



**Australian Government**

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**Department of Innovation  
Industry, Science and Research**

# **Industry Innovation Councils Update**

## **Towards Innovative Australia**

**October 2010**

For further information see [www.innovation.gov.au/industryinnovationcouncils](http://www.innovation.gov.au/industryinnovationcouncils)

- Media Releases
- *Innovation Profiles*
- Information Brochure
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- Projects, reports and activities
- Industry Innovation Councils
  - Automotive
  - Built Environment
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  - Pulp and Paper
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# Introduction

A strong innovation culture is critical to the future of Australian industries. It is the key to resilience, productivity, and global competitiveness.

Since 2008, eight Industry Innovation Councils have been established to champion and guide the process of industry transformation. This report examines their achievements in the period from 1 July 2009 to 30 September 2010. It considers progress made within the Councils, and the outcomes of their engagement with other individuals and organisations.

The membership of the Councils is broadly based, and each continues to work inclusively. They bring together industry leaders, workers, the research community, and government, often for the first time. Each Council member brings unique insight and expertise.

Members are essentially 'volunteers' whose Councils meet three to four times a year. Their core function is dialogue and communication at a strategic level.

A strong message from the Councils is that Australia *needs to be* and *needs to be seen* as innovative. Council initiatives align with the Government's aim 'to make innovation a way of life', articulated in *Powering Ideas: an Innovation Agenda for the 21<sup>st</sup> Century* (p. 1).

Innovation leaders appointed to the Councils freely share their expertise and experience. This is demonstrated in the twenty-five *Innovation Profiles* which Senator the Hon Kim Carr, Minister for Innovation, Industry, Science and Research (the Minister) launched in December 2009.

The multimedia *Innovation Profiles* are real stories of innovation in industry in Australia. Council members speak frankly about the benefits and challenges in being innovation leaders. Their experiences highlight what can be achieved through innovation. The *Innovation Profiles* are available on-line at [www.innovation.gov.au/innovationprofiles](http://www.innovation.gov.au/innovationprofiles), on DVD, and in print. See **figure 1** for a selection of quotes from the project.

Individual Councils have developed and implemented many communication strategies that champion positive industry innovation messages. Their role in industry as champions of innovation is a significant contribution to industry transformation.

Through *Powering Ideas*, the Australian Government affirmed its commitment to strengthen every constituent part and every critical link within the Australian innovation system (p. 1). The Councils have made a substantial contribution to that national endeavour.

## **Figure 1 *Innovation Profiles: Members say ...***

### **Innovative Australia**

'Innovation is the lifeblood of our company.' Philip Binns

'Our goal is to design a sustainable future.' Ken Maher

'The secret to a sustainable business is to remain relevant to your customers.' John Grant

'Innovation is fun!... you're creating a better product than has been created before.' Tristram Carfrae

'In innovation there is always the risk of failure, but you can't let that stop you.' John Garrett

'There are some bigger risks for Australia in not being innovative though, and the risk is that we won't be competitive.' Suzanne Roche

### **Global leadership**

'If we weren't delivering better solutions, better options, better opportunities than our competitors we'd quite simply be out of business.' Tom Crago

'We have some unique products...and that unique innovative type product we're able to export ...it's the competition that makes you healthy and makes you strong....' Erich J Hofmann

'We've been able to develop products that are globally competitive...we're nimble and quick.' Brian Rush

'Every company is going to be affected by global competition, it's far better to be first... ' Philip Binns

'Having world class customers is an absolutely crucial step towards having innovation.' Pat Boland

### **Innovation transformed industry**

'I'd like to see innovation take our businesses and governments to be the most competitive, the pre-eminent, the leaders globally.' John Grant

'Every project is taken on as a unique set of problems to think about and to find an innovative solution.' Kerstin Thompson

'It's an intellectual property company, ...not really shipping parts, we're shipping ideas.' Terry Stinson

'The issue is: how do you get that great idea through the process efficiently, in a cost effective way, and into the market place?' Phillip Butler'

'It's one thing to be innovative, it's another thing to turn it into a return.' Bruce Griffiths

'You have to be innovative in absolutely every sense of the word...in every single process.' Diane Tompson

### **Market driven collaborative R&D**

'Research is a fundamental platform for innovation.' Ken Maher

'...in Australia...you've got access to some excellent public research, excellent partners, excellent companies.' Philip Binns

