

new direction for nsw

NSW GOVERNMENT STATEMENT ON



# innovation



## MESSAGE FROM THE PREMIER

This innovation statement—a key part of our 'Open for Business' strategy—marks a new direction for NSW.

The NSW Government is determined to focus its efforts on those industries that are most important to the State economy.

We will concentrate on the sectors where we have a clear comparative advantage such as logistics, resources and finance.

These are the sectors with the greatest potential for innovation-driven growth, provided we carefully target our investment where it will produce the best returns.

This new approach is most clear in the coal industry, our largest export earner and one of the State's biggest sources of employment.

Given the impact of global warming, the demand for coal will be under threat unless we can find new ways of reducing its environmental effects. This is precisely the sort of area where investing in innovation makes the best sense.

Our innovation policy is a commonsense, realistic approach which is unapologetically different from what other jurisdictions are doing.

It's all about refusing to be swayed by passing fads and fashions, but instead building on our strengths and doing what we do best.



**Morris Iemma**  
Premier of NSW



## Background

As part of the Government's Economic and Financial Statement, the Government asked Professor Jonathan West, a world expert in innovation, formerly Associate Professor at Harvard Business School, to provide advice on an innovation strategy for NSW.

Professor West has presented his first paper including recommendations on a framework for development of innovation policy to the NSW Cabinet. He is continuing work on Research and Development Priorities in NSW; Innovation and Regional Development; and International Comparisons of Government Programs to Promote Innovation.

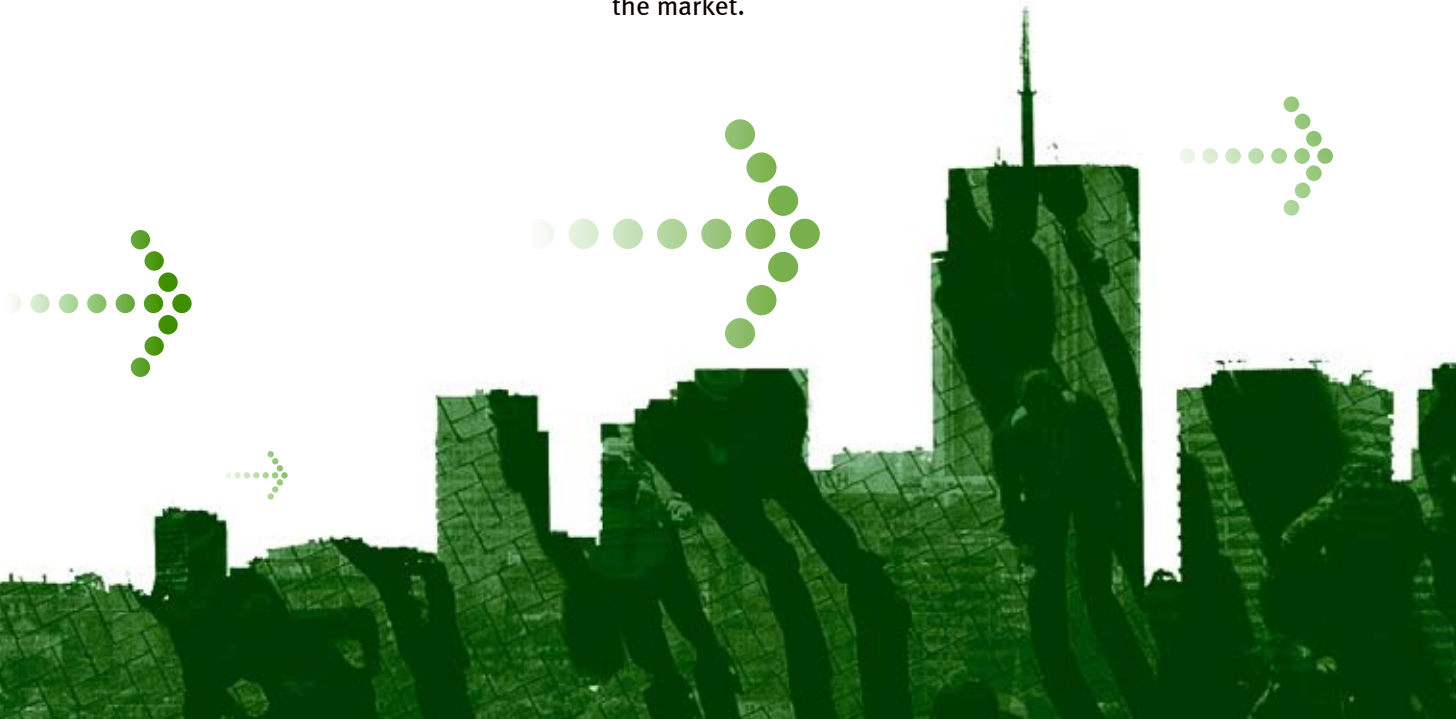
This Statement is a response to Professor West's first paper and provides the Government's framework for innovation policy.

