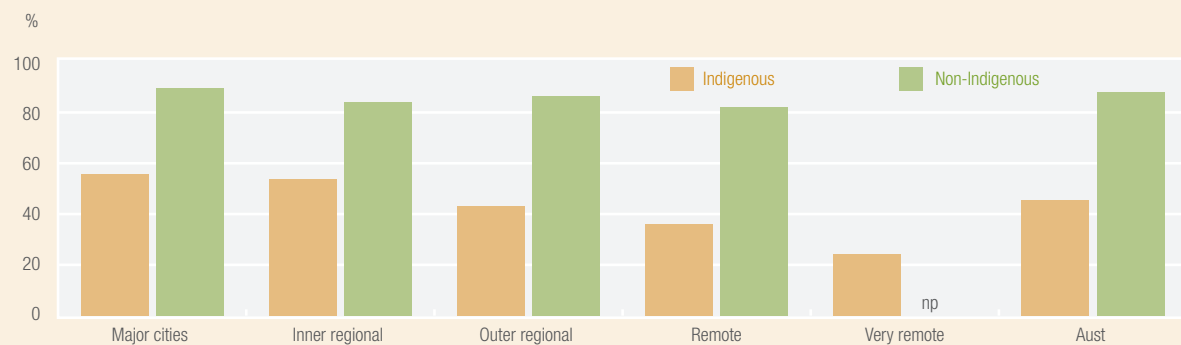
## Outcomes deteriorate as remoteness increases

### Students achieving year 3 standards, by location, 2010



Source: *Overcoming Indigenous Disadvantage: Key Indicators 2011*, figure 4.4.1

### Proportion of 20-24 year olds who had completed year 12, or certificate II or above, 2008



Source: *Overcoming Indigenous Disadvantage: Key Indicators 2011*, figure 4.5.1

On the release of the 2011 OID report, Productivity Commission Chairman Gary Banks, who chairs the inter-governmental Steering Committee responsible for the report, said 'the latest data still reveal considerable disparities in outcomes between Indigenous and other Australians. This applies across the six COAG 'closing the gap' targets, as well as for over 40 other significant indicators. And progress in closing those gaps has been mixed'.

---

**Of the 45 quantitative indicators in the report, available data show improvement in outcomes for 13 indicators. There has been no significant improvement in 10 indicators, and outcomes have actually deteriorated for another seven indicators. There was no trend data for the remaining 15 indicators.**

---

### Measuring multiple disadvantage

Different aspects of disadvantage often seem to occur together – for example, poor education appears to be linked with poor employment outcomes, and both are linked with low income. The OID report uses two approaches to examine the interactions between indicators of disadvantage. The first approach examines associations between different aspects of disadvantage. The analysis shows that rates of multiple disadvantage are higher for Indigenous people than non-Indigenous people in the areas of education, income, health, housing, crime and violence. The second approach uses a statistical technique to isolate the possible contribution of one factor at a time (such as education), holding other modelled factors (such as health or age) constant. This information can be used to analyse the possible effect of factors that might be influenced by government policy, while controlling for other factors.

### 'Things that work': some examples

**The Inala Indigenous Health Service** (Queensland) was established in 1995, after the mainstream general practice in Inala could identify only 12 Indigenous clients. An Indigenous community focus group attributed poor Indigenous attendance to a lack of Indigenous staff, staff perceived as unfriendly, inflexibility around time, intolerance of Indigenous children's behaviour and a lack of Indigenous artwork and other items. The Inala Indigenous Health Service, under energetic Indigenous leadership, addressed these issues and provided bulk billing, and in 2008 had 3006 Indigenous patients.

**The Cape York Institute's Higher Expectations Program – Tertiary (HEPT)** (Queensland) targets talented Cape York Indigenous people with high potential for achievement and leadership, and provides them with long-term support to undertake tertiary studies. HEPT offers material assistance through scholarships, and strengthens students' academic, social and emotional capacity through a combination of case management, leadership training and professional mentoring. Strong family support and community identity are at the core of the program.

**Rio Tinto Indigenous employment programs** have helped increase the proportion of Indigenous employees in Rio Tinto's Australian workforce from 0.5 per cent in 1996 to the current level of 6 per cent. In partnership with community stakeholders, Rio Tinto's employment programs provide education, training and individual support programs such as mentoring, to help Indigenous employees overcome educational barriers.

**The Aboriginal Maternal and Infant Health Service (AMIHS)** (NSW) is a community-based maternity service providing culturally appropriate care for Aboriginal women and babies. Positive outcomes for Aboriginal mothers and babies include decreased rates of premature birth, improved breastfeeding rates and improved access to antenatal care in early pregnancy.

*Source: Overcoming Indigenous Disadvantage: Key Indicators 2011*

## Overcoming Indigenous Disadvantage: Key Indicators 2011

- > Published by the Steering Committee for the Review of Government Service Provision, chaired by Gary Banks. The Productivity Commission provides the Secretariat for the Steering Committee.
- > [www.pc.gov.au/gsp/reports/indigenous/key-indicators-2011](http://www.pc.gov.au/gsp/reports/indigenous/key-indicators-2011)

# Independent policy advice and the Productivity Commission

In a recent address at Swinburne University, the Commission's Chairman, Gary Banks, outlined how independent policy advice can contribute to better public policy formulation. Edited highlights of his comments follow.

During the past decade, the number of reviews commissioned by governments on key policy issues appears to have increased exponentially. However, some have done better than others in achieving improved outcomes. How well they have performed has depended crucially on their governance, their skill base and how they have gone about their tasks – especially their consultation processes.

One aspect of governance that has stood out as a success factor is 'independence'. While many reviews have been characterised as independent, in practice this has not always been accepted by stakeholders, and that has affected their influence.

---

**'Policy making occurs in a complex and conflicted arena; one that in many cases is hindered by lack of evidence and biased in ways that can favour special interests over the public interest. Independent policy advice can play an important role not only by helping governments determine what to do amidst such competing or conflicting claims, but also by helping them achieve it through greater public understanding and a more benign political environment.'**

---

Independence is integral to the Productivity Commission's role in advising governments and informing public opinion. It is also something that, as its Chairman, I have frequent cause to reflect on.

The Commission's independence is formalised in its statute, the *Productivity Commission Act 1998*. A key feature of the legislation is that the Commission is required to take an 'economy wide perspective'; that is, it must promote the interests of the community as a whole over that of any particular industry or group.

Two aspects of the statute bear on the Commission's independence. One relates to appointments, the second to the operations of the Commission – particularly its relationship with the government or Minister of the day.