'For industry, research must be directed towards tangible outcomes. ... We're bringing industry partners, bringing universities together on a problem of real relevance to the industry. ...It's a long hard slog, international collaboration; it's one that Australia, I think, is right to invest in.' Caroline McMillen

'The world is not absolutely a level playing field and governments and companies and academic organisations have to work together.' Sylvia Tulloch

### **Adaptive and skilled people**

'It's about everybody in the organisation having a culture of innovation.' Gary Zamel

'You can buy the best equipment, the best laboratories, but ultimately it's the people that make it happen.' Zoran Angelkovski

'People are the essential ingredient for innovation.' Phil Butt

'It's not just one person who is bringing ideas to a project. It is normally a team of people and it's the conversations that you have as a team...where the innovation comes about.' Kerstin Thompson

'Innovation, for me, is...about how we take people on the journey to create change.' Siobhan Toohill

### **Adaptive policy and regulatory framework**

'Governments play a key role because they create the framework.' Zoran Angelkovski

Selection of quotes from *Innovation Profiles* at [www.innovation.gov.au/innovationprofiles](http://www.innovation.gov.au/innovationprofiles)

## Role

The Councils have three key roles. Members share their insights by:

- providing strategic advice on innovation priorities to the Minister;
- championing innovation in industry; and
- building connections and collaborating across Councils and with other innovation initiatives and organisations.

## Established

As of 30 September 2010, the Minister had established eight Councils covering the following industries:

- Automotive
- Built Environment
- Future Manufacturing
- Information Technology (IT)
- Pulp and Paper
- Space
- Steel
- Textile, Clothing and Footwear (TCF).

In the period of this update report, 1 July 2009 to 30 September 2010, five of the eight Councils held their first meeting: IT (21 July 2009), TCF (17 September 2009), Steel (5 November 2009), Space (10 February 2010) and Pulp and Paper (27 July 2010).

A list of the members for the eight Councils, as at 30 September 2010, is at **Attachment A**. A list of the Chairs, membership numbers and meeting dates for each Council, as at 30 September 2010, is at **Attachment B**.

## Collaborating for Success

In April 2010 Chairs and members of the Councils joined with other advisory bodies of the Department of Innovation, Industry, Science and Research (the department) at the *Collaborating for Success* conference. A key theme of the conference was building adaptive capability and capacity to boost productivity, competitiveness and sustainability.

The Chairs and members of the Councils both led and contributed to the discussions at the conference, in particular sessions addressing this key conference theme.

The Australian Government's national innovation strategy *Powering Ideas—An Innovation Agenda for the 21<sup>st</sup> Century* (p. 4) highlighted the need to look beyond meeting today's needs, to ensure firms were equipped to meet the challenges of the 21<sup>st</sup> century.

Two of the specific imperatives for firms explored at the *Collaborating for Success* conference, were:

- Information technology (IT) industries and supply chains, and
- Solutions for a sustainable future.

The first theme drew attention to the continued, sustained evolution of businesses, and business relationships, made possible by developments in information technology.

Firms need to move from deploying individual systems in their own operations to interconnected systems, such as smart supply chains, smart infrastructure and intelligent transport. Interconnectedness is not just about new technology; it is also about better approaches to collaboration and information sharing with trusted suppliers, clients and partners. Government can encourage the building of the digital infrastructure, including but not limited to the national broadband network. It can also lead by example in operations and service delivery, and as a purchaser of goods and services.

*Collaborating for Success* looked at case studies of supply chain transformation in a major Australian defence contractor and an automotive components supplier. It also explored how the position, navigation and timing service from the global positioning system had quickly become critical infrastructure across the economy.

The second theme drew attention to the challenges and opportunities of building a more sustainable economy and society for the future.

Organisations need to consider core strengths they can leverage to address emerging challenges for their clients, identifying the technologies, processes and collaborations needed to provide solutions for Australian and world markets.

Large companies are changing their business models, becoming networked organisations that collaborate with customers and suppliers to deliver sustainable solutions. Australia's many small and medium sized enterprises also need to transform their adaptive capability and capacity to participate in these networked supply chain relationships. Government can assist firms by encouraging them to commit to the process, supporting them to implement new strategies and demonstrating practical business benefits.



## Collaboration by Council Chairs

Early in 2010, the Chairs of Councils collaborated in the development of a set of interrelated strategic outcomes for Councils (illustrated in **figure 2**). They created six shared high level goals, which provide the structure for the main report.