The approach is an integral part of the NSW Government's Open for Business campaign. It will shape NSW Government economic policies towards enhancing industry innovation as a means of improving productivity and increasing business investment.

## NSW Government Framework for Innovation

The Government sees this innovation strategy as a key part of its commitment to support economic growth in NSW, and accepts the three core principles underlying Professor West's proposal:

1. That the efforts of government to support and build innovation should be focused on those industries that are most likely to produce benefits for the broader economy, and where innovation will be boosted by the Government's support.
2. That policies and support to these sectors should be based on an analytical understanding of the actual innovation processes specific to these sectors in the NSW economy.
3. That the Government's role in supporting innovation should be focused on complementing, not replacing the market.



## Principle 1

► **Focus on those industries that are most likely to produce benefits for the broader NSW economy.**

The first sectors for investigation and focus will be:

1. Logistics and transaction services
2. Financial services
3. Entertainment, design and media
4. Manufacturing
5. Resources — especially coal

Innovation takes place across the whole of the economy—not just the high-tech industries. In this context the five sectors identified by Professor West are the starting point for new work—but the Government acknowledges that other sectors such as agriculture, tourism and medical research play key roles in the NSW economy and the Government will not be losing focus on these sectors.

## Principle 3

► **Government intervention should aim to complement, not substitute for or compete with activities of private companies.**

This innovation approach is based on working in partnership with industry to identify what is the best role for government, where the market is unlikely to produce the best result. This may typically include a positive regulatory approach, and providing the right foundations through appropriate education, infrastructure, and access to applicable technologies.

The NSW Government will also endeavour to work with the Commonwealth on this important task, encouraging the Commonwealth Government to redirect its programs to support the focus NSW identifies for the nation's leading economy.

## Principle 2

► **Evidence based approach to supporting innovation.**

As with the approach the Government is taking in its State Plan and other key government decision making, there is recognition that involvement and intervention in key sectors should be undertaken only after acquiring deep knowledge of the role that innovation plays in how the sector operates.

Innovative firms rely on three forms of support that are of particular importance: access to science and technology, access to capital, and high quality information and knowledge infrastructure. Analysis of the sectors that the government is focusing on will assess the degree to which these factors are present.

The NSW Government's approach will never be to blindly follow the same trends or fads of other governments around the world. Typically, the fashionable sectors relate to the current areas of 'high' technology breakthroughs. Insufficient consideration is sometimes given to whether the local economy has any particular strengths and advantages or a track record in the areas, and the wisdom of chasing the same specialisations as many others.



# 5 *the five goals of innovation policy in nsw*

The Government is adopting 5 goals of Innovation Policy as suggested by West:

- 1 Improve human capital.
- 2 Upgrade knowledge and information infrastructure.
- 3 Reduce the cost to business of utilising science and technology.
- 4 Encourage capital allocation to invest in innovation.
- 5 Reduce regulatory barriers to innovative NSW companies.





## 1 Improve Human Capital.

The NSW Government provides a key platform of growth for growth through its role in primary and secondary school education and vocational training. There are over 740,000 students enrolled in public schools and more than 510,000 people enrolled in TAFE colleges across NSW. A key part of future training will be closer links between schools, TAFE and local businesses. We will mirror this approach when looking at investments in education for high-level skills. In some sectors the NSW Government will play a more active role in development of high-level skills and expertise. In doing so, we will explicitly link our support to industry and sector workforce demands.



