

**Report of the  
House of Representatives Standing Committee  
on Economics, Finance and Public Administration**

*Australian Manufacturing: today and tomorrow*

**GOVERNMENT RESPONSE**

February 2010

## **Recommendation 1**

**The committee recommends that the Government develops a strategic Australian manufacturing policy, including regional strategies, to supplement existing industry policy.**

### **Response: *Noted***

Manufacturing is a vibrant sector of the economy that has a part to play in achieving the Government's economic growth, employment and productivity goals. To this end, the Government has implemented a wide range of policies that will support a competitive manufacturing industry. Innovation is central to these policy settings but they also encompass a wider range of policy settings to support a positive business climate both through the short term downturn and in the longer run.

The Government has implemented stimulus packages to address the impact of the global financial crisis. These stimulus packages are underpinning Australian manufacturing and will create a better environment for long term growth. Elements of the stimulus packages that benefit manufacturing include:

- the \$42 billion *Nation Building and Jobs Plan* to support jobs and infrastructure investments to provide for future long term economic growth which incorporates:
  - \$16.2 billion to improve Australia's schools and \$6.6-billion for community and defence housing that will increase demand for manufacturing industries that provide inputs such as steel, concrete, bricks, timber and glass to the housing and construction sector;
  - \$4 billion for home insulation;
  - \$2.7 billion temporary tax break to stimulate investment in capital equipment; and
  - \$890 million for local community infrastructure and local road projects.
- the \$10.4 billion *Economic Security Strategy* includes \$1.5 billion to help first home buyers purchase a home; which supports the housing and construction sector and manufacturers that supply the sector.

The Government has implemented programs to provide on-going support to assist the manufacturing sector to enhance its skill and innovation base; and to minimise adverse impacts of structural change in manufacturing. The Government's *Skilling Australia for the Future* initiative is delivering 711,000 training places (including 85,000 apprenticeships and 20,000 places for displaced workers) over five years to ensure that Australians develop the skills that industry needs. The \$2.5 billion ten year *Trade Training Centres in Schools Program* will build upon existing facilities and equipment in Australian secondary schools and facilitate successful transitions from school into the workforce to fill shortages in the manufacturing sector, traditional trades, and in emerging industries. The \$1.5 billion *Jobs and Training Compact* will provide relief and assistance to those who have been affected by the global financial crisis. It will provide 5,500 training places in 2009-10 and funding to support out-of-trade apprentices and trainees to remain connected to the workforce. The Government has also established *Skills Australia*, an independent statutory body, to advise on national skills needs and skills funding priorities.

The Government is supporting the transformation of Australia's automotive industry with *A New Car Plan for a Greener Future*. The \$6.2 billion plan aims to assist the automotive industry to prepare for a low carbon future and to make the industry indispensable to global markets and supply chains. It will provide the automotive industry with policy certainty to enable it to invest for the future. The plan includes \$3.4 billion for the ten-year *Automotive Transformation Scheme*. The Scheme will support the competitive investment and innovation needed to make the automotive industry economically and environmentally sustainable through increased support for strategic investment in research and development.

The Government is building the innovative capacity of the Textiles, Clothing and Footwear (TCF) industry with a \$401 million retargeted package from 2009-10 to 2015-16. The TCF package includes \$55 million towards innovation, including \$10 million in new funding. The TCF package aims to make the TCF industry stronger and more sustainable by supporting the development of new products and processes, especially at the high-tech, high-value end of the market. The TCF package also enhances the *TCF Structural Adjustment Program* that will provide specialised employment services to workers who have been made redundant.

The Government's industry policy framework is all about innovation and will benefit Australian manufacturing. In 2009-10, Commonwealth Government spending on science and innovation will increase to \$8.6 billion – 25 per cent more than in 2008-09 and the largest increase since records began. The Government's policy agenda is outlined in *Powering Ideas: An Innovation Agenda for the 21<sup>st</sup> Century*. This agenda will strengthen the Australian innovation system and improve the competitiveness and sustainability of Australia's manufacturing industries.

The 2009-10 Budget measures include \$196.1 million for *Commercialisation Australia* that will assist researchers, entrepreneurs and innovative firms to commercialise their research and ideas. In addition, a new, simpler R&D Tax Credit will replace the R&D Tax Concession. Manufacturing industries are relatively R&D intensive and will particularly benefit from the new arrangements.

The \$271 million *Enterprise Connect* network is another element of the Government's manufacturing policy. *Enterprise Connect* is designed to help small and medium size enterprises (SME's) acquire the knowledge, tools and expertise to improve productivity, increase competitiveness and fully capitalise on their growth potential. The network includes *Manufacturing Centres* in each State to facilitate SME access to specialist advice and technologies to improve business performance; and *Innovation Centres* aimed at improving the performance of SME's by providing a range of services designed to link them to new ideas, technologies and markets.

