



New Leadership.



An innovation future for Australian industry

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ELECTION 2007

Overview

Innovation is a key driver of productivity and economic growth, particularly for advanced economies such as Australia. Innovation drives the creation of new businesses and sectors and revitalises existing industries.

Problem solving, creative ideas and new technologies are also vital to meeting the social and environmental challenges we face as a nation – from population ageing to climate change.

Yet the Howard Government has ignored the innovation imperative.

After 11 years, Australia compares poorly with competitor countries on too many indicators, including: business investment in research and development (R&D); the number of PhDs in the workforce; and low growth in business productivity and exports of goods and services.

Australia's innovation system is weakened by a cultural divide between public research and private business, and a lack of national policy coordination. A Rudd Labor Government will build a truly **national innovation system**.

Federal Labor will put the right policy framework in place, implementing a range of initiatives to: bridge the divide between industry and research; ensure that business has better access to new ideas and new technology; and increase innovation incentives across the economy.

A key initiative is Federal Labor's **\$200 million Enterprise Connect network**, aimed at connecting businesses to new ideas and new technologies.

This will include a national network of **Manufacturing Centres**, a **Clean Energy** Innovation Centre, a **Creative Industries** Innovation Centre and a **Remote Enterprise** Centre. In addition, Federal Labor's *Enterprise Connect* initiative will include:

- An **Innovative Regions Centre** with funding of \$20 million to provide hands-on support to small and medium sized companies, boost local economies and create new jobs in areas that are experiencing adjustment pressures.

- \$10 million for a **Researchers in Business** initiative, to build strong research links and develop the commercial potential of news ideas.

Federal Labor will restore the key place of science and innovation in our community, with a **full time Chief Scientist** and a **reinvigorated CSIRO**.

A Rudd Labor Government will value the breadth of Australian research effort across the humanities, creative arts and social sciences as well as scientific and technological disciplines and will revitalise Australia's public research sector.

This includes doubling the number of **Australian Postgraduate Awards** for PhD and Masters by Research students, and creating 1,000 new four year **Future Fellowships** to keep our best and brightest mid-career researchers in Australia.

To help address Australia's chronic shortage of qualified mathematicians and scientists, Federal Labor has committed to **halving HECS fees for maths and science students**, and halving their repayments if they take up jobs in key fields, like teaching.

Federal Labor's Education Revolution also includes a clear commitment to early childhood education; the creation of 450,000 additional training places; a \$2.5 billion investment over ten years to build Trades Training Centres in each of Australia's secondary schools; and putting a computer on the desk of every student in Years 9 to 12.

High speed broadband is a vital underpinning for an innovation economy. A Rudd Labor Government will invest up to \$4.7 billion to establish the **National Broadband Network** in partnership with the private sector.

A Rudd Labor Government will also work in partnership with industry to support innovation that addresses the challenge of climate change, by establishing:

- **Clean Business Australia**, with an investment of \$240 million to support: a Re-tooling for Climate Change grants program; Climate Ready support for R&D and early stage commercialisation of environmentally friendly products; and a Green Building Fund.
- A \$150 million **Energy Innovation Fund** and a \$50 million **geothermal initiative**.
- A \$15 million **Clean Energy Export Strategy** to help Australian businesses take a larger slice of the renewable energy market, working alongside the Innovation Centre.
- A \$500 million **Green Car Innovation Fund** to develop and build fuel efficient vehicles in Australia.

In the 21st century, innovation policy is industry policy. Federal Labor's approach will therefore be underpinned by bringing responsibility for innovation, industry, science and research into one Department to provide national leadership. Federal Labor will also establish **Industry Innovation Councils** to foster ongoing partnerships across the value chain in key sectors and develop a long-term approach to boosting productivity.

A Rudd Labor Government will build a strong national innovation system, bridging the cultural divide between public research and the private sector. Innovation will be valued as a driver of economic prosperity and harnessed to address national challenges.

Australia's innovation performance

Australia's key economic challenge is to maintain our prosperity for the long term. Our innovation performance will be critical to meeting this challenge. According to the OECD:

*"Most of the rise in material standards of living since the industrial revolution has been the consequence of innovation."*¹

However, Australia is falling behind its competitors in what has been described in a recent United Kingdom Government review as the "race to the top".²

The World Economic Forum's latest *Global Competitiveness Index* shows Australia ranking 22nd on innovation performance – languishing behind our major regional competitors, including Japan, Korea, Taiwan, Singapore and Malaysia.