## Independent Commissioners

The independence of the Productivity Commission is embodied in the Commissioners. Together with the Chairman, they are responsible for its advice to government. This is accomplished with the support of some 200 permanent public servants; about 150 of whom are professional researchers.

Under the Productivity Commission Act, Commissioners can be appointed for up to five years. This period has the advantage of spanning more than one electoral cycle. Perhaps more importantly, it gives the Commissioners job security for their term of appointment. This means that Commissioners can't be sacked merely for giving unwelcome advice on public policy matters.

What's to stop the government loading the Commission with people chosen mainly for their political affiliations or support for the government? That has been an issue for some of the ad hoc policy reviews, but in my experience it has not been thus far for the Commission. Firstly, there are some formal protections within the Act. Appointment is by the Governor General. While obviously acting on the advice of the government of the day, the Governor General must accept that 'the qualifications and experience of the Commissioner are relevant to the Commission's functions'. And the integrity of appointments has been enhanced by the changes introduced in 2008 for all Commonwealth statutory appointments. These are now required to be advertised and to undergo a formal merit-based selection process, with recommendations to the Minister by a panel headed by the Portfolio Secretary.

## Relationship with 'the Minister'

The Commission has no executive powers and its reporting relationships within government are different to those of a department of state. These are best summarised as 'the Minister can tell the Commission what to do, but not what to say'.

The Minister has formal responsibility for the Commission's work program and the Commission reports to and through the Minister. It is the Minister who formally commissions studies. However, proposals for Commission inquiries do not emerge only from the Minister's portfolio (Treasury). They can originate from community groups, from State governments, from other portfolios and ►



indeed from the Parliament or Council of Australian Governments (COAG). The tasks given to the Commission are set out in Terms of Reference which are made public. The Minister is required to table the Productivity Commission's final reports in the Parliament within 25 'sitting days', which reflects the organisation's dual role of advising government and informing Parliament and the wider community.

The intent of the Act is clear. For public inquiries, the Commission's relationship with the Minister, or government more broadly, needs to be arms length and transparent.

A number of protocols and practices have been developed in keeping with that. Periodic briefings are given by the Chairman to Ministers and to Parliamentary Committees on the Commission's activities and progress. But the specifics of particular inquiries underway and what might be recommended are not discussed, and that is understood and respected.

By the same token, it is a reasonable expectation on the part of any government that there be 'no surprises', particularly with the Commission making recommendations in what are sometimes very sensitive policy areas. Accordingly, there is a long-standing convention that the Government receives briefings on a report in advance of its public release – but only after it has been signed and 'gone to the printer'.

## Funding and resourcing

Policy advisory bodies are most independent where they have control over their own staffing. Reviews headed by independent figures, but provided with secretariats from the relevant policy departments, can in practice be constrained or compromised. The Productivity Commission and its predecessors have always benefited from having their own staff and that has enabled the organisation to build expertise in analysis and in the processes that the Commission follows. Over time it has also helped create a culture of independence throughout the organisation.

The Commission also has always been funded through a single annual appropriation, which has given it desirable flexibility in allocating its resources.

## What difference has independence made?

The Commission in its modern form has been around for nearly four decades. It has operated under three successive statutes, had two name changes and seen its remit widened under both Labor and Coalition Governments. That suggests that governments have seen the Commission as

making a useful contribution to public policy, even though they have not always agreed with or been able to accept its recommendations.

---

**'In a world of many self interested claimants for preferment and advocates for 'causes', governments have been able to rely on the Commission for advice which by its mandate must be motivated only by the public interest. And governments have been able to depend on the rigour of the research and analysis contained in the Commission's reports, informed by extensive consultations and tested through public scrutiny.'**

---

These two features have seen the organisation being called on by governments to assist in a wide range of quite difficult policy areas, including (recently) aged care, disability support, international carbon pricing policies, the education workforce, urban water policy, rural R&D support, airport regulation, planning and zoning, and the retail sector.

The Commission has also provided 'ammunition' for governments in advocating policy initiatives to the public and Parliament and in countering policy proposals from special interests. For example, the evidence and analysis in Commission reports have been actively employed by the Australian Government recently in areas such as paid parental leave, gambling and executive remuneration. In some cases, the Commission's work has helped build active constituents for reform, by demonstrating to certain industries or groups the costs to them of the status quo and the benefits of a change in policy direction. And we've arguably made government's 'selling' job a bit easier through our own consultative processes, which on key policy issues have assisted public understanding and helped bring the community along.

> Edited highlights of Swinburne University Chancellor's Lecture, presented by Gary Banks on 22 September 2011. The full address is available on the Commission's website: [www.pc.gov.au](http://www.pc.gov.au)

## Managing Australia's demographic change

The demographic changes underway in Australia have received considerable policy attention. The Commission's latest Annual Report presents a framework for analysing issues relevant to a population policy.



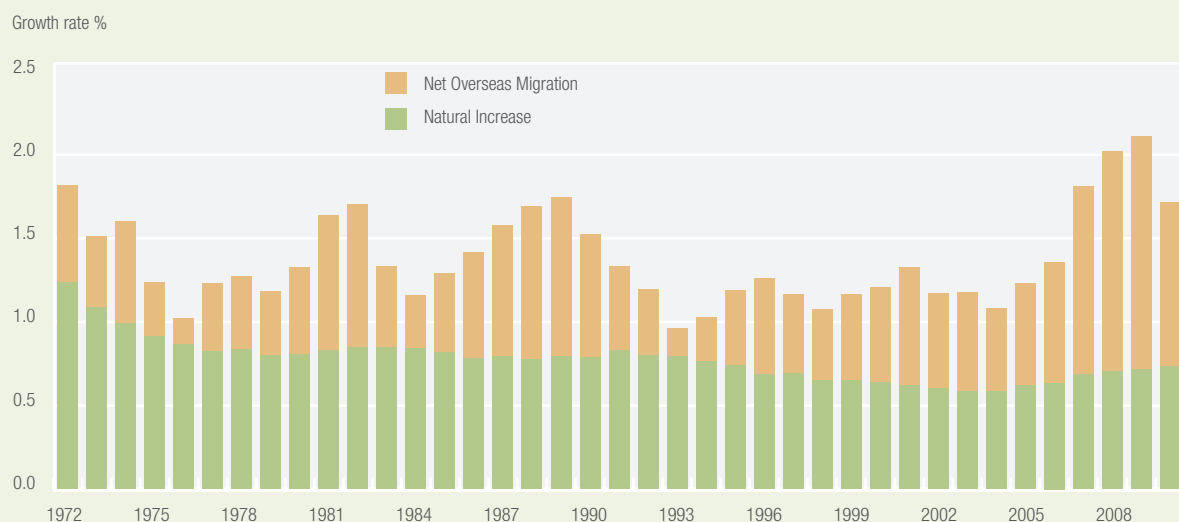
The objectives of 'population policy' have evolved over the years, reflecting changing public priorities. The current focus is on achieving sustainable outcomes. An important implication is that population levels are less important for policy than the rate of population growth over time, and the capacity of the Australian community to accommodate it.