The six strategic outcomes are:

- innovative Australia,
- global leadership,
- innovation transformed industry,
- market driven collaborative research and development (R&D),
- adaptive and skilled people, and
- adaptive policy and regulatory framework.

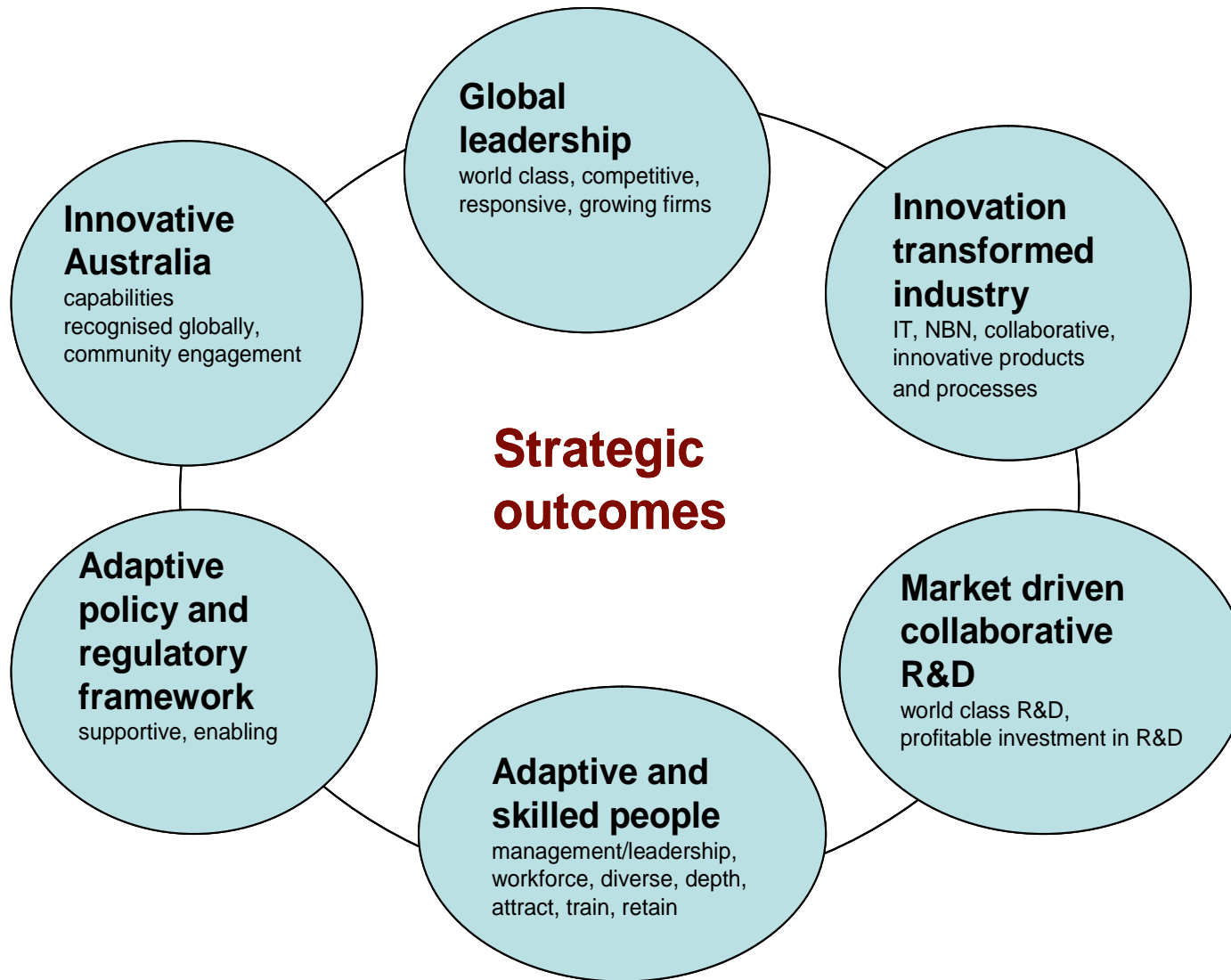
The Chairs' deliberations were underpinned by the strategic roadmaps (outcomes, pathways, and milestones) developed and implemented by the Built Environment, Future Manufacturing, IT, Space, and TCF Councils. The strategic roadmaps are available at [www.innovation.gov.au](http://www.innovation.gov.au) .