The major impediments to an improved innovation performance in Australia are low expenditure on business R&D and weak linkages between public researchers and industry.³

Over the last 11 years, the innovation gap has widened – particularly regarding the treatment of publicly funded research and its accessibility by Australian business.

According to the ABS, in 2004 and 2005, just over a third of Australia's businesses undertook some form of innovation – meaning almost two thirds were classified as 'non-innovators'.⁴

Funding of the Howard Government's innovation programs has been ad hoc, characterised by a lack of coordination between federal departments.

The Howard Government has refused to enter into a national dialogue with the State and Territory Governments to build a coordinated innovation system, despite the fact that there are currently 169 separate innovation programs across the country.⁵

It has also refused to engage in national policy discussions, such as the National Manufacturing Forum (NMF) that was convened by the State and Territory Industry Ministers with representation from industry groups, unions and research organisations.

Business research and development has suffered

Early decisions taken by the Howard Government – such as halving the R&D tax concession – have had a lasting impact.

Between 1995 and 2001, Australia was one of only three OECD countries to reduce its tax benefits for business R&D, while 12 countries increased the level of support.⁶ In 1999, Australia ranked equal 7th in the OECD on small and medium business tax subsidies for R&D – by 2006, this had dropped to 14th. For large firms, Australia's relative support levels have dropped from 6th to equal 11th.⁷

Australia's current rate of business R&D expenditure, at 1.04 per cent of GDP remains well below the OECD average of 1.53 per cent.⁸

The rate of growth in business R&D under the Howard Government has been less than half of that achieved under the former Labor Government.⁹ If the growth rate achieved under Labor had been maintained over the last 11 years, investment would now be more than double today's figure.

Public research has been undermined

Research and scholarship undertaken in Australia's universities and public research agencies is critical to helping us solve the problems we face today and meet the challenges of the future – including terrorism, population ageing, social inclusion and climate change – as well as to improving business management practices and technologies.

The Howard Government's neglect of public research and scholarship belies Australia's history as a thoughtful and inventive nation – the country that boasts more Nobel Prize winners per capita than any other.

Under the Howard Government, public investment in tertiary education has fallen by 4 per cent at the same time the average OECD investment increased by 49 per cent – making Australia the only country to reduce public investment over this period.¹⁰

The Howard Government has reduced federal funding for higher degree programs by 20 per cent in real terms between 2002 and 2005. It has failed to provide opportunities for our workforce to be educated to the same levels as our competitors – with only 7.8 PhD holders per 1,000 workers in Australia, compared to 21.1 in Germany and 8.2 in Canada.

The Productivity Commission's recent report on *Public Support for Science and Innovation* confirmed the problems in Australia's innovation and public research system, saying that major improvements are needed.

According to the Howard Government's own figures, the cumulative maintenance backlog for university infrastructure stands at \$1.5 billion. The Howard Government's Higher Education Endowment Fund, introduced in 2007 to fund university infrastructure, will yield between \$300 and \$400 million a year – meaning it will take around five years just to clear the backlog of neglect.¹¹

Of particular concern is the future capacity of CSIRO. Eleven years of under-resourcing and Howard Government interference has reduced the capacity of CSIRO and the breadth of its research effort. This is evident in a number of areas:

- CSIRO is facing an infrastructure crisis.
- An emphasis on revenue from short-term commercialisation has skewed CSIRO's research focus.
- A loss of research skills and a contraction in job security and research career paths.

Our competitors are moving ahead

Australia's competitors – both developed and developing – are taking seriously the contribution of R&D and innovation to economic growth and competitiveness.

China's gross R&D expenditure has more than doubled as a proportion of GDP since 1995, and it is committed to lifting its gross R&D expenditure as a proportion of GDP to 2.5 per cent by 2020 – compared with Australia's current 1.8 per cent.

This expansion comes at a time when multinational firms are increasingly looking to internationalise their R&D efforts.¹²

China is now identified by multinational companies as the most attractive location for R&D investment, with India rated third (behind the United States).¹³ Australia rates only 18th of 33

countries in the same survey, behind developed countries such as Canada, as well as regional competitors like Malaysia, South Korea and Thailand.