In recent years the contribution of Net Overseas Migration (NOM) to population growth in Australia has increased considerably. The share of NOM in Australia's population growth has risen from 40 per cent, on average,

over the period 1971-72 to 2005-06, to more than 60 per cent over the past four years.

With Australia's population ageing progressively and the declining rate of natural increase, net overseas migration will play an increasingly important role. For example, based on the trends in fertility, mortality and NOM that prevailed in 2008, the share of NOM in population growth would rise to 70 per cent by the middle of this century, and would account for practically all population growth by its end. ►

### Contributors to Australia's population growth



Source: Productivity Commission 2011, *Annual Report 2010-11*

## Clarifying the economic contribution of migration

An understanding of the economic impacts of immigration is sometimes clouded by misperception. Two benefits that are sometimes attributed to immigration, despite mixed or poor evidence, are that:

- immigration is an important driver of per capita economic growth
- immigration could alleviate the problem of population ageing.

### Immigration and real incomes

The impacts of migration on real incomes depend on a multitude of factors, many of which offset each other. These include (among others): whether immigrants are complements or substitutes to the existing factors of production; whether there are any economies (or diseconomies) of scale in production and consumption; the effect on the government's net fiscal position; and how any fiscal gains or losses are distributed. It also depends on whether there are any distortions in the domestic economy that prevent an efficient adjustment to the changing size and structure of the population. Most research indicates that the net impacts tend to be small, though not evenly distributed, with potential winners and losers across Australia's population. Skilled immigrants are more likely to increase average local incomes than their lower skilled counterparts. Finally, there is a potential downside for any outcomes, resulting from existing policy and economic distortions.

### Immigration and ageing

Australia's population has been progressively ageing. According to the Treasury projections, the proportion of people aged 65 and over is set to reach nearly 25 per cent by 2050. An ageing population results in a higher 'aged dependency ratio' and poses significant economic and fiscal challenges. Increased migration is often suggested as a solution.

Immigrants, being typically younger on arrival than the existing population, could alleviate the ageing pressures in the short run. However, several studies show these reductions are small for most plausible immigration levels. More importantly, any effect would be short lived. This is because immigrants themselves age, and progressively higher levels of migration would be needed to sustain the current age structure into the future.

## Policies for sustainable outcomes

Much of the recent policy discussion has focused on addressing the potentially adverse effects of population growth on urban amenity, the natural environment and social cohesion.

In many cases, population growth will not be the only (and in some cases, not even the main) cause of the observed problems. Some may be existing or emerging problems (arising from market failures or policy distortions), which are magnified by population growth. Resolving those at their source can often produce 'no regrets' outcomes, providing gains to the existing population regardless of the rate of population growth, while also increasing Australia's 'absorptive' capacity. However, even efficient policy settings may still involve some negative impacts on incumbents.

## Planning sustainable cities

The geographic location of population growth is influenced by a multitude of dynamic market forces. Those forces constitute signals for welfare-enhancing individual decisions on where to live and work. In this context, an appropriate role for governments is to address, where feasible, any significant market failures distorting individual choices and to remove the regulatory impediments to population movement.

Population growth leads to a higher demand for infrastructure, housing and various essential services and products, such as water. Where there is an inadequate response

### Improving the supply side: the case of urban water

The supply of urban water is subject to substantial institutional and regulatory constraints. Of these, bans in several jurisdictions on urban–rural water trade may be the most inefficient, especially in light of government commitments to high cost supply augmentation options. For example, the Port Stanvac desalination plant in South Australia is expected to cost \$1.83 billion to build and involve substantial running costs. Acquiring a similar volume of water through rural water entitlements could have cost under \$200 million and would likely involve lower operating costs. Recycling for planned indirect potable use is another water supply option currently prohibited in New South Wales, Victoria and South Australia without a transparent analysis of its costs and benefits.

in supply, it can lead to rising prices or (in some cases) increased pressure to ration services or reduce service quality. Some of these demand-side pressures can be alleviated through improved management of the supply side.

And population growth can exacerbate existing distortions in consumption arising from inadequately priced natural resources or infrastructure services. In many cases, improved pricing will be the most appropriate policy response.

## Addressing environmental impacts

Population growth leads to higher aggregate consumption and production, which can have implications for the natural environment. Most concerns focus on: unsustainable use of natural resources; reduced food security; increased pollution and greenhouse gas emissions; and loss of biodiversity. Some of those concerns are undoubtedly important, and may justify migration controls to address them, subject to two important caveats.

First, some of these environmental impacts, such as the depletion of internationally traded natural resources and increased greenhouse gas emissions, are global in nature. The implications of Australia's population growth need to be seen in the context of this country's size, as well as the net effect on *global* population growth (immigration into Australia does not increase the global population). For example, Australia accounted for only 0.3 per cent of the world's population in 2010, and our share of world carbon dioxide emissions in 2008 was roughly 1.3 per cent.

Second, even for localised impacts such as pollution and loss of biodiversity, the relationship between population growth and environmental quality is not direct or exclusive. Improvements in technology, such as improvements in energy efficiency and in waste processing technologies, can ameliorate potential ecological pressures from increasing population. Consumption and production behaviour are also important – a community that is oriented towards the production of services and other skill-intensive activities is likely to generate less pollution than a community

that relies heavily on some types of manufacturing.

Property rights (which help to ensure that common-pool resources are not depleted beyond the point where regrowth is possible) can also play a crucial role in determining the environmental effects of demographic changes.

---

Where there are concerns about environmental degradation, it is important to ascertain how direct the relationship between population growth and those concerns are, and whether policies that target environmental problems at their source would be more effective than the relatively blunt option of more restrictive immigration controls.

---

## What are the policy implications?

Australia's current and prospective demographic changes present many challenges. Important policy implications arising from recent Commission analysis include that:

- The *rate* of population growth is an important consideration for policy. How fast Australia's population grows has direct implications for the environmental, urban and social amenity of existing residents, and immigration policy is the most effective mechanism for influencing the rate of growth.
- The composition of Australia's migrant intake is important. Evidence indicates that a focus on skilled migrants (while also meeting humanitarian obligations) is generally most beneficial, both economically and socially.
- Improving Australia's capacity to accommodate a growing and changing population is critical. Reforms that improve the flexibility, adaptability and overall efficiency of the economy are even more pressing in the context of a sustainable approach to Australia's population.