The Government will drive innovation in the private sector by being a demanding and discerning customer. It will favour innovative solutions and work with suppliers to translate new ideas into better outcomes for Australian taxpayers and Australian industry. The Government will strengthen the *Australian Industry Participation Framework* in cooperation with the States and Territories and ensure that opportunities for Australian industry are maximised by the Government's spending, especially nation building infrastructure projects. The Government will provide additional funding (through the *Supplier Access to Major Projects* program) to support the *Industry Capability Network* and to create a supplier advocate service to ensure that the capabilities of Australian small and medium enterprises are properly presented to government buyers. The Government is also strengthening *Australian Industry Participation Framework* requirements in the *Enhanced Project By Law Scheme* and improving the implementation of the *Tariff Concession Scheme* to ensure Australian industry services opportunities from major private sector projects.

## **Recommendation 2**

**The committee recommends that the Government reviews the on-going need for an Industry Action Agenda approach.**

**Response: *Not Agreed***

The Industry Action Agenda approach was concluded in mid 2008.

The Government's *Industry Innovation Councils* provide a critical on-going dialogue between industry, unions, the research sector and government. The Government has established seven *Industry Innovation Councils* with a strong focus on manufacturing in the following industries:

- Automotive;
- Built Environment;
- Future Manufacturing;
- Information Technology;
- Space;
- Textiles, Clothing and Footwear; and
- Steel.

In addition to the Councils, the Government has established industry working groups for the pulp and paper, pharmaceuticals and printing industries. These groups comprise senior representatives from business, unions and government, and consult with research bodies as required. They advise the Minister for Innovation, Industry, Science and Research on key issues facing their respective industries. The *Pharmaceuticals Industry Strategy Group* presented its final report to the Minister in December 2008, and its conclusions contributed to the development of the *Powering Ideas* agenda.

### **Recommendation 3**

**The committee recommends that the Australian Industry Productivity Centres initiative be finetuned to ensure that:**

- **akin to the UK Manufacturing Advisory Service it maintains a manufacturing focus so as not to dissipate resources;**
- **it is well promoted and easily accessible;**
- **Australian regions are sufficiently resourced and that there is one centre in every large manufacturing region;**
- **there is appropriate liaison with state-based manufacturing advisory agencies.**

### **Response: *Agreed in principle***

The *Enterprise Connect* network has replaced the *Australian Industry Productivity Centres* (AIPCs). The Government has committed around \$50 million a year for the *Enterprise Connect* network. The network will provide SMEs with better access to new ideas, knowledge and technologies to enable businesses to become more innovative; efficient and competitive; and to lift productivity across Australian industry.

The *Enterprise Connect* network includes *Manufacturing Centres* to facilitate SME access to specialist advice and technologies to improve business performance. The *Manufacturing Centres* are located in Sydney, Brisbane, Melbourne, Adelaide, Perth and Burnie. The *Enterprise Connect* network also includes *Innovation Centres* that are aimed at improving the performance of SMEs by providing a range of services designed to link SMEs to new ideas, technologies and markets. The *Innovation Centres* are located as follows:

- the *Creative Industries Innovation Centre* is based in Sydney;
- the *Clean Energy Innovation Centre* is based in Newcastle;
- the *Innovative Regions Centre* is based in Geelong;
- the *Mining Technology Innovation Centre* is based in Mackay;
- the *Remote Enterprise Centre* is based in Alice Springs; and
- the *Defence Industry Innovation Centre* is based in Dandenong.

Services to manufacturing firms are provided through a network of over 80 Business Advisers located in these cities and major centres throughout metropolitan and regional Australia. *Enterprise Connect* was launched on 21 May 2008.

Services offered by the *Manufacturing Centres* include:

- Business Reviews – delivered by skilled and experienced Business Advisers; and
- Tailored Advisory Services – matching funding to implement changes identified through the Business Review.

Business Advisers will also provide ongoing support and advice to help firms implement the recommendations in the Business Review. Each centre has a close relationship with their respective State Governments, and, where they exist, the state manufacturing advisory agencies.

#### **Recommendation 4**

**The committee recommends that through the Council of Australian Governments (COAG), the States, Territories and the Commonwealth harmonise standards particularly in regard to occupational health and safety issues such that compliance and regulatory burdens for manufacturers are reduced, without compromising safety standards.**

#### **Response: *Agreed***

The Council of Australian Governments (COAG) has acknowledged that harmonisation of occupational health and safety regimes has long been identified as a key issue for business, with the inconsistencies of current approaches resulting in unnecessary cost and complexity, particularly for those businesses that operate across jurisdictions. The Government has committed to address this area of regulatory burden by working cooperatively with state and territory governments to harmonise occupational health and safety (OHS) legislation.

On 3 July 2008, COAG signed an historic agreement to end the fragmented and inconsistent approach to the protection of workers' occupational health and safety. The *Intergovernmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* sets out the commitment of the Federal, state and territory governments to adopt uniform OHS legislation complemented by consistent approaches to compliance and enforcement. COAG further agreed that the uniform OHS laws would be implemented by December 2011.

COAG recognised legitimate concerns about workplace safety and reaffirmed its requirement that there be no reduction or compromise in workplace safety.

The Government has established a new, independent national tripartite body, Safe Work Australia, that has responsibility for developing harmonised OHS laws.