## 2 Upgrade Knowledge and Information Infrastructure.

Just as the State routinely provides the physical infrastructure to support the economy, getting the right knowledge and information infrastructure is also critical. The Government should not compete with the private sector here but supplement and support the private sector.

Already, the provision of broadband services to rural NSW by the Department of Commerce is a good example of this approach.



## 3 Reduce the cost to NSW Business of utilising science and technology.

The NSW Government will work to make intellectual property generated in institutions it supports—including universities and other research organisations—more readily available to businesses that can make best use of it. The Government will ask its new Innovation Unit to recommend the best means of achieving this objective.



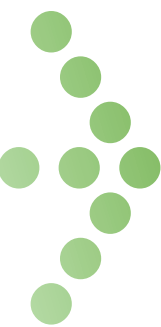
## 4 Encourage Capital Allocation to Invest in Innovation.

The NSW Government agrees with Professor West's finding that the NSW economy may benefit from greater private capital allocation to innovation, and will investigate appropriate means to implement this objective.



## 5 Reduce regulatory barriers to innovative NSW Companies

The Government has shown a strong commitment to reducing the burden of red-tape on NSW businesses. Moving forward, government activity in supporting innovation will include identifying regulations that impede innovation in key sectors.



## 5 KEY ACTIONS

### 1. A Dedicated Innovation Council and Secretariat to drive implementation

We will establish an Innovation Council reporting directly to the Premier in his capacity as Minister for State Development with an analytical secretariat supported by the Department of State and Regional Development to implement this innovation approach.

The Council's first task will be an analysis of the opportunities for government to improve the innovation capability of the five identified sectors.

The Council will be comprised of senior leaders in business and innovation and Professor West, and key Government officials: Secretary of the NSW Treasury, Director-General of the Department of State and Regional Development, and the Director General of the Premier's Department.

### 2. Wireless Broadband Infrastructure

The NSW Government believes that the citizens of NSW deserve access to state-of-the-art wireless broadband. As one of the world's great cities, Sydney in particular should enjoy the fastest and most available broadband access available anywhere. Such facility will provide NSW citizens with direct access to global information flows, supporting innovation across the economy

The NSW Government will conduct an expression of interest to solicit proposals from the world's leading providers, and will work with the best of these to make this plan a reality.

The NSW Metropolitan Strategy identifies seven cities within and around Sydney that will be the focus of government planning over the next twenty years to ensure there are more jobs closer to home. The cities are Sydney CBD (including North Sydney), Parramatta, Gosford, Penrith, Liverpool, Newcastle and Wollongong.

To further support the 'City of Cities' approach the Government will initiate an EoI by the end of 2006 for the seven cities to establish comprehensive wireless broadband coverage across these CBDs.

Providing wireless accessibility at high bandwidths will increase the desirability of each location to business.

Tourists and business visitors are becoming more demanding and accustomed to the extent of wireless accessibility available in US and Europe, through which they can access travel information, booking and reservation sites, and access email. NSW residents desire the same standard of access.

The Expression of Interest will specify that:

- The Government is seeking interested parties to build, own, operate and maintain their own wireless broadband network.
- The network is preferred to have extensive indoor and outdoor coverage of, as a minimum, the CBDs of the listed cities. Consideration will be given to additional locations proposed by respondents.
- The Government expects that the selected respondent will be able to offer a low setup cost solution ideally providing free low-capacity service; the Government acknowledges that some commercial restrictions will apply and these are to be clearly identified.
- The Government expects that the selected respondent will be able to offer a high capacity solution providing portable, mobile, nomadic data service of at least 5 Mbps symmetrical data transmission.
- The Government envisages that it may be able to provide access to Government buildings, water tanks and towers, parking ramps, street and traffic lights as well as other Government-owned facilities, however this may incur access charges.
- The Government will also work with utility companies which own several thousand utility poles in the area that the network will encompass
- The Government may be prepared to use its own needs as a service-user to provide commercial support.
- The Government reserves the right to consider alternative solutions and counter proposals.