This report by the department explores the six strategic outcomes by highlighting a selection of achievements and work in progress by Councils which contribute to achieving the six shared goals. The Councils investigate cross cutting issues and propose solutions.

The insights and initiatives of the Councils demonstrate the strategic nature of their role, focusing on:

- identifying needs, gaps and opportunities;
- proposing strategies and solutions to maximise opportunities;
- providing strategic advice on government policies and programs;
- obtaining evidence based analyses and reports to support the development of their advice for the Minister and stakeholders; and
- developing and implementing their communication strategies to engage with, and inform, the Minister, the Government, stakeholders and the media.

**Figure 2 Strategic outcomes of Councils**



## Strategic outcome: Innovative Australia

Australia needs *to be* and needs *to be seen* as innovative.

'Innovative Australia' is a strategic goal shared by members of all the Industry Innovation Councils.

Council members in articulating an 'Innovative Australia' goal, identify the need to achieve a positive image of Australian industry through building:

- a strong 'Brand Australia',
- global brand recognition of Australia's capabilities,
- a sophisticated and informed end user community, and
- broad community engagement in moving to a sustainable future.

### Council insights and initiatives

Australia needs *to be* and needs *to be seen* as innovative. Strengthening Australia's innovation system adds another dimension to Australia's international reputation for highly valued innovation capability and capacity.

Early in its operations, the Future Manufacturing Council identified the outdated image of manufacturing as a significant impediment to growth, with particular implications for training and recruitment. For the Council, creating a positive image of manufacturing is a priority 2014 outcome. As one strategy to promote a positive image, members of the Future Manufacturing Council together with other Council members shared their experiences in providing innovative industry solutions in the multimedia *Innovation Profiles* project.

The Australian automotive industry, like other industries at home, has world-class innovative capabilities; but in a dynamic global environment it must continue to highlight those strengths. The Automotive Council, in collaboration with key government and research stakeholders, supported the development of the *Automotive Australia 2020* technology roadmap. This robust analysis and report identifies specific automotive technologies with real commercial potential for Australia, and the enabling activities required to realise these opportunities. This is a valuable resource for stakeholders. It provides a new focus and direction for the Australian industry, and makes a case for technology collaboration and business investment.

Space policies and industries exist in an environment characterised by dynamic global growth. This can be seen in 2010 in the developments of space policies, space agencies and/or growth in space industry opportunities, in the United States, European Union, United Kingdom and Asia-Pacific. Internationally, Australia's geographic position gives it a competitive advantage and rich opportunities to pursue its role in supporting global space systems. The Space Council is leveraging this geographic advantage and building ideas around its 'Big Ear for the southern hemisphere' concept to promote a positive image of Australian space industry's capabilities and opportunities.

For the Pulp and Paper Council, the drive to improve the industry's innovative capability and capacity will focus on identifying opportunities in water and energy efficiency and devising ways to maximise Australia's capacities in fibre production, product innovation and renewable energy, in particular bioenergy.

The Minister asked the Textile, Clothing and Footwear Council (TCF) to provide advice on the introduction of a voluntary ethical quality mark. The Council has examined arrangements internationally and in Australia, and their early considerations include the possibility of linking it with a broader 'Brand Australia' concept for the TCF industries.

Community engagement and initiatives to raise awareness of the importance of innovation is a common thread across Councils.

Councils have initiated **multiple strategies** as they engage in dialogue, champion innovation, and build connections with other innovation stakeholders focusing on innovation priorities, including:

- publishing information at [www.innovation.gov.au](http://www.innovation.gov.au) ;
- consulting and collaborating within the Councils
- inviting experts to assist the Councils to identify challenges and opportunities, and propose solutions;
- actively linking research to industry, government to industry, business to business, and industry to the general community;
- making submissions to parliamentary inquiries;
- initiating forums to engage directly with a broad range of stakeholders;
- taking up speaking engagements and leadership roles at conferences, such as the April 2010 *Collaborating for Success* conference;
- providing evidence-based analyses and reports to inform discussions on innovation priority issues and possible solutions;
- working with other government initiatives, including Enterprise Connect and Supplier Advocates; and
- ongoing initiatives to cut through the media by providing:
  - multimedia resource materials,
  - authored articles by members, and
  - individual members for interviews for articles in specialist publications.