On 18 May 2009, the Workplace Relations Ministers' Council (WRMC) agreed to a framework for uniform OHS laws which will address the disparate and inconsistent OHS laws across jurisdictions. In making its decisions, WRMC was conscious of the COAG directive that the model OHS laws do not compromise standards for legitimate safety concerns and WRMC agreed that the focus of OHS harmonisation is on achieving the best possible approach to health and safety for all Australian workers. Safe Work Australia is now developing the model OHS laws in accordance with WRMC's decisions.

COAG has established a Business Regulation and Competition Working Group (BRCWG) to assist the delivery of the COAG reform work program. The objectives of this working group include the acceleration and broadening of the regulation reduction agenda to reduce the regulatory burden on business.

The Productivity Commission is also continuing its Performance Benchmarking of Australian Business Regulation. At the request of the BRCWG, the Productivity Commission has included OHS regulation in its benchmarking program for 2009 with the report to be completed by March 2010.

#### **Recommendation 5**

**The committee regards benchmarking as a vital activity of the nascent Australian Industry Productivity Centres and recommends that the Government ensure the Centres are adequately resourced to provide this service to a wide range of companies across Australia.**

#### **Response: *Agreed***

The Government recognises the importance of benchmarking as a tool to improve business competitiveness. The *Enterprise Connect Manufacturing Centres* offer benchmarking services as a key component of the Business Review function. The program currently uses two internationally respected benchmarking tools, Benchmarking Index and Probe.

#### **Recommendation 6**

**The committee recommends that the Government increase the amount budgeted for the Export Market Development Grants programme each year and, in line with a recent Austrade review, allow the carry forward of any unspent budgeted funding to be used in future programme years of high applicant demand.**

#### **Response: *Noted***

The Government already provides substantial funding for the *Export Market Development Grants* (EMDG) scheme, with \$852 million currently available over five years from 2008-09. This includes an additional \$50 million for 2008-09 to ensure much needed liquidity to those exporters who continue to pursue trade opportunities despite the very difficult export conditions in the course of the global economic recession and to provide a stimulus to exporters to protect jobs and increase Australia's global market share; and a further \$50 million in 2009-10 to complement the legislative enhancements the Government made to the scheme in 2008, which were initially announced in Labor's trade policy statement, *A strong future for Australia's exports*.

In 2008-09 over 1,400 Australian manufacturing businesses, amounting to 34.4 per cent of all grant recipients, received EMDG grants totalling over \$60 million to help them promote their goods for export. The scheme also assisted many wholesale businesses that were seeking to export Australian manufactured goods.

In addition, the Government has previously carried unspent EMDG funding over to future years. The Government moved \$10 million from 2004-05 to 2005-06 and \$8.88 million from 2006-07 to 2007-08. In both instances, the Government recognised the value of moving unspent funds from one year to the next to provide for an expected increase in grant applications in the following year.

The Government regularly reviews EMDG funding through the Budget process and will ensure that future funding levels remain appropriate. Moreover, the 2008 Review of Export Policies and Programs included an examination of how the EMDG scheme could be improved, including the scheme's funding arrangements, to encourage more businesses to export and existing exporters to expand their export base. The review has now been completed and the Government is considering its options in response to the Review.

#### **Recommendation 7**

**The committee recommends that the Australian Government commits to annual direct funding of the Australian Synchrotron given its importance to manufacturing innovation through cutting-edge research.**

#### **Response: *Not agreed***

In June 2007, the Government allocated \$50 million towards the Synchrotron's operating expenses over its first five years of operation, subject to matching funding from the Victorian Government.

A further \$13.75 million is being provided to contribute towards the capital expenditure costs associated with the construction of beamlines at the Synchrotron.

The Australian Synchrotron was awarded \$36.8 million for the National Centre for Synchrotron Science: Outreach and Research Support Facilities under the Education Investment Fund Round Two. This project provides funding to expand the Australian Synchrotron, including though providing facilities to better meet the needs of researchers currently using the Synchrotron.

#### **Recommendation 8**

**The committee recommends that the Australian Bureau of Statistics, in conjunction with the Australian Taxation Office and the Department of Industry, Tourism and Resources, improve the available data on venture capital, including by distinguishing better between venture capital and other forms of private equity, and compiling performance data.**

#### **Response: *Agreed in principle***

The Government recognises the need for on-going, consistent and reliable statistics to evaluate policy and programs, and notes that the 2008 Cutler Review of the National Innovation System recommended that the ABS undertake annual collections of venture capital data to enable effective tracking of the market and the impact of government support.

While recognising the importance of improved data collections, consideration should also be given to conceptual complexity surrounding the definitions of the various stages of private equity and venture capital. This complexity may result in sub-optimal outcomes in relation to capturing data from the survey of participants.

The Government also recognises that there are difficulties in compiling performance data through annual ABS surveys as such data may not be releasable due to confidentiality concerns (commercial-in-confidence data). Such data may be better collected through program evaluations.

The Government recognises the importance of having a stronger knowledge of the performance of the national innovation system and also of understanding how government

assistance programs impact on the performance of firms in Australia. In 2009, the Department of Innovation, Industry, Science and Research commissioned work on Innovation Metrics to develop a framework to guide the collection of innovation and firm performance data. The project will explore recent developments in innovation indicators (especially work of OECD countries) with a view to develop metrics that better reflect the systemic nature of innovation, and the implications of new economic theories on the understanding of innovation and economic growth. It is expected that the framework will also contribute to the collection of venture capital statistics in Australia.