#### TIMELINE FOR WIRELESS BROADBAND ROLL OUT TO THE 7 CITIES

Q1 2007	Q2 2007	Q3 2007	Q4 2007	2008	2009
EoI to market	EoI decision	Design and Construction	Operation and Government Pilot		



### 3. Institute for Advanced Research in Finance

The NSW Government believes that as a global financial leader, Sydney should host one of the world's top five centres of advanced research in finance. This is a long-term objective but we will begin work in collaboration with the financial and education sectors to build such an institution.

The NSW Government, in conjunction with the private sector and the universities, will look to establish an Institute of Advanced Finance. Such an Institute will undertake leading-edge research that links NSW with global thinking in finance, and provides advanced-level training and education to those people with high-end skills. The Government understands that building such an institution will require sustained commitment over a number of years but foresees the result will be an equivalent in finance of the Garvan or Walter and Eliza Hall Institutes in medical research.

Stage one of the program will be to work with the private sector to identify key skills likely to be required in the finance industry in the coming years.

We will then bring together key representatives from the finance sector, government and the universities to develop international quality programs for the targeted skill areas.

### 4. Clean Coal Research

No greater need for innovation in NSW industry exists today than in the coal industry.

The NSW Government sets itself the target of becoming a world centre of research in clean coal technology.

The coal industry accounts for around 19% of NSW merchandise exports, and NSW provides 13% of total world exports of coal (valued at \$4.45 billion).

But the electricity sector also accounts for 35% of greenhouse emissions in NSW.

The NSW Government is pursuing a number of measures to ensure we retain the benefits of our successful coal industry, but at the same time take steps to reduce the greenhouse emissions associated with coal-fired electricity generation. The NSW Government is a partner of the Coal21 National Action plan and the Cooperative Research Centre for Greenhouse Gas Technologies (CO<sub>2</sub>CRC), both of which support clean coal technologies. The NSW Government recently established the NSW Clean Coal Technologies Working Group to identify priorities and targets to reduce carbon emissions from coal.

Innovation to reduce the greenhouse effects of coal needs to be at the centre of this work.

NSW generation companies are engaged in continuous improvements to existing technologies. But more needs to be done—and this is where government support is necessary.

As a symbolic first step, NSW will develop an initiative aimed at stimulating technological innovation associated with carbon dioxide capture and storage (geosequestration). Geosequestration is acknowledged by the Stern Review as one of the leading technologies to help reduce greenhouse gases.

#### **GEOSEQUESTRATION PROJECT**

**AIM: To identify potential sites in NSW that could be used for substantial storage of carbon dioxide (say 50 million tonnes per annum) and develop and deploy appropriate capture and storage technology at a trial site.**

**Stage 1:** Initial feasibility study of sites for storage (a joint venture among coal companies, research institutions, generation companies and the Department of Primary Industries) .

**Stage 2:** Detailed geological assessment and commencement of technology acquisition and development to address challenges of sealing, liquefaction and pipeline transport.

**Stage 3:** Trial injection at a chosen site.

The Newcastle Ports Corporation is also sponsoring a PhD research fellowship into clean coal in conjunction with Newcastle University.

### 5. Government financial support to R&D and Innovation

The NSW Government will aim to build NSW's share of Australian government supported R&D resources, which has declined in recent years. It will build on the Premier's announcement of the Science Leveraging and Greenhouse Innovation Funds. In particular, the Government will seek to participate actively in the Commonwealth Government's Low Emissions Fund and gain a substantial share of national research activity in this field.

The NSW Government will also work to align its support for R&D activity more closely with the needs of the State economy. Financial support for innovation and research from NSW Government will increasingly be directed to those industries which can be expected to produce the largest benefit for the NSW economy. The Government will focus its support towards research proposals that demonstrate an outcome which will contribute to the innovation capability of key sectors of the NSW economy.

The Government's current approach is consistent with Professor West's view that there are better ways to support innovation than direct grants.

The Government will adopt the approach of 'tilting the playing field in favour of productive investment in innovation projects'. The Government will not create free grant programs for companies, and future financial support will be based on private sector partners accepting the investment risk with the expectation that they will enjoy commensurate returns.



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