## Productivity Commission Annual Report 2010-11

> Released October 2011

**For further Commission analysis in this area see:**

- A 'Sustainable' Population? – Key Policy Issues Productivity Commission Roundtable Proceedings (2011)
- Population and Migration: Understanding the Numbers, Commission Research Paper (2010)
- Productivity Commission Submission to the Taskforce on a Sustainable Population Strategy for Australia (2010)
- Economic Impacts of Migration and Population Growth, Productivity Commission Research Report (2006)

## Government assistance to industry

The Commission's *Trade & Assistance Review 2009-10* sets out the latest estimates of Australian government assistance to industry.

The Australian Government assists industries through an array of measures, including import tariffs, budgetary outlays, taxation concessions and regulatory restrictions on competition. Assistance generally benefits the receiving industry, but can penalise other industries, taxpayers and consumers.

The Productivity Commission is required to report annually on industry assistance and its effects on the economy. *Trade & Assistance Review 2009-10* contains the Commission's latest quantitative estimates of Australian Government assistance to industry. It also identifies recent developments in industry assistance, and presents an updated picture of state and territory government expenditure on industry support.

**In 2009-10, Australian Government assistance to industry amounted \$17.3 billion in gross terms. After allowing for the cost imposed of import tariffs on industries using imported goods as inputs, net assistance totalled \$9.3 billion. Total assistance comprised \$9.4 billion in tariff assistance, \$3.7 billion in budgetary outlays and \$4.1 billion in tax concessions.**

In the 12 months prior to May 2011, the Australian Government announced industry assistance budgetary outlays of around \$700 million, mostly to be expended within five years. Nearly half of the proposed expenditure (\$370 million) relates to carbon emission reduction and energy programs.

Following the 2010–11 floods and other natural disasters, the Australian Government announced changes in funding arrangements for existing programs and new funding to support regions and businesses affected by natural disasters. Concurrently, the Australian and Queensland governments announced \$5.6 billion in support for recovery and reconstruction from floods in Queensland. To help fund recovery and rehabilitation work, the Australian Government announced it would terminate certain industry assistance programs, including the Green Car Rebate Scheme and the Green Car Innovation Fund, saving around \$1 billion.

### Preferential trade agreements

In addition to participating in the Doha Round of multi-lateral trade talks, in recent years, the Australian Government has negotiated preferential trade agreements with several countries (including Singapore, Thailand, the United States, and Chile) and further bilateral arrangements are currently being pursued with China, India, Japan, Malaysia and Korea. Indonesia and Australia have commenced the negotiation of an economic partnership agreement, and the Australian Government is also pursuing a proposed Pacific Agreement on Closer Economic Relations Plus agreement with Pacific Islands Forum members and a proposed Trans-Pacific Partnership Agreement.

In November 2009, the Government asked the Productivity Commission to review the impacts of such agreements on trade and investment barriers and, more generally, on Australia's trade and economic performance. In its research report, *Bilateral and Regional Trade Agreements* (2010), the Commission recommended (among other things) that:

- bilateral and regional agreements should only be pursued where they are likely to afford significant net economic benefits and be more cost effective than other options for reducing barriers to trade and investment
- as far as practicable, discriminatory terms and conditions should be avoided in favour of non-discriminatory (most favoured nation) provisions
- agreements should not include matters that would serve to increase barriers to trade, raise costs or affect established social policies without comprehensive reviews of the implications and available options for change.

As part of its April 2011 Trade Policy Statement, the Australian Government responded to the Commission's report and recommendations. The Government endorsed the Commission's broad approach and agreed to nine of the ten recommendations.

### Trade & Assistance Review 2009-10

- > Productivity Commission Annual Report Series
- > Released July 2011



## State and territory assistance to industry

Industry assistance is also provided by state and territory governments through a diverse range of programs. The Commission's latest *Trade and Assistance Review* contains estimates of state and territory expenditures in 2008-09 on programs and services identified as supporting industry policy objectives.

- State and territory government assistance to industry totalled \$4.1 billion, equivalent to around \$184 per person Australia wide.
- Programs relating to primary industries and resources account for about 60 per cent of this expenditure (table 1). A significant proportion of primary and resources expenditure is for rural R&D support. In addition, state government drought support, including interest rate and transport subsidies, totalled over \$170 million.
- Victoria was estimated to have the largest expenditure on industry programs overall. On a per capita basis, expenditure on industry programs is highest in the Northern Territory, due largely to it having the highest per capita expenditure for tourism support (table 2).

**Table 1: Estimated state and territory government assistance to industry, 2008-09**

Portfolio grouping	Grants and other support	Employee expenses	Other operating expenses	Total expenditure
	\$ million	\$ million	\$ million	\$ million
Primary industry and resources	639.7	1078.5	758.1	2476.3
Industry, innovation and regional development	570.7	290.1	267.5	1128.3
Tourism	231.8	89.1	78.9	399.5
Film and screen	49.2	11.6	8.0	70.5
<b>Total</b>	<b>1493.1</b>	<b>1469.3</b>	<b>1111.9</b>	<b>4074.6</b>

**Table 2: Estimated state and territory government assistance to industry by jurisdiction, 2008-09**

Jurisdiction	Expenditure	Per capita (state)
	\$ million	\$ per person
New South Wales	722.8	101
Victoria	1059.5	193
Queensland	849.5	190
South Australia	516.1	315
Western Australia	591.6	261
Tasmania	160.6	318
Northern Territory	160.1	703
Australian Capital Territory	14.6	41
<b>Total</b>	<b>4074.8</b>	<b>184</b>

Source for tables: Productivity Commission 2011, *Trade & Assistance Review 2009-10*.

## Carbon emission policies in key economies

A recent Commission research report found that a wide range of emission-reduction policies have been implemented in key economies, with varying costs and effectiveness.



In November 2010, the Australian Government asked the Productivity Commission to undertake a study on the 'effective' carbon prices that result from emissions and energy reduction policies in Australia and other key economies (the UK, USA, Germany, New Zealand, China, India, Japan and South Korea). The Commission released a methodology working paper in March 2011, and the Research Report, *Carbon Emission Policies in Key Economies*, was released in June 2011.

### What policies have been implemented?

The Commission identified more than 1000 carbon policy measures in the nine countries studied, ranging from (limited) emissions trading schemes to policies that support particular types of abatement technology. As policies have been particularly targeted at electricity generation and road transport emissions, the Commission analysed major measures in these sectors.