#### **Recommendation 9**

**The committee recommends that an inter-departmental working party, headed by the Department of the Prime Minister and Cabinet, report publicly on the issue of whether there are market failures hindering the development of the venture capital industry. The report of, and submissions received by, the Venture Capital Industry Review, should be made available to this working party and be allowed to be cited in their report.**

#### **Response: *Noted***

*Powering Ideas* identifies that the main impediment to venture capital markets working effectively is the asymmetry of information between firms and financial institutions, which cannot accurately gauge the likely success of a project.

The previous Government's 2005 review of the venture capital industry considered whether there were impediments to venture capital and later stage private equity investment. Further, a number of measures were introduced in the 2006-07 Budget which were designed to encourage venture capital investment, including:

- the introduction of an early stage venture capital limited partnership investment vehicle to provide investors with a tax exemption on capital and revenue gains;
- an enhanced *Venture Capital Limited Partnership Vehicle*; and
- a third round of the *Innovation Investment Fund* (IIF) which is currently underway.

The Government supports these initiatives but acknowledges that the IIF, as currently structured, may not be as effective during a time of global recession and highly restricted access to venture capital. In August 2009, the Government announced \$64 million for investment into promising early stage companies through a new vehicle – the *Innovation Investment Follow-on Fund* (IIFF). The IIFF is a temporary and targeted response to the lack of capital available in the marketplace as a result of the global recession. The Government is continuing to work with the venture capital sector to finetune its support for early stage, innovative companies.

*Commercialisation Australia* will work to leverage private sector capital and assist innovative companies to access the assistance they need to successfully commercialise new ideas. While for the most part innovation commercialisation is driven by market forces, certain conditions may impede the efficient and competitive functioning of markets for new ideas and technologies. These market failures exist in the early proof of concept, demonstration and commercialisation phases of the innovation chain. The gaps in knowledge, skills and capital in the market along the path from experimental development to commercialisation are referred to as the 'Valley of Death' as new concepts fail, technically or financially, before achieving commercial viability. This gap is an accepted phenomenon internationally.



#### **Recommendation 10**

**The committee recommends that the Department of Industry, Tourism and Resources and the Treasury prepare a paper outlining the implications, including cost, of allowing participants in the Venture Capital Limited Partnership and Early Stage Venture Capital Limited Partnership schemes to deduct losses in these schemes against other income.**

**Response:** *Not agreed*

The existing exemption of gains from certain investment transactions provides a significant incentive to investors. Capital gains made by *Venture Capital Limited Partnerships* (VCLPs) are exempt from taxation in the hands of certain foreign investors. Capital losses incurred by foreign investors are also exempt and therefore cannot be claimed. Income and capital gains derived by Australian investors from investments made by VCLPs do not qualify for any tax concessions. However, any capital losses realised by these Australian investors are deductible under the normal taxation provisions. Both capital gains and income gains for *Early Stage Venture Capital Limited Partnerships* are exempt from taxation for all investors. Any losses under these circumstances are exempt and therefore cannot be deducted or offset.

#### **Recommendation 11**

**The committee recommends that the venture capital tax concession schemes—such as the Venture Capital Limited Partnership scheme and the Early Stage Venture Capital Limited Partnership scheme—be merged and simplified, and clear objectives set.**

**Response:** *Not agreed*

The *Early Stage Venture Capital Limited Partnership* (ESVCLP) and *Venture Capital Limited Partnership* (VCLP) schemes have clearly defined objectives. The focus of VCLP is to facilitate investment by foreign residents into the Australian venture capital market while ESVCLP encourages the supply of funding to the early stage venture capital sector by both foreign and Australian residents.

A venture capital fund cannot operate both as a VCLP and an ESVCLP because of different operational and investment requirements. The legislative provisions of each of these two schemes are set out in the *Venture Capital Act 2002* and there are key aspects of the schemes which cannot be merged. The different taxation treatment on returns from ESVCLP and VCLP investments would make a merger of the two schemes extremely complex for the fund manager to administer. It would also make it difficult for the Australian Taxation Office to monitor eligibility of ESVCLP and VCLP investments.

#### **Recommendation 12**

**The committee recommends that the Australian Industry Productivity Centres ensure they have adequate information about venture capital funds to assist new manufacturers in accessing this source of funding.**

**Response:** *Agreed*

*Enterprise Connect* subsumes the former Australian Industry Productivity Centres initiative. A key role of *Enterprise Connect* is as a source of information on a wide range of government programs and business issues, including venture capital funding available through government sources. Having close links with AusIndustry's program information resources,

*Enterprise Connect* will be able to assist Australian SME's in accessing venture capital programs delivered by *AusIndustry*.

### **Recommendation 13**

**The Committee recommends that the manufacturing industry, with the support of the Australian Government, develop a coordinated communications strategy for promoting the career opportunities in manufacturing, especially in innovative, knowledge based manufacture.**

### **Response: *Noted***

The Government agrees that industry can make a significant contribution to promoting career opportunities in manufacturing.