In recognition of the changing economic geography of competition in the 21st century, other developed countries have been lifting their game. For example:

- The UK Government has increased its R&D tax credit for small business from 150 to 175 per cent and for other companies from 125 to 130 per cent; and
- New Zealand has introduced a 15 per cent tax credit (equivalent to a 150 per cent concession under the Australian scheme).

The US response has been characterised by both a holistic framework of thinking and a sense of urgency. Both of these characteristics are absent under the Howard Government.

The economic impact of the Howard Government's neglect

Australia's poor innovation performance over the last 11 has contributed to the fall in productivity growth under the Howard Government:

- Over the five years to 1998-99, labour productivity grew by an average of 3.3 per cent a year. It then fell to just 2.1 per cent a year over the five years to 2003-04. Three years into the current productivity cycle, productivity growth is further below its long run average, growing at an annual rate of just 1.1 per cent per year.¹⁴
- Multifactor productivity growth has also slowed – falling from an average of 2.3 per cent a year over the five years to 1998-99 to 1.1 per cent a year over the five years to 2003-04.

Export growth has slowed significantly since the 1990s. The value of total exports grew at an annual rate of 10.7 per cent between 1983 and 1996. Since then, average annual growth has fallen to 6.8 per cent – despite booming resource prices.¹⁵

Under the Howard Government, Australia's current account deficit sits at 5.7 per cent of GDP and our net foreign debt has blown out to over \$540 billion.

Opportunities lost

Australia has also missed out on major economic opportunities because of the Howard Government's poor policy settings.

For example, according to Ernst and Young the global market for renewable energy is expected to be worth US\$750 billion annually by 2016. Australia's clean energy industry is well placed to grow significantly in the next decade and beyond – if we adopt the right policy settings. But under the Howard Government renewable energy investments in Australia have too often been delayed or abandoned – with a number of projects going offshore.

The Howard Government's Industry Statement made no mention of responding to climate change or working with Australian businesses to take advantage of the opportunities offered by clean energy, clean technology and improved production processes.

The Howard Government has also neglected manufacturing as a sector of ongoing research, technology and production importance to Australia, and a source of satisfying, high wage, high skill jobs.

Australia's advanced manufacturing sector is highly regarded for the quality of its products and the creativity of its engineers and designers.

Global competition is driving Australia's manufacturers up the value chain, towards increasingly complex integration of electronics and information technology, and into the manufacture of micro and nano scale particles, and their incorporation into consumer and industrial products.¹⁶

Advanced manufacturing companies are also increasingly offering holistic advice and support on process innovation – a clear example of the more widespread shift towards service-enhanced manufacturing. In addition, complex manufactured goods provide considerable scope for the development of after sales technical support, operations teaching and training, and ongoing engineering and construction services.¹⁷

A recent Parliamentary Inquiry into the future of the manufacturing sector made it clear that the Howard Government has let the industry down with its limited approach and failure to work with the States and Territories to build a strong national innovation system.¹⁸

Australia also has tremendous opportunity in the information and communications technology (ICT) sector. The growth of the ICT sector will create more high skilled and well paid jobs. It will also help drive productivity growth across the economy, with recent government studies showing that ICT innovation has been responsible for up to 85 per cent of productivity growth in the manufacturing sector and up to 78 per cent of productivity growth in the service sector.

In the mining sector, ICT has revolutionised many activities through use of technologies such as three dimensional graphical ore body evaluation and blast and mine design; mineral sampling software; seismic monitoring and geologic sensing; monitoring the condition and maintenance of equipment; and data collection and transfer.

Australia's potential success in ICT industries is being held back by our poor broadband performance, with a US think-tank, the Information Technology and Innovation Foundation, recently ranking Australia's broadband speed as 26th out of 30 OECD countries – behind Hungary and the Slovak Republic. Australia must have better ICT infrastructure if the true potential of this sector is to be realised.

Federal Labor's plan for innovative Australian industry

Building a culture of innovation

For Australia to move forward in the 21st century knowledge economy, we need to build a culture of innovation across the economy – from the classroom to the board room; from the laboratory bench to the factory floor.

Federal Labor has a comprehensive plan to build a national innovation system in cooperation with business and the States and Territories – most of which have their own innovation strategies¹⁹ – to ensure Australia remains competitive in the future.