Several of the study countries have introduced or have committed to emissions trading schemes. The United States and Germany are part of the European Union's cap-and-trade ETS (introduced in 2005) and New Zealand introduced its own scheme in 2008. Japan and South Korea have announced they will introduce ETSs, and China is considering trialling a pilot ETS in some provinces. There are also sub-national ETSs in place or proposed in 10 states in the north east of the United States (the Regional Greenhouse Gas Initiative); in seven US states and four Canadian provinces (the Western Climate Initiative); and in California.

The most widely applied emissions-reduction policies in the electricity generation sector are mandatory renewable energy targets (most with tradeable permits), feed-in-tariffs, and capital subsidies (often in conjunction with feed-in-tariffs). Countries seek to reduce emissions in the road transport sector primarily through fuel taxes, production subsidies for biofuels, vehicle fuel efficiency standards and/or labelling, fuel mandates, and differentiated vehicle taxes and subsidies.

## A taxonomy of existing emissions-reduction schemes

### Explicit carbon prices

Emissions trading scheme – cap-and-trade  
Emissions trading scheme – baseline and credit  
Emissions trading scheme – voluntary  
Carbon tax

### Subsidies and (other) taxes

Capital subsidy  
Feed-in-tariff  
Tax rebate or credit  
Tax exemption  
Preferential, low-interest or guaranteed loan  
Other subsidy or grant  
Fuel or resource tax  
Other tax

### Direct government expenditure

Government procurement – general  
Government procurement – carbon offsets  
Government investment – infrastructure  
Government investment – environment

### Regulatory instruments

Renewable energy target  
Renewable energy certificate scheme  
Electricity supply or pricing regulation  
Technology standard  
Fuel content mandate  
Energy efficiency regulation  
Mandatory assessment, audit or investment  
Synthetic greenhouse gas regulation  
Urban or transport planning regulation  
Other regulation

### Support for research and development (R&D)

R&D – general and demonstration  
R&D – deployment and diffusion

### Other

Information provision or benchmarking  
Labelling scheme  
Advertising or educational scheme  
Broad target or intergovernmental framework  
Voluntary agreement

## Estimating ‘effective carbon prices’

‘Effective’ carbon prices would need to include both explicit carbon prices from emission taxes and tradeable permits, and the implicit prices of other measures, such as direct regulation of technologies, renewable energy targets, or subsidies for low emissions technology. While the Commission found that no single ‘price’ could equate to all these, it was able to measure:

- what each country is spending on abatement programs (that is, the subsidy ‘equivalent’ of policies)
- the amount of abatement being achieved
- the average implicit abatement subsidy (that is, the subsidy per unit of abatement – a measure of what induced abatement ‘costs’).

---

The estimated cost per unit of abatement achieved varied widely, both across programs within each country and in aggregate across countries. Emissions trading schemes were found to be relatively cost effective, while policies encouraging small-scale renewable generation and biofuels have generated little abatement for substantially higher cost.

---

Other findings presented in the report include:

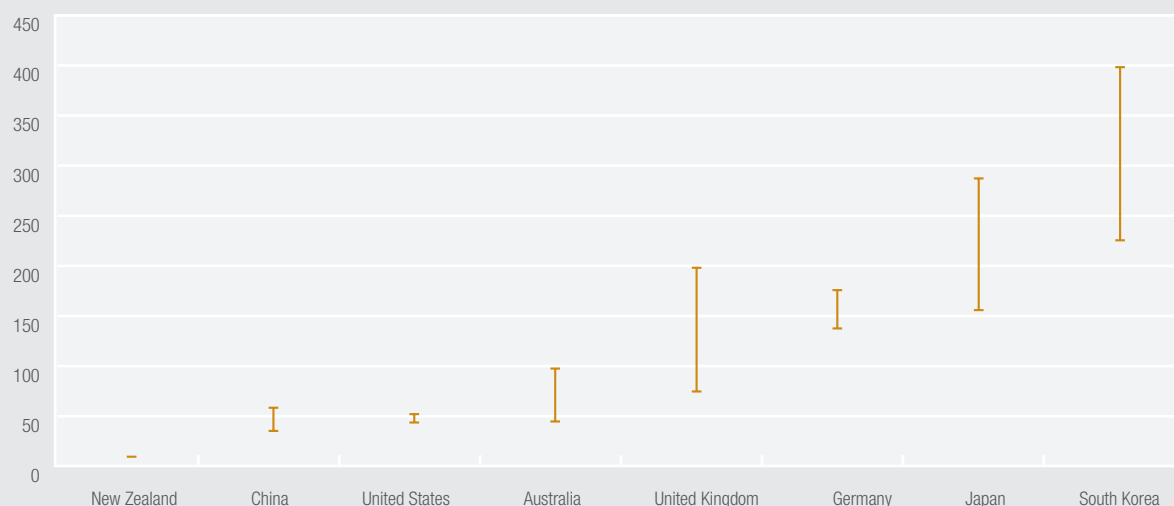
- As a proportion of GDP, Germany has allocated more resources than other countries to abatement policies in the electricity generation sector, followed by the UK, with Australia, China and the US mid-range.
- Estimates of abatement relative to counterfactual emissions in the electricity generation sector followed a similar ordering, with Germany significantly ahead, followed by the UK, then Australia, the US and China.
- The estimated price effects of supply-side policies have generally been modest, other than for electricity in Germany and the UK.

The report illustrated the relative cost effectiveness of price-based approaches for Australia by stylised modelling that suggests that the abatement from existing policies for electricity could have been achieved at a fraction of the cost.

However, the report notes that while the Commission’s estimates present a snapshot of the cost and cost effectiveness of major emissions-reduction policies in 2010, they are highly preliminary and sensitive to a range of assumptions. ►