Under a *National Partnership on Youth Attainment and Transitions*, the Australian, State and Territory governments are working together to pursue reforms to improve young people's educational attainment and transition from school. In addition to \$100 million in reward funding for improvements in participation and attainment to support the Compact with Young Australians, the Government has committed \$623 million over four years to this National Partnership, which will include the consolidation of existing youth career and transitions programs into two programs: *School Business Community Partnership Brokers* and *Youth Connections*. Tenders for these programs have been assessed and successful tenderers were announced in December 2009. These programs will be developed in consultation with the States and Territories and will be implemented over four years from 1 January 2010. These programs will build on the success of existing programs, including the information exchange and support received from business and industry in providing up to date industry specific advice to inform the youth transitions agenda. Of particular relevance will be work of *Partnership Brokers* with key stakeholders including industry to engage with schools to extend learning beyond the classroom, increase student engagement, deepen learning experiences, lift attainment and improve educational outcomes.

*Partnership Brokers* will be supported by state, territory and national representative bodies which will work closely with the Department of Education, Employment and Workplace Relations and the state and territory governments. This will ensure the strategic focus of the *Partnership Brokers* is aligned to broader Government policy objectives and responsive to the existing and emerging priorities in each jurisdiction.

The Government will work with the national peak bodies to build on existing structures and forums to improve the flow of information on current, emerging and future skill needs and training opportunities and to provide national strategic direction for the broader *Partnership Broker* network.

Under the National Partnership, the States and Territories will have the flexibility to use this funding to support a menu of reform areas including career development. Support under career development could facilitate access for all young people to high quality individualised career development services and pathways planning and empower students to identify strengths, talents and interests and build resilience.

Under the National Partnership \$47 million of the funding will be available for *National Career Development* initiatives. Funding will be utilised to support a range of projects and resources that require a national approach to implementation. These include, for example, *Job Guide*, the *myfuture* website and the *Australian Youth Mentoring Network*. The Government will maintain responsibility for this element under the National Partnership.

The *Career Advice Australia* initiative helps young people make informed decisions about their future. This initiative includes a National Industry Career Specialist, which supports the manufacturing sector by:

- developing strategies for promoting manufacturing careers to young people; and
- identifying models for involving regional manufacturing businesses in *Career Advice Australia* programs designed to improve young peoples' understanding of manufacturing careers.

The *Career Advice Australia* initiative ceased on 31 December 2009 and new programs under the *National Partnership on Youth Attainment and Transitions* will be in place on 1 January 2010.

#### **Recommendation 14**

**The committee recommends that the Ministerial Council on Education, Employment, Training and Youth Affairs consider the necessary resources provision and teacher training needs to introduce updated primary and secondary school science curricula with a focus on practical and up-to-date information about emerging technologies.**

#### **Response: *Agreed in principle***

The Government is working with States and Territories through the Council of Australian Governments (COAG), as well as the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), to progress key elements of this recommendation.

Through COAG, the Commonwealth and the States and Territories, have committed to the development of a rigorous and world class national curriculum from kindergarten to Year 12, starting with the key learning areas of English, mathematics, the sciences and history. A second phase of work will involve the development of national curriculum in languages, geography and the arts.

The Australian Curriculum, Assessment and Reporting Authority (ACARA) is overseeing the development of the national curriculum and is also responsible for assessment and reporting at a national level. The national curriculum in the key learning areas will be developed by 2010 and implemented by the States and Territories from 2011.

With a futures oriented perspective, the national curriculum in the sciences can be expected to incorporate contemporary perspectives including content related to emerging technologies. The national curriculum will reflect effective curriculum practice in Australia and overseas as well as extensive collaboration with government and non-government education authorities, schools, teachers, parents and professional associations.

It should be noted however, that the national curriculum will not mandate the pedagogical practices that schools or teachers use in the classroom, nor will it limit the ability of teachers to use different instructional methods in recognition of the fact that children learn in different ways and at different rates. Schools and teachers will continue to apply their professional judgement regarding what to cover and in what sequence, and how best to cater to individual learning needs and styles. As is the case currently, teachers will refer to school education authorities' policies, resources and practices designed to assist particular student cohorts as they plan for and teach the national curriculum.

The Government recognises the importance of preparing current and future teachers for the introduction of a national curriculum. Improving the training and development of teachers

and school leaders is an integral part of the Australian Government's \$550 million *Teacher Quality National Partnership* agreement. This agreement will facilitate and reward reforms that support systemic improvement in the quality of teaching.

Key reforms include national professional standards for teachers and school leaders, improved pre-service teacher education, additional pathways into teaching for top university graduates and 'mid-career changers'; appropriate recognition and reward for quality teaching; and principal's professional development and support to lead improvements at the school level.

The Government and its state and territory partners have begun work to progress the implementation of the national partnership. The reforms will be delivered on the basis of Bilateral Agreements and Implementation Plans to be concluded between participating states and the Australian Government.

In addition, as part of its \$2.2 billion *Digital Education Revolution*, the Government is providing \$11.25 million to support professional development in information and communication technology; and \$32.6 million over two years to supply students and teachers across Australia with online curriculum tools and resources to support the national curriculum, and conferencing facilities for specialist subjects such as languages.