All Councils have taken the opportunity to access expert advice on particular topics prior to developing Council advice for the Minister and their wider stakeholder groups. For example, experts from different sectors in the space community have attended meetings of the Space Council and provided an overview of the strengths, threats and opportunities in space education, space science, earth observation from space, and satellite sectors.

Forums to engage directly with stakeholders have been a feature of the Built Environment, Future Manufacturing, IT and the TCF Councils. These forums have encouraged robust debate on priority issues, contributed to refining Council advice to the Minister, and influenced the strategic work programs of Councils.

At its first industry forum, the Built Environment Council and its key stakeholders identified the need to engage the industry and the broader community to change practices and behaviours in order to move to a more sustainable built environment. The Council supported the development of *A Framework for a Community Engagement Strategy for the Built Environment*. It identifies key elements of a sustainable built environment that are desirable, affordable and durable. It provides strategies for engaging the community and is a valuable resource for stakeholders across industries wanting to implement strategies to engage targeted communities.

The IT Council is active in raising awareness of the critical role of IT in transforming how people live and do business in industry, government and the wider community. In particular, the Council has highlighted the opportunities associated with the national broadband network. The members continue to emphasise the need for businesses to be 'technology ready' to maximise opportunities which innovative enabling technology can deliver. Some members of the IT Council have authored articles as a resource for the media.

Mr Philip Binns, Chair of the Future Manufacturing Council, shared the Council's ideas, views, priorities and achievements for transforming Australia's future manufacturing industries for articles in AMTIL's *Australian Manufacturing Technology* magazine and the *Curve* magazine.

The Future Manufacturing Council provided submissions to the House of Representatives Economics Committee inquiry into raising the level of productivity growth in the Australian economy, and the Victorian Parliament Economic Development and Infrastructure inquiry into Manufacturing in Victoria. Two members, Mr Philip Binns (Chair), then Managing Director, Varian Australia Pty Ltd, and Mr Pat Boland, then Chief Executive Officer, ANCA Pty Ltd appeared before the Victorian parliamentary committee.

The Future Manufacturing Council, in collaboration with the Australian Institute of Commercialisation, developed a Council sponsored *Innovation Quiz*. This easily accessible quiz continues to attract users and contributes to raising awareness for individuals of the vital role of innovation in transforming and strengthening business.

## Strategic outcome: Global leadership

Australia needs firms that are exemplars with significance in their global markets which are able to assist local companies to better link into global supply chains.

In aspiring to 'global leadership' for some Australian firms, members of the Industry Innovation Councils across targeted industries want Australia to be a valued international player which is building and sustaining:

- vibrant, growing exports;
- world leadership in niche areas;
- competitive supply chains;
- improved market access;
- more companies with global leadership positions; and
- maintenance of critical manufacturing base.

### Council insights and initiatives

With eight Councils covering a diversity of endeavours, some issues and strategies will be shared by all, while some will be particular to one or a few of the industries. The situations and solutions are complex and variable. Here are some examples of recent insights and initiatives by Councils to contribute to achieving a goal of 'global leadership' for some Australian firms.

The viability of the Australian automotive industry is dependent on strong exports and a world class reputation in firm and technological capabilities. The Automotive Council, collaborating with government and research stakeholders, supported the *Automotive Australia 2020* technology roadmap project. Released on 6 August 2010, it recognises that Australia is already a leader in the design, engineering and production of large passenger cars.

*Automotive Australia 2020* identified new technology opportunities in which Australia can be a world leader. The roadmap is a comprehensive, evidenced based analysis which links research and industry. It will help industry, research and government navigate the future.

*Automotive Australia 2020* is also a model of collaboration. The initiative was made possible through the collaboration of the Automotive Council with the support of the Australian and Victorian Governments; and the Cooperative Research Centre for Advanced Automotive Technology (AutoCRC), with assistance from the University of Cambridge, the Australian National University and CSIRO.

The Automotive Council also identified the need for and, subsequently developed, a coordinated strategy to access China's automotive market, including measures to promote Australia's world class capabilities. The strategy received strong input and support from industry stakeholders and continues to guide market access activities, including the May 2010 Automotive Envoy led mission to China.