## Implicit abatement subsidies vary widely for electricity generation 2009, 2010

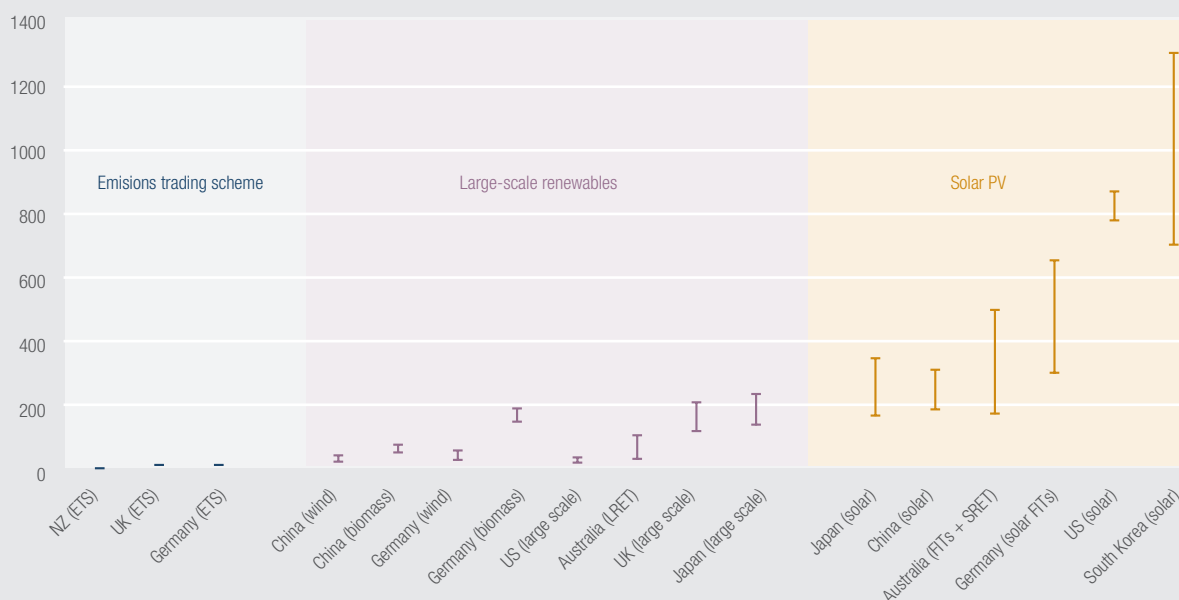
Average implicit abatement subsidy (A\$/t CO<sub>2</sub>)



Source: Productivity Commission 2011, *Carbon Emission Policies in Key Economies*, Research Report.

## Implicit abatement subsidies by technology and country Electricity generation, 2009, 2010

Implicit abatement subsidy (A\$/t CO<sub>2</sub>)



Source: Productivity Commission 2011, *Carbon Emission Policies in Key Economies*, Research Report.

Notes: ETS = Emissions trading scheme; FIT = Feed-in-tariff; LRET = large-scale Renewable Energy Target; SRET = small-scale Renewable Energy Target. The data used to prepare this graph reflect the Commission's revised estimates of the implicit abatement subsidy to solar PV in Australia.

The data used to prepare this graph reflect the Commission's revised estimates of the implicit abatement subsidy to solar PV in Australia.

## Carbon Emission Policies in Key Economies

> Productivity Commission Research Report

> Released June 2011

## Regulation reform

The Commission was asked by the Australian Government to undertake a research study on frameworks and approaches to identify areas of regulation reform and methods for evaluating reform outcomes.

Regulation has grown at an unprecedented pace in Australia over recent decades. As in other advanced countries, this has been in response to the needs and demands of an increasingly affluent society and an increasingly complex global economy. This regulatory accretion has brought economic, social and environmental benefits. But it has also brought substantial costs – some unavoidable, but others unnecessary for achieving the regulatory objective. Moreover, regulations have not always been effective in addressing the problems for which they were designed.

In recognition of these costs, and following the recommendations of the 2006 Regulation Taskforce, the Australian Government asked the Productivity Commission to undertake a series of reviews of the burdens of business from the stock of Commonwealth regulation.

In the fifth year of the Annual Review of Regulatory Burdens on Business, the Commission was asked to examine frameworks and approaches for identifying and prioritising areas of regulation reform. The study also examined methods and approaches for evaluating regulation reforms. A discussion draft was published in September 2011, and the final report *Identifying and Evaluating Regulation Reform* was released in December.

The report sets out a number of lessons on how to make the various tools and approaches for managing the stock of regulation more efficient, effective and appropriate.

There is no one approach or tool that can serve all needs. Rather, governments need to utilise a suite of approaches as part of managing the regulatory system. Good regulatory outcomes rely on the efficient choice and application of these tools. The study found that the Australian Government regulatory system, and the COAG reform processes employ an appropriate suite of tools. There are, however, areas that could be strengthened. These include:

- improving the incentives for regulators to adopt risk-based enforcement strategies, reduce compliance costs, and ensure that communication and consultation strategies are cost effective for business as well as the regulator
- ensuring proportionate and timely review of regulations that have a significant impact on business, through means such as stricter application and enforcement of the review requirements in the RIS, ensuring a more effective process for PIRs, and encouraging greater use of embedded reviews where there are significant uncertainties

- greater use of prioritisation processes for reviews and reform through adoption of explicit criteria and transparent prioritisation processes. The criteria could apply to sunset reviews, in-depth reviews and COAG SNE reform activity, and should include the cost of undertaking the review and implementing the subsequent reforms
- better communication of the review and reform activity and outcomes through more comprehensive and streamlined monitoring and reporting processes
- building government evaluation capabilities through greater requirements for ex-post evaluation of regulations with major impacts on business, and more structured learning by doing arrangements.

### Annual Review of Regulatory Burdens on Business

The Commission's series of reviews of regulatory burdens on business has covered the following areas:

2007 Primary sector

2008 Manufacturing sector and distributive trades

2009 Social and economic infrastructure services

2010 Business and consumer services

2011 Identifying and evaluating regulation reform

Completed reviews are available on the Commission's website.

### Identifying and Evaluating Regulation Reform

> Productivity Commission Report

> Released December 2011



# Multifactor productivity growth cycles at the industry level

Examining growth in industry productivity over industry-specific cycles, rather than from year to year, provides a better indication of underlying movements in technological progress.

Understanding productivity performance and its drivers at the aggregate market sector level requires a closer examination of the underlying productivity performance of individual industries. But interpreting movements in both aggregate and industry productivity measures is not entirely straightforward. A recent Productivity Commission Staff Working Paper identifies appropriate periods over which to examine average growth in productivity in individual industries.

## Why not just look at year-to-year variations in multifactor productivity?

Year-to-year changes in measured multifactor productivity (MFP) reflect not only technological progress, but also many temporary influences. One important such influence is change in the utilisation rate of capital. Ideally change in capital utilisation would be measured as a change in inputs, but because of limited data it appears as a change in measured MFP.

The Australian Bureau of Statistics identifies MFP growth cycles for the aggregate *market sector* of the economy. These are periods over which average growth in market sector MFP can be most appropriately compared. But cyclical influences can vary across industries, so cycles identified for the market sector are not necessarily those that will provide a good indication of technological change *within* an industry.