A ten point plan for the future

Federal Labor has laid out a ten point framework for its innovation policy:

1. Build a culture of innovation and new ideas by strengthening investment in creativity and knowledge generation.
2. Focus incentives for business R&D to promote global competitiveness, delivering the best outcomes for exports and economic growth.
3. Accelerate the take up of new technology, so Australian firms can access the best ideas from around Australia and the rest of the world.
4. Make Australia's innovation system truly international, by supporting partnerships, collaboration and foreign investment in Australian R&D.
5. Use government procurement to support innovative Australian firms.
6. Strengthen publicly funded innovation and research infrastructure so as to and develop multiple pathways for industry to access the knowledge and expertise in universities and research agencies.
7. Strengthen the skill base for innovation, including in maths, science and engineering, and professional training for firms to manage innovation.
8. Develop and implement a set of national innovation priorities, with a broader focus than the current national research priorities.
9. Strengthen the governance of the national innovation system to support higher expectations of government agencies and industry.
10. Review the bewildering array of government innovation and industry assistance programs to reduce duplication and improve effectiveness.

Improved governance and coordination

Federal Labor will promote a coordinated approach to innovation by bringing together the key policy areas of industry, science and research within the one Department to provide the leadership that is required to build a national innovation system.

A key objective of a Rudd Labor Government will be to improve connections across government and ensure that effective use is made of existing expertise. Federal Labor will seek to more closely integrate trade, industry and innovation programs, recognising that trade promotion activities are going to be most effective with a strong base of innovative industries and a clear understanding of Australian business capabilities – building on the success of the Industry Capability Network.

Science and innovation ambassadors

A Rudd Labor Government will make the office of the Chief Scientist a full-time position. This position should act not simply as a source of high-level advice to government but also as an advocate, directly involved in promoting science to secondary and tertiary students.

Federal Labor will also use the \$5 million currently allocated to the Innovation Ambassador role of the new Innovation Australia Board to establish a stronger Innovation Ambassadors program with a broader remit than that of the Innovation Australia Board.

Building a highly skilled workforce

Innovation is where 'white coat meets blue collar' and an innovative, creative economy requires a wide range of highly skilled tradespeople, scientists, engineers and professionals.

Investment in education at all levels is essential if Australia is to build the workforce of the future, maintain its competitiveness and secure its long-term economic prosperity. Federal Labor's Education Revolution includes:

- An investment of \$450 million to provide early childhood learning or pre-school for all four year olds for 15 hours a week, 40 weeks a year, with a fully trained teacher.
- Funding an additional 450,000 skilled training places over the next four years – 200,000 more than the Howard Government.
- \$2.5 billion over ten years to build trades training centres in each of Australia's secondary schools.
- A *National Secondary School Computer Fund* to allow every Australian student in years 9 to 12 to have access to their own school computer.
- Halving HECS fees for new maths and science students and halving annual repayments again for up to five years for graduates who take up work in a relevant occupation, including teaching.
- Doubling the number of undergraduate Commonwealth Learning Scholarships and the number of Australian Postgraduate Awards for PhD candidates and students doing a Masters by Research.

A stronger public research sector

Federal Labor supports stronger public investment in research. Australia must have strong and independent universities and well-funded public sector research agencies.

Labor will replace the Howard Government's Research Quality Framework for university research funding with an internationally recognised, metrics-based research quality assurance system.

Federal Labor recognises the importance of basic research in the creation of knowledge. A Rudd Labor Government will value and recognise the contribution of Australian research effort across the humanities, creative arts and social sciences as well as scientific and technological disciplines.

A Rudd Labor Government will also ensure that the Australian Research Council and the National Health and Medical Research Council fund the best quality and most nationally

significant research projects, without fear of political manipulation. The decision making processes of these bodies should be transparent, robust and free from political interference.

Federal Labor will revitalise our public research agencies, including the CSIRO, and replace the culture of short-term commercialisation with an emphasis on ensuring that public research contributes appropriately to national goals and long-term economic growth.

A Rudd Labor Government will reinvest in research infrastructure, establishing a “hubs and spokes” model of research cooperation between universities and other research agencies to promote excellence while providing access to the best possible facilities for the greatest number of researchers. This will reduce the fragmentation of our national research effort, build on our research strengths and encourage greater collaboration between researchers and research institutions.