The Space Council identified the need to build awareness of Australian space-related activities and capabilities, and the important role Australia plays in supporting international space systems. The Council provided the Government with advice on the development of a national space policy and information to be included on the newly launched portal [www.space.gov.au](http://www.space.gov.au). Also, the Council is contributing to building community awareness through its activities, including the participation of members at international and national events and conferences.

The IT Council recognises that a global profile for innovation will bring national benefits and, in a digitally enabled world, information technology is a vital key to success. The Council sees a vibrant, growing and entrepreneurial information and communications technology (ICT) business sector engaged in world class research and development (R&D) which, with commercialisation, can export solutions to the world.

Achieving more Australian companies with global leadership is a desired outcome of the Future Manufacturing Council. There are few Australian manufacturers, like Cochlear Limited and Commonwealth Serum Laboratories (CSL) Limited, which are significant in their global markets. The development of global leaders has the potential to lift the international image of Australian manufacturing and assist local companies to access global markets through primes better linking with firms in their supply chain.

There is room for Australia to improve its performance in a range of fields. The Future Manufacturing Council provided advice to the Minister on international benchmarking studies on company performance issues, including a suggested strategy to provide smaller innovative firms with working capital necessary for their expansion and growth.

Evidence based analyses were provided by a range of experts to the Councils. For example, two studies on innovation were provided by:

- Professor Danny Samson (July 2010) in his examination of the factors associated with successful innovation at the enterprise level. His report includes findings from ten Australian based company case studies and his 20 principles of systematic innovation capability; and the
- Melbourne Institute of Applied Economic and Social Research (June 2010) analysis report on the characteristics of innovative firms in Australia and a comparison of these results with results in the UK and Europe.

Working collaboratively, the Built Environment Council and industry representatives identified the need to enhance the industry's global profile. The Chair and members of the Council are collaborating in international forums and engaging with industry representatives in identifying industry issues and opportunities, including the adoption of sustainable technologies and building information modelling (BIM).

## **Strategic outcome: Innovation transformed industry**

Members of the Industry Innovation Councils consider a broad canvas of innovation priorities to transform industry, including innovation in products (goods and services), business models, operational processes, skills, and marketing.

Examples of factors which influence innovation in transforming industry, considered by Councils, include but are not limited to strategies to maximise opportunities through better:

- technology, in particular a national broadband network;
- energy, water and resource efficiency;
- access to information, markets and capital;
- supply chain connections;
- products and processes which are sustainable;
- maintenance of essential manufacturing base for industry; and
- leveraging of existing government programs and partnering with government initiatives.

Fundamental to innovation transforming industries are technology and people.

### **Council insights and initiatives**

Members of the Councils took leadership roles at the *Collaborating for Success* conference in April 2010 in discussions, in particular in sessions focusing on:

- IT transformed industries and supply chains, and
- Solutions for a sustainable future.

Technology and people are fundamental to industry transformation. Through its work, the IT Council is ensuring that government policy development, and program design and delivery, keep the importance of technology 'front of mind.' This is reflected in the IT Council's vision and advocacy in its advice to the Minister, other Councils, departmental officers, and stakeholders, including a concerted effort to cut through to provide a uniform message to the media. An important question is: 'How broadband ready are firms?' Maximising the opportunity of a national broadband network is a priority in the IT Council's strategic plan.

The Built Environment Council supports research into sustainable technologies and building information modelling (BIM). The Council recognises that innovative technologies, including in government procurement practices, have the potential to raise productivity in firms which will strengthen the economy and society.

The Steel Council, as with other Councils, identified the need for strategic mapping of impediments and opportunities in their industry and through their supply chains. For the Steel Council, a market failure is access to coordinated and comprehensive databases to demonstrate the industry's capabilities and capacities in order for Australian steel manufacturers and steel fabricators to gain increased access to supply to major projects.



The TCF Council identified the necessity of maintaining a critical manufacturing base. The Council is developing an industry capability map to identify an essential industry base in TCF industries. Once completed, it will assist stakeholders to identify the challenges and how the issue of maintaining an essential manufacturing base might be achieved in a globally competitive market.

The newly established Pulp and Paper Council is investigating ways to maximise Australia's ability to take up opportunities in renewable energy and water efficiency, as well as in fibre production and product innovation. The issues of sustainable energy and water are innovation priorities for other Councils too, including the Built Environment and the Future Manufacturing Councils.