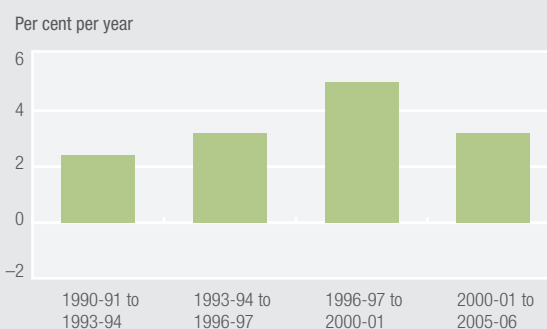
The Staff Working Paper identifies MFP growth cycles for individual industries within the market sector over the period 1985-86 to 2008-09. It finds that there is considerable variation in industry-specific cycles. For example, industries including Agriculture, forestry & fishing (AFF), Mining, and Wholesale trade have no cycles in common with the market sector, while all cycles identified for Manufacturing coincide with those for the market sector.

The set of cycles used to examine industry MFP growth can have a considerable effect on the pattern found. For example, the figure shows that, considered over industry cycles, MFP growth for AFF is exceptionally strong in the late 1990s cycle followed by a return to more average MFP growth in the 2000s. However, over the market sector cycles it might be concluded that there was a steep downward trend in MFP growth in the 2000s. One cyclical

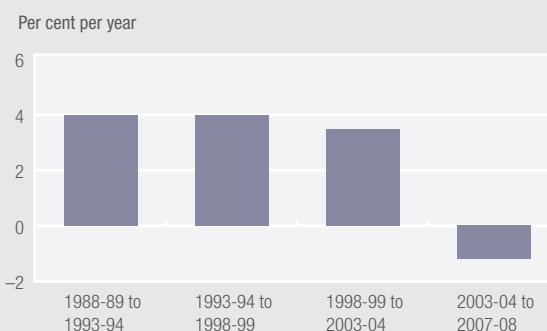
influence on AFF is drought – measured MFP falls during a drought and rebounds with the recovery from drought. A cycle identified for AFF will include both the fall *and* the recovery, so that average MFP growth over such cycles are not distorted by the effect of drought. But a market sector cycle may include the fall but not the full rebound associated with the drought, so looking at average annual MFP growth in AFF over such cycles may be misleading.

## Average annual MFP growth in Agriculture, forestry and fishing

### Industry cycles



### Market sector cycles



Source: Barnes, P. 2011, *Multifactor Productivity Growth Cycles at the Industry Level*, Productivity Commission Staff Working Paper

## Multifactor Productivity Growth Cycles at the Industry Level

- > Paula Barnes
- > Productivity Commission Staff Working Paper
- > Released July 2011

## Commission News

### New Commissioner appointed



**Jonathan Coppel** was appointed as a full-time Commissioner in July 2011. Immediately prior to his appointment, Jonathan was the Economic Counsellor to the OECD Secretary General. Previously he was head of the Office of the OECD Chief Economist, where he was

responsible for the OECD's contributions to the G20. While at the OECD, he held a range of other positions, including Executive Manager of the NEPAD-OECD Africa Investment Initiative, Senior Economist and expert on foreign direct investment, Deputy Counsellor to the Chief Economist, Head of the EU and UK Desks, and Climate Change Specialist in the OECD Economics Department. He has also been an Energy Analyst at the International Energy Agency.

Jonathan has previously held senior management positions in the Reserve Bank of Australia. He has also been a lecturer for the World Trade Institute's Mile Masters Programme in International Law and Economics and at Sciences Po Institute in Paris. Jonathan has an honours degree in economics from the Australian National

University, and a Masters in International Affairs (Economics and Management) from Columbia University in New York. ■

### A 'sustainable' population? 2011 Commission policy roundtable

The Commission's 2011 policy roundtable, held at Old Parliament House in Canberra in March, examined the topic *A 'Sustainable' Population? – Key Policy Issues*. Participants included government officials, academics, consultants and representatives of non-government organisations. Keynote addresses were presented by Professor Barry Chiswick from George Washington University, and Distinguished Professor Richard Arnott from the University of California, Riverside.

The roundtable aimed to shed light on the potential tensions between the various dimensions of 'sustainability' and projected population growth, and assess the implications for economic growth and community wellbeing. The proceedings of the roundtable are available on the Commission's website. ■

### New Melbourne office opening

The Commission's new Melbourne office was officially opened on 24th October 2011 by Assistant Treasurer Bill Shorten, at a function attended by current and former Commission staff.



Addressing the event, Minister Shorten stressed the importance of the work of the Commission, and congratulated the Chairman and staff for the contribution the Commission has made to public policy formulation in Australia. Minister Shorten is pictured at the function (right), with daughter Georgette, and Commission Chairman Gary Banks.

The Commission's Melbourne office is now located at 530 Collins Street. The relocation has enabled a significant reduction in rental costs, while still meeting the Commission's needs for adequate office space and meeting facilities. ■

## Commission news

### New inquiries and commissioned studies

#### Barriers to effective climate change adaptation

In this public inquiry the Commission has been asked to identify regulatory or policy barriers that inhibit effective adaptation to unavoidable climate change, and high priority options for addressing those barriers.

#### Australia's export credit arrangements

This public inquiry will review arrangements for the provision of export credit through the Export Finance and Insurance Corporation (EFIC).

#### Business regulation benchmarking: Role of local government as regulator

The Australian Government, with the agreement of COAG's Business Regulation and Competition Working Group, has requested the Productivity Commission to undertake a benchmarking study into the role of local government as a regulator. This study is the fourth in a series of reviews, conducted by the Commission, benchmarking regulatory burdens on Australian business. ■

*More details including contact information and key dates for all current Commission projects appear on page 28 and are available at [www.pc.gov.au](http://www.pc.gov.au)*

### Associate Commissioner receives Prime Minister's Award



At the 2011 National Disability Awards Ceremony held in Canberra in November, the Prime Minister presented a special award to John Walsh AM (pictured), in recognition of his outstanding contribution to the disability sector including his role as an Associate Commissioner on the Productivity Commission's recent inquiry into

long-term disability care and support. John is a Partner in the Advisory Practice of PricewaterhouseCoopers, and was named Actuary of the Year in 2001. He was also a member of the Disability Investment Group, which reported to government in 2009 on funding ideas to help people with disability and their families access greater support. ■

### Richard Snape Lecture 2011



The Productivity Commission's 2011 Richard Snape Lecture was presented in Melbourne on 11 October by Dr Roberto Newell, founding President of the Mexican Institute for Competitiveness, an independent think tank promoting policies to enhance Mexico's performance in the global economy. Dr Newell has had a distinguished career in the public and private sectors, including many years as a senior partner with McKinsey and Co., advising corporations and governments on regulatory issues, including in the financial sector. In a stimulating presentation, Dr Newell outlined the factors constraining Mexico's current economic performance, and the reform challenges it faces to ensure future economic and social prosperity. A printed version of the Lecture can be downloaded from the Commission's website. ■