In addition to the national curriculum and teacher reform initiatives, the Government is funding the national school science education projects *Science by Doing* (secondary school) and *Primary Connections: linking science with literacy* (primary school) which includes teacher professional learning and exemplary curriculum resources to engage students in learning science. These programs seek to include content that is relevant, engaging and contemporary and could provide opportunities for students to learn practical and up-to-date information about emerging science and technologies.

The *Teaching for the Digital Age Advisory Group* (TDAAG) is an advisory group to the Australian Information and Communications Technology in Education Committee, which is a subcommittee of MCEECDYA. TDAAG provides advice on professional development in the use of ICT for pre-service teachers, in-service teachers and school leaders. It supports the implementation of the Digital Education Revolution, with work focusing on professional development for teachers and school leaders in the use of ICT. There is capacity for future national projects to focus on improving the skills of teachers and school leaders in the use of emerging technologies.

On 5 December 2008, MCEETYA released the *Melbourne Declaration on Educational Goals for Young Australians* which sets the direction for Australian schooling for the next 10 years. The Declaration highlights the fundamental importance of the sciences learning area and the need for students to have a strong foundation and deep knowledge, understanding, skills and values in the disciplines of science and in areas such as ICT and design technology.

The Government has established the *National Enabling Technologies Strategy* to provide a framework for the responsible development of enabling technologies such as nanotechnology, biotechnology and other new technologies. This includes providing balanced and factual information to increase community awareness and understanding of nanotechnology and biotechnology. In November 2008, under the previous National Nanotechnology Strategy, the Government launched AccessNano (<http://www.accessnano.org/>), a free education resource on nanotechnology for high school teachers.

### **Recommendation 15**

**The committee recommends that post secondary vocational education providers continue to seek out opportunities to form training partnerships with companies that own costly state-of-the-art equipment—to give apprentices access to the latest technology and maintain the skills of TAFE trainers.**

#### **Response: *Noted***

The Government encourages Registered Training Organisations including TAFE institutes, Group Training Organisations and Australian Apprenticeships Centres to foster partnerships with industry.

The *National Agreement for Skills and Workforce Development* between the Government and the States and Territories provides a strengthened focus on increasing enrolments in Vocational Education and Training. The removal of prescriptive input controls also provides States and Territories with the opportunity to progress innovative approaches to training delivery in order to meet enrolment targets and higher level targets over the period to 2020.

On 12 December 2008, the Government also announced the \$500 million *Teaching and Learning Capital Fund for Vocational Education and Training* (TLCF) aimed at updating and enhancing the capacity of training infrastructure to meet current and future training challenges. TLCF funding is available in the 2009-10 financial year and will be provided through the following three program elements:

- *Better TAFE Facilities* – a total of \$200 million is available to TAFE institutes across Australia, to help them to address immediate maintenance needs, small capital works and equipment; and plant purchase. Funding of \$2 million to \$8 million (GST exclusive) is available to TAFE institutes for eligible projects.
- *Training Infrastructure Investment for Tomorrow* – a total of \$200 million is available for eligible applicants and consortia led by eligible applicants to apply for competitive grants of up to \$10 million (GST exclusive) for infrastructure projects to adjust to the emerging training needs of the local economies in which they operate; and support the national training system to address industry's emerging green skills requirements. The criteria used to assess application for this element included consideration of industry collaboration and/or co-investment.
- *Investing in Community Education and Training* (ICET) – a total of \$100 million is available to community education and training providers, who will be able to apply for small capital grants of between \$50,000 (GST exclusive) and \$250,000 (GST exclusive) to assist with maintenance or the purchase of equipment and for larger grants of \$250,000 to \$1.5 million (GST exclusive) for major capital infrastructure developments or upgrades.

### **Recommendation 16**

**The committee recommends that CSIRO receive additional funding to employ more staff dedicated to liaising with individual (especially small and medium-sized) businesses, business organisations and the new Australian Industry Productivity Centres. The liaison officers should inform potential partners of relevant work within CSIRO and seek information on possible future CSIRO work that could lead to developing new products and processes useful to Australian manufacturers.**

#### **Response: *Noted***

A suitable framework already exists for liaison between CSIRO and individual (especially small and medium-sized) businesses and business organisations. CSIRO's interactions with SMEs help them to identify and utilise science and technology to grow their businesses. Currently, CSIRO's *SME Engagement Centre* has a small number of staff dedicated to liaising with individual SMEs that want to access and implement science and technology. Specifically, the *SME Engagement Centre*:

- acts as a portal into CSIRO for SMEs referred by partners (such as the *Enterprise Connect* network);
- coordinates CSIRO's overall SME Engagement Strategy (which uses CSIRO's extensive international networks);
- facilitates workshops and seminars aimed at helping Australian industry to become aware of innovation, technology issues and solutions which might be found from within CSIRO and elsewhere; and
- develops relations with parties that have a primary interest in SME innovation.