Obtaining evidence-based analyses and reports is a feature of the Councils. Councils recognise that soundly-based ideas and initiatives are vital if they are to contribute to transforming their targeted sectors and build a stronger innovation culture across Australian industry. Members have explored a broad canvas of issues which includes innovation in products (goods and services), business models, operational processes, skills, and marketing. This aligns with other key innovation organisations, including analyses and reports by the Organisation for Economic Cooperation and Development (OECD) and the Australian Bureau of Statistics (ABS). See **Attachment C** for examples of Council related projects or for more details go to [www.innovation.gov.au](http://www.innovation.gov.au)

Access to capital is a particular priority for the Automotive and Future Manufacturing Councils. Difficulty in obtaining access to capital, especially for small to medium sized enterprises (SMEs), is a major constraint in growing existing firms and creating new firms and new jobs. On 22 March 2010, the Automotive Council facilitated a forum, led by the Automotive Envoy, the Hon Steve Bracks AC, to improve linkages between bank representatives and industry stakeholders with the aim of improving their understanding of the strengths and dynamics for the stakeholders and the banks. The participants agreed on the need for ongoing dialogue to enhance understanding.

The Space Council is looking to leverage off government activities to maximise opportunities by developing a business case around opportunities from ground based elements of NBNCo Limited satellites, the dual use synthetic aperture radar (SAR) satellites, for hosted payloads for the national broadband network satellites, and the opportunities if the Square Kilometre Array (SKA) is hosted in Australia and New Zealand. Also, the Space Council is looking to gain influence from existing government policy, including the Defence white paper (2009), the Aviation white paper (2009), and the Critical Infrastructure Resilience Strategy (2010).

Members of the Built Environment, Future Manufacturing, IT, Steel and TCF Councils provided advice on the Government's 2009 Supplier Advocates initiative.

The Councils continue to align their work with, and contribute to, the Government's call for innovation to transform industry. Innovation as a key driver of productivity and competitiveness can strengthen the economy and society. Innovation can stimulate the creation of new industries and new jobs, as well as revitalise mature industries.

## Strategic outcome: Market driven collaborative R&D

Members of the Industry Innovation Councils see a strong nexus between establishing world class research and development (R&D) and establishing a world class skills/education system.

Their goal is for R&D to be market driven and collaborative.

Characteristically, this would include:

- profitable and rewarding industry investment in R&D,
- world class research capabilities,
- stronger links between research and industry,
- effective commercialisation of new ideas/products/services,
- a robust and aligned education and investment environment, and
- world class R&D supported by a world class skills/education system.

### Council insights and initiatives

The Councils' strategic goal of achieving 'market driven collaborative research and development (R&D)' goes to the heart of the Government's national innovation priorities which aim to 'address the country's long term weakness in business innovation, and in collaboration between researchers and industry' (*Powering Ideas* p. 4).

The quality of the leaders appointed as members of the Councils, and the members' multiple roles in their busy lives in industry, unions, research, and government provide valuable networks and connections within and beyond Councils. The formal and informal links provided by Council members create a beneficial foundation for collaboration with other innovation initiatives and organisations. Members help break down 'silos' which can be impediments to strengthening the national innovation system. The combined connections and expertise of 150 members directly helps shape the advice Councils provide to the Minister and other innovation stakeholders.

Strengthened links between industry and research are evident in the work of the Automotive, Built Environment, and the Future Manufacturing Councils with Cooperative Research Centres (CRCs), universities and the CSIRO. For example, the AutoCRC linked with the Automotive Council and other groups to produce *Automotive Australia 2020* technology roadmap, a comprehensive and valuable resource for industry, research and government stakeholders.

Investment in R&D is relatively low in the pulp and paper industry and in the TCF industries. The challenge this brings is recognised by their Councils. The Pulp and Paper Council is developing a roadmap to identify R&D needs and opportunities for the industry. One immediate opportunity is the task of encouraging the establishment of a Biorefinery Research Institute through developing draft terms of reference and building support for such an initiative.

From the Built Environment Council's first industry forum, members and their industry stakeholders identified the need for better partnerships between research and industry to overcome a lack of connected R&D, which inhibits innovation, especially for SMEs. As part of their initiatives to better link research and industry, members of the Built Environment Council were active in:

- contributing to the Government's Built Environments Research Infrastructure Investment Plan (\$20m Super Science Investment program), and the Organisation of Economic Cooperation and Development (OECD) Global Science