### Brunei visit by Commission staff

John Salerian and Clare Sibly visited Brunei in November 2011 at the invitation of the Centre for Strategic and Policy Studies (CSPS), Brunei Darussalam. The purpose of the visit was to hold a two-day workshop with officers of CSPS and various ministries, on productivity, economic reform and Productivity Commission insights into how to achieve successful reform. The Commission staff also held a forum with Ministry of Trade officials, organised by the Australian High Commissioner, on productivity and the role and importance of regulatory reform. ■

## Recent releases

### December 2011

**Identifying and Evaluating  
Regulation Reforms**  
*Research Report*

**Carbon Emission Policies in Key  
Economies: Responses to Feedback on  
Certain Estimates for Australia**  
*Supplement to Research Report*

**Influences on Indigenous Labour  
Market Outcomes**  
*Staff Working Paper*

**Early Childhood Development  
Workforce**  
*Research Report*

### November 2011

**Industry Assistance in a  
'Patchwork Economy'**  
*Chairman's Speech*

**Schools Workforce**  
*Draft Research Report*

**National Agreement Performance  
Information 2010: National Education  
Agreement**  
*Steering Committee for the Review of  
Government Service Provision*

**National Agreement Performance  
Information 2010: National Agreement  
for Skills and Workforce Development**  
*Steering Committee for the Review of  
Government Service Provision*

### October 2011

**Barriers to Effective Climate Change  
Adaptation**  
*Issues Paper*

**Annual Report 2010-11**  
*Annual Report Series*

**Australia's Urban Water Sector**  
*Inquiry Report*

**Political Economy of Reform in  
Mexico**  
*Dr Roberto Newell  
Richard Snape Lecture 2011*

### September 2011

**Independent Policy Advice and the  
Productivity Commission**  
*Chairman's Speech*

**Competition, Innovation and  
Productivity in Australian Business**  
*Productivity Commission and Australian  
Bureau of Statistics Joint Research Paper*

### August 2011

**National Partnership Agreement  
on Essential Vaccines**  
*Steering Committee for the Review of  
Government Service Provision*

**Overcoming Indigenous Disadvantage:  
Key Indicators 2011**  
*Steering Committee for the Review of  
Government Service Provision*

**Economic Regulation of Airport  
Services**  
*Draft Inquiry Report*

**Disability Care and Support**  
*Inquiry Report*

**Caring for Older Australians**  
*Inquiry Report*

**Economic Structure and Performance  
of the Australian Retail Industry**  
*Draft Inquiry Report*

### July 2011

**Multifactor Productivity Growth  
Cycles at the Industry Level**  
*Staff Working Paper*

**A 'Sustainable' Population? –  
Key Policy Issues**  
*Roundtable Proceedings*

### June 2011

**Australia's Mining Boom:  
What's the Problem?**  
*Chairman's Speech*

**Early Childhood Development  
Workforce**  
*Draft Report*

**Identifying and Evaluating  
Regulation Reforms**  
*Issues Paper*

**Identifying and Evaluating  
Regulation Reforms**  
*Discussion Draft*

**Trade & Assistance Review 2009-10**  
*Annual Report Series*

**Rural Research and Development  
Corporations**  
*Inquiry Report*

**Carbon Emissions Policies in  
Key Economies**  
*Research Report*

All publications can be downloaded  
from the Commission's website  
[www.pc.gov.au](http://www.pc.gov.au)

# Current commissioned projects

7 December 2011

Full details of all current projects available at [www.pc.gov.au](http://www.pc.gov.au)

## Australia's Export Credit Arrangements – *Public Inquiry*

Issues paper released October 2011.  
Draft report due February 2012.  
Final report to Government May 2012.

Contact: Alex Maevsky (03) 9653 2230  
Email: [exportcredit@pc.gov.au](mailto:exportcredit@pc.gov.au)  
[www.pc.gov.au/projects/inquiry/export-credit](http://www.pc.gov.au/projects/inquiry/export-credit)

## Barriers to Effective Climate Change Adaptation – *Public Inquiry*

Issues paper released October 2011.  
Draft report due April 2012.  
Final report to Government September 2012.

Contact: Anthea Long (03) 9653 2162  
Email: [climate-adaptation@pc.gov.au](mailto:climate-adaptation@pc.gov.au)  
[www.pc.gov.au/projects/inquiry/climate-change-adaptation](http://www.pc.gov.au/projects/inquiry/climate-change-adaptation)

## Business Regulation Benchmarking: Role of Local Government as Regulator – *Commissioned Study*

Issues paper released September 2011.  
Draft report due March 2012.  
Final report to Government July 2012.

Contact: Sue Holmes (02) 6240 3351  
Email: [localgov@pc.gov.au](mailto:localgov@pc.gov.au)  
[www.pc.gov.au/projects/study/regulationbenchmarking/localgov](http://www.pc.gov.au/projects/study/regulationbenchmarking/localgov)

## Economic Regulation of Airport Services – *Public Inquiry*

Issues paper released January 2011.  
Draft report due August 2011.  
Final report to Government December 2011.

Contact: Adam Sheppard (02) 6240 3294  
Email: [airport-regulation@pc.gov.au](mailto:airport-regulation@pc.gov.au)  
[www.pc.gov.au/projects/inquiry/airport-regulation](http://www.pc.gov.au/projects/inquiry/airport-regulation)

## Education and Training Workforce: Schools – *Commissioned Study*

Issues paper released June 2011.  
Draft report released November 2011.  
Final report to Government 22 April 2012.

Contact: Leonora Risse (03) 9653 2198  
Email: [schools@pc.gov.au](mailto:schools@pc.gov.au)  
[www.pc.gov.au/projects/study/education-workforce/schools](http://www.pc.gov.au/projects/study/education-workforce/schools)

## Impacts and Benefits of COAG Reforms – *Commissioned Study*

Framework report released January 2011.  
Discussion draft to Government December 2011  
Final report to Government 31 March 2012

Contact: Owen Gabbitas (Regulation)  
(02) 6240 3273  
Lou Will (VET and School Transitions)  
(03) 9653 2224  
Email: [coagreporting@pc.gov.au](mailto:coagreporting@pc.gov.au)  
[www.pc.gov.au/projects/study/coag-reporting](http://www.pc.gov.au/projects/study/coag-reporting)