The *Enterprise Connect* network has extensive links with CSIRO. In May 2009, CSIRO commenced working with *Enterprise Connect* to further identify placements under the *Researchers in Business* program. The program places CSIRO staff members from its *SME Engagement Centre* within all mainland *Enterprise Connect Manufacturing Centres* to ensure a seamless engagement with SME manufacturers. The *Researchers in Business* program supports the placement of researchers from universities or public research agencies into businesses where such a placement would help to develop and implement a new idea with commercial potential. *Enterprise Connect* provides funding of up to 50 per cent of salary costs, to a maximum of \$50,000, for each placement for between 2 and 12 months.

#### **Recommendation 17**

**The committee urges universities to consider appointing more 'industry liaison officers' to facilitate contacts between universities and local industry (including via the new Australian Industry Productivity Centres). They could look for opportunities to share equipment and arrange short-term secondments in both directions.**

#### **Response: Noted**

The Australian Government has encouraged universities to engage with industry at a national and local level through the *Diversity and Structural Adjustment Fund* (the Diversity Fund). The objective of the Diversity Fund has been to promote structural reform by eligible higher education providers that supports greater specialisation among providers, more diversity in the higher education sector, and better responsiveness to labour markets operating in the local or national interest. The Diversity Fund is managed by the Department of Education, Employment and Workplace Relations. A number of the projects funded under the Diversity Fund and its predecessor (the *Collaboration and Structural Reform Fund*) involved innovative collaborative partnerships between industry/businesses and universities to build on their respective strengths and synergies (details are available at [www.deewr.gov.au/dsa](http://www.deewr.gov.au/dsa)).

The 2009-10 Budget provided \$400 million over four years for a new *Structural Adjustment Fund* to support significant structural change in the higher education sector. The *Structural Adjustment Fund* will subsume the Diversity Fund from 2010.

Improved links between higher education and vocational education and training will also enhance contact between universities and local industry. The Government has established a new Ministerial Council for Tertiary Education and Employment (MCTEE), with responsibility for higher education, vocational education and training, international education,

adult and community education, the Australian Qualifications Framework, employment and broader youth policy.

The Government also established *Skills Australia*, which is an independent statutory body established to provide advice to the Minister for Education on Australia's current, emerging and future skills and workforce development needs. This advice includes identifying current and future skills needs to help inform decisions on all aspects of Australia's labour market needs, including developing higher level skills to position Australia to meet the challenges of the future.

Suitably skilled international graduates can make a substantial contribution to Australia's skills needs. The increased emphasis being placed on migration to address critical skills needs should be an added incentive for higher education providers to deliver courses to international students. This may forge closer links with industry to gain a greater understanding of their needs. This will ensure that international graduates emerge with the right set of technical skills, and with the English language and other employability skills for effective transition into the workplace.

In addition, closer links between higher education providers and industry will facilitate a more collaborative and industry-relevant research focus within Australian universities, making them more attractive to the best and brightest international postgraduate researchers and enhancing Australia's productivity.

The *Enterprise Connect* network is forming links with research and knowledge providers such as universities. This is to ensure that firms who are seeking to implement change are able to draw on external sources of technology and knowledge from universities.

*Enterprise Connect* is also delivering the Government's \$10 million *Researchers in Business* initiative. This supports placing 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. Funding for up to 50 per cent of salary costs, to a maximum of \$50,000, is provided for each placement. Placements can be for a period of between 2 to 12 months. Up to fifty projects will be supported per year.

Two universities are *Enterprise Connect Manufacturing Centre* partner organisations and directly deliver program services. The University of Western Sydney and the University of South Australia both house Business Advisers who will deliver the Business Review element of the program. *Enterprise Connect* has also established Technology Partnerships under which firms and Tertiary Institutions (Universities and Technical and Further Education (TAFE)) with leading edge equipment not generally available in the market, can register with the program. The objective is to increase the capacity utilisation of this equipment for firms and institutions owning the equipment, while providing other firms and institutions with access to equipment or technology which would otherwise not be available. The *Enterprise Connect* network of Centres and Business Advisers will assist client firms to link with the equipment on the register.

### **Recommendation 18**

**The committee recommends that successful Commercialising Emerging Technologies (COMET) and Commercial Ready grant applicants are linked up with the CSIRO to foster better industry applied research at the small to medium manufacturing level.**

### **Response: *Not Agreed***

The closure of the Commercial Ready program was announced in the 2007-08 Budget.

The COMET program provides assistance to small companies commercialising innovative products and services. Assistance is via financial support and business development advice with a strong focus on mentoring and business management. COMET grants do not involve applied research as applicants have working prototypes when they enter the program. COMET funding is used for development of management skills, strategic business planning (including export strategies), market research and validity, development of an IP strategy, proving technology (including finalising working prototypes) and the engagement of business mentors.

The COMET program supports commercialisation in public sector research organisations, including CSIRO. The strategic plan for COMET for 2009–2010, specifies a target of at least 15 per cent of COMET approvals (new customers) commercialising public sector sourced innovations.

An independent evaluation of the COMET program conducted in 2007-08 found the program objectives to be relevant and the program to be effective in improving the ability of the majority of its customers to commercialise their innovation.

CSIRO has engaged with successful COMET grant recipients. Additionally, CSIRO already has the opportunity to follow up with successful COMET grant recipients as this information is published.