Federal Labor will bring forward the statutory review of the Cooperative Research Centre (CRC) program and remove the restrictions imposed by the Howard Government that the Productivity Commission has identified as reducing the effectiveness of CRCs.

The Howard Government has allocated \$87 million for the implementation of the RQF. A Rudd Labor Government will seek to redirect the remaining funds to encourage genuine industry collaboration in research.

Keeping our best and brightest researchers in Australia

A Rudd Labor Government will invest in new *Future Fellowships* to keep Australia’s best and brightest mid-career researchers in Australia.

This program will offer four year Fellowships valued at \$140,000 a year to 1,000 of Australia’s top researchers in the middle of their career. In addition, each researcher’s institution will receive a \$50,000 grant to support the purchase of related infrastructure and equipment for their research project.

Fostering collaboration

A Rudd Labor Government will promote a strong culture of collaboration, networking and clustering, including at the international level, across our universities, research institutes and private research programs in order to maximise our capabilities.

Australia also needs to ensure that it leverages its position as an economy that produces roughly two per cent of the world’s research and innovation. A Rudd Labor Government will examine the potential for forming a coalition of smaller nations – such as South Africa, Ireland, Chile and South Korea – to identify where they work together more effectively in research and innovation.

Innovation infrastructure – broadband

Labor will invest up to \$4.7 billion to establish the National Broadband Network in partnership with the private sector. High speed broadband is a vital underpinning for an innovation economy. The National Broadband Network will connect 98 per cent of Australians to high speed broadband internet services – at a speed more than 40 times faster than most current speeds – providing a platform to build and expand Australian business.

Taking stock and moving forward

Review of the national innovation system

A Rudd Labor Government will work with the States and Territories to review the bewildering agglomeration of innovation programs to ensure that support for innovation is well targeted and easy to access, with the aim of reducing the fragmentation and duplication. The review will be to:

- Identify regulatory barriers to innovation and recommend ways to minimise these.
- Assess the complex mix of current assistance programs against agreed priorities.
- Examine the scope for simplifying the system and reducing duplication, so that it is easier for firms to identify and access relevant programs.
- Identify gaps and weaknesses in the innovation system and develop new policy proposals to address them.

The review will identify a set of principles to underpin the role and participation of the public sector in innovation. It will also examine how a national innovation system can encompass areas in which innovation drivers and processes have not been studied in-depth until recently – particularly the services sector.²⁰

Through the review, a Rudd Labor Government will also develop a set of national innovation priorities to complement the national research priorities. Together, these will provide a framework for a national innovation system, ensuring that the objectives of research programs and other innovation initiatives are complementary.

Research and development tax concession

The business community has expressed ongoing concern about the adequacy of the current 125 per cent R&D tax concession, the complexity of the 175 per cent Premium Concession, and the thresholds applying to the Tax Offset for small business. The Productivity Commission and other bodies have made a number of recommendations on these issues, which have largely been ignored by the Howard Government.

The review of the national innovation system will consider the role of the R&D tax concession scheme in promoting R&D and innovation. The review will be tasked with evaluating the current scheme and, where appropriate, making recommendations, including on the following design principles:

- That the tax concession be designed to encourage sustained growth in R&D activity in Australia and facilitate higher R&D intensity, which may generate greater spillovers.
- That the concession encourages international linkages and provides an incentive for multinationals that hold their intellectual property offshore to undertake R&D in Australia.
- That the concession encourages collaboration with universities and research agencies.
- That the Tax Offset arrangements for small companies be amended to remove the perverse incentives resulting from the current eligibility threshold for R&D expenditure, while minimising the potential for abuse.

Bridging the innovation gap

There is an urgent need to act to bridge the innovation divide between the business and research sectors. As a first step, a Rudd Labor Government will establish an *Enterprise Connect* network to connect small and medium sized businesses to new ideas and new technologies – helping them to become more innovative, efficient and competitive.

To complement these centres, a Rudd Labor Government will establish mechanisms to bring innovation stakeholders together and will use existing programs in a more focused and strategic way.

Industry Innovation Councils

Labor will work with industry partners to establish long-term Industry Innovation Councils for specific sectors. These Councils will support the *Enterprise Connect* network and facilitate the integration of these centres into the broader innovation framework.

The Councils will comprise high level decision makers from the private sector, unions and professional representatives, the science and innovation community and senior Federal, State and Territory Government officials. By building strong, productive and ongoing working relationships among all participants in the value chain, the Councils will facilitate government and industry commitment to new directions and initiatives.

National Manufacturing Network

Federal Labor will invest \$100 million over four years in a national network of Manufacturing Centres to foster innovation in small and medium sized manufacturing businesses and give them better access to new research, new ideas and new technologies.

Manufacturing Centres will help businesses become more productive, better able to compete in global markets, and able to take advantage of new business opportunities arising from the challenge of climate change.

Five new Centres will be established in Sydney, Melbourne, Adelaide, Perth and north west Tasmania, and Queensland's QMI Solutions will be linked in with the network. A wide range of expert services will be offered to businesses, including:

- Benchmarking of business and manufacturing processes against best practice.
- Helping to find and adapt the latest research, technology and organisational knowledge to improve products and efficiency.
- Prototyping and testing facilities to turn ideas into products.
- Helping to cut through red tape to access other government programs.

Researchers in Business

A Rudd Labor Government will commit \$10 million within *Enterprise Connect* to support the placement of researchers from universities or public research agencies into businesses where it is identified that such a placement would help to develop and implement a new idea with commercial potential.

Under this initiative, a Rudd Labor Government will provide funding for up to 50 per cent of salary costs – to a maximum of \$50,000 – for each 12 month placement.

Placing researchers in business will help to break down the cultural divide between business and the research sector – whether the researcher is from a university or research agency.

Innovative Regions Centre

A Rudd Labor Government will invest \$20 million to establish an Innovative Regions Centre in Geelong, as part of the *Enterprise Connect* network.

The aim of the Centre will be to boost local economies and create new jobs in areas that have been left behind under the Howard Government. It will provide direct support to small and medium sized businesses in targeted regions, helping them to develop their business skills and link into relevant innovation networks.

It will also build on successful experiences in Australia and overseas by providing seed funding to support region-specific strategies, such as business clusters and networks, that aim to boost the innovative capacity of local firms.

Seizing new opportunities

Re-tooling for Climate Change

A Rudd Labor Government will establish a new \$75 million grants program for Australian manufacturers to help them improve their production processes, reduce their environmental footprint and cut carbon emissions.

Carbon-efficient and climate friendly production represents a competitive opportunity for Australian manufacturers who are feeling the pressure of competition from China.

Re-tooling for Climate Change will provide grants of between \$10,000 and \$500,000 to small and medium sized companies, with the government funding up to a third of the cost of each project. Applications for bigger grants or from larger manufacturers will be considered on a case by case basis.

Manufacturers will be able to apply for grants to help them do things like improve the energy efficiency of their operations and invest in energy efficient manufacturing tools. The program will also support investment in small scale cogeneration plants that capture waste energy and use it to produce electricity on site. Other projects could cut water wastage, increase stormwater capture and improve water recycling, reduce wastage of other materials and increase re-use and recycling.

Green Building Fund

A Rudd Labor Government will establish a \$90 million Green Building Fund to help Australian businesses implement cost-saving energy efficiency measures through the retrofitting and retro-commissioning of commercial buildings.

Through the Green Building Fund, a Rudd Labor Government will:

- Fund 50 per cent of the cost of retrofitting and retro-commissioning existing commercial office buildings, up to a maximum of \$200,000 per building.
- Assess funding applications on a competitive basis, with priority given to large buildings (over 5,000m²) for retro-commissioning, and on the basis of projected greenhouse savings for every dollar of Federal Government funding contributed for retrofitting projects.

- Work with the commercial building sector to enhance building operator training and develop energy efficient operating and maintenance advisory guides.

Climate Ready and Commercial Ready

A Rudd Labor Government will commit \$75 million to a new Climate Ready program to support the development and commercialisation of clean, green technologies in Australia.

The challenges of climate change and drought are inspiring individual inventors and small businesses to create new products that save energy and water, reduce pollution and use waste products in innovative ways. Sometimes these entrepreneurs need help to bring their innovative, environmentally friendly products to market.

Labor's Climate Ready program will support the development of products such as:

- Water recycling, waste recovery or small scale renewable energy technologies.
- Green building materials to make homes more energy efficient and more comfortable.
- New technologies to reduce the energy used by appliances, cutting emissions and household power bills.

Climate Ready will be part of a revitalised Commercial Ready scheme. Because Federal Labor is committed to reducing red tape, the review of the national innovation system will also examine ways to streamline the application process for the whole Commercial Ready program. A less onerous application process will enable Australia's innovative businesses to get on with the job.

Making the most of clean energy opportunities

Under a Rudd Labor Government, Australia will have the opportunity to fulfil its potential as the clean energy hub of the Asia-Pacific, making clean energy central to Australia's economic and environmental future.

Specific initiatives to help Australian businesses take a larger slice of the renewable energy market under a Rudd Labor Government include a \$15 million Clean Energy Export Strategy and up to for a \$20 million Clean Energy Innovation Centre.

The Clean Energy Export Strategy will provide critical capacity in Austrade to promote Australian clean energy exports. Austrade liaison officers will work with individual clean energy firms to match their strengths with opportunities in clean energy growth markets such as China, India, Japan and the United States.

The Clean Energy Enterprise Connect Centre will help make Australia's small and medium sized clean energy companies export-ready with benchmarking services, practical assistance and access to prototyping and testing facilities.

A Rudd Labor Government will also invest \$150 million in critical clean energy technology research under a new Energy Innovation Fund, to support the Australian Solar Institute, photovoltaic research and development, and general clean energy research and development. Additionally, up to \$50 million will be made available to assist companies seeking to develop 'hot rock technology' with the cost of drilling geothermal production wells.

Establishing a Green Car Partnership

The automotive industry is important to Australia's economy and to future prospects for high-wage, high skill jobs. Some 80,000 Australians people are employed directly in the industry, while almost one in every 10 dollars spent on research and development by businesses in Australia is in this sector.

The future challenges for the automotive industry – particularly the challenge of climate change – can only be done through innovation. That's why a Rudd Labor Government will invest \$500 million in a Green Car Partnership over a five year period from 2011. This fund will generate \$2 billion in investment to develop and build fuel efficient cars in Australia – securing jobs while tackling climate change.

Federal Labor has also committed to starting the scheduled review of the automotive industry as soon as possible and will look at all issues affecting competitiveness.

Boosting innovation in creative industries

Federal Labor will invest \$17 million in the Creative Industries Innovation Centre, as part of the \$200 million *Enterprise Connect* initiative. Drawing together a critical mass of arts practitioners, cultural entrepreneurs and researchers, with access to the latest technology and business support programs, the Creative Industries Innovation Centre will:

- Incubate a cluster of small and medium sized Australian arts companies and creative businesses.
- House creative industries research programs, building collaboration between researchers and cultural entrepreneurs.
- Provide students with learning opportunities in a dynamic, 'hothouse' environment, laying down career building blocks for creative Australians.
- Provide help identifying and accessing the latest creative technologies.
- Build a resource base of business development expertise and research.
- Link with the local community to create an energised, vibrant creative precinct.

Fostering enterprise in remote Australia

Access to know-how, mentoring and support is required to get businesses off the ground. Often, however, it is difficult for businesses in remote communities to access this expertise. Federal Labor will establish a new \$10 million Remote Enterprise Centre to help small and medium enterprises in remote areas of Australia to grow and succeed.

The Centre will support new and existing remote businesses by connecting them to other companies for mentoring, private investment and partnerships, and helping to identify complementary businesses which could lead to new business opportunities. It will also provide access to technical experts, scientific advice and the latest technology, as well as helping to identify new markets, and providing advice on legal and regulatory issues.

The Centre will also compile a directory of remote enterprises, and provide this information to the national Industry Capability Network, which helps governments, private companies and major project proponents identify local suppliers.

Conclusion

The Howard Government has neglected innovation policy for 11 years and has failed to understand the critical need to bridge the innovation divide between scholarship and research, and its application in business and the community.

A narrow focus on research commercialisation – combined with a lack of planning for Australia's skills needs and poor decisions on support for research and development – has left Australia languishing on key international indicators of innovation.

Only with a revitalised national innovation system will Australia be able to secure its prosperity beyond the mining boom.

A Rudd Labor Government will show the new leadership that is required to build a strong national innovation system, bringing the public and private sectors together and working cooperatively across and between governments.

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