*Enterprise Connect* plays a key role in linking its manufacturing clients to the CSIRO. As discussed under Recommendation 16, a network of CSIRO SME Engagement Managers, located within the Enterprise Connect Technology and Knowledge Connect service, work with Enterprise Connect Business Advisers to:

- diagnose technology and technical knowledge related issues/opportunities for firms (i.e. processes, plant and equipment);
- connect Business Advisers to the most appropriate domestic and international sources of expertise, suppliers of technology and technical knowledge advice for the SME;
- assist SMEs to access prototyping and testing facilities; and
- advise on the feasibility of Researchers in Business applications and other innovation grant programs (i.e. COMET).

The service is delivered using *Enterprise Connect* resources and by accessing knowledge from partner organisations including the CSIRO, the Australian Institute of Commercialisation, InnovationXchange, Universities and other public research organisations and relevant state government departments.

*Commercialisation Australia* will provide a new approach to commercialising Australian research and ideas. It will build the capacity of our researchers, entrepreneurs and innovative firms to turn their ideas into successful commercial realities and create high-skill, high-wage jobs. *Commercialisation Australia* will offer support for specialised advice and services to build the skills, knowledge and linkages required to commercialise new ideas, as well as



support for proof of concept and early stage commercialisation activities. *Commercialisation Australia* will build on current innovation activities and work with existing service providers to achieve efficient and effective outcomes.

#### **Recommendation 19**

**The committee recommends that the design of the R&D tax concession scheme be examined in the light of the recent report by the Productivity Commission and the evidence assembled in this inquiry. The examination should include the eligibility rules, in particular the extent to which foreign-owned companies conducting R&D in Australia are able to benefit from the concession. If such an examination leads to the R&D tax concession being reduced then the funds saved should be used for increased grants where a convincing case can be made for them.**

#### **Response: *Noted***

The Review of the National Innovation System examined the R&D Tax Concession and recommended that it should be replaced with a less complex and more predictable R&D Tax Credit. In the 2009-10 Budget, the Government announced that it will introduce a 45 per cent refundable tax credit (equivalent to a 150 per cent concession) available to firms with a turnover of less than \$20 million per annum. A 40 per cent tax credit (equivalent to a 133 per cent concession) will be provided to firms with a turnover of \$20 million or more per annum. The new arrangements will take effect from 1 July 2010.

#### **Recommendation 20**

**The committee recommends that the Department of Industry, Tourism and Resources review assistance programmes with a view to:**

- **rationalisation, simplification and programme stability;**
- **dovetailing programmes into a manufacturing sector strategic approach;**
- and**
- **conducting grant programmes in consecutive stages where evaluation of outcomes is more readily apparent.**

#### **Response: *Agreed in Principle***

The Department of Innovation, Industry, Science and Research conducts reviews of programs on an ongoing basis. Recent examples include the Government's reviews of the National Innovation System, the Automotive Industry, the Textile, Clothing and Footwear Industry, the Government's Climate Change Programs, and the Cooperative Research Centres (CRC) program. Each of these reviews has examined a range of issues and inputs including many of those raised by the Committee. These reviews have informed the Government's response in *Powering Ideas*.

Evaluation of outcomes from programs in consecutive stages is already a feature of a wide range of programs administered by the Department of Innovation, Industry, Science and Research.

## Recommendation 21

The committee recommends that a dedicated manufacturing advisory portal be developed as the internet face of the manufacturing-based Australian Industry Productivity Centres, linking to a manufacturing webpage on the Department of Industry, Tourism and Resources website. Features of this would include:

- streamlining of other information portals so there is a one-stop-shop for the manufacturing sector;
- prominent home page links to the industry agencies and the generic 'business entry point' and 'export hub';
- an on-line venture capital information service; and
- a focus on sector specific issues beyond assistance programme advice including information on production, process and entrepreneurial developments; forums and key global issues.

## Response: *Noted*

The Department of Innovation, Industry, Science and Research website, [www.innovation.gov.au](http://www.innovation.gov.au), provides information on the Government's manufacturing policies and links to a wide range of government information tools, including:

- the AusIndustry website, [www.ausindustry.gov.au](http://www.ausindustry.gov.au), provides information on a range of innovation, research and development, venture capital and other business assistance programs available to firms in manufacturing and other sectors;
- [business.gov.au](http://business.gov.au) is the Government's business entry point that provides a wide range of essential information on planning, starting and running a business. Among other things, the website provides business information on federal, state and territory government grant and assistance programs, intellectual property, and importing and exporting requirements;
- the *Enterprise Connect* website, [www.enterpriseconnect.gov.au](http://www.enterpriseconnect.gov.au), provides detailed information on the services offered under the initiative, information for partner organisations and Business Advisers, and an application form for the Business Review service;
- the Australian Trade Commission (Austrade) website, [www.austrade.gov.au](http://www.austrade.gov.au), provides information to assist Australian businesses initiate, sustain and grow trade and outward investment, and promotes and supports the inflow of productive foreign direct investment. The Austrade administered *Export Market Development Grants* scheme, for example, encourages small and medium sized Australian businesses to develop export markets; and
- the IP Australia website, [www.ipaustralia.gov.au](http://www.ipaustralia.gov.au), provides information on Australia's intellectual property rights system, specifically patents, trade marks, designs and plant breeder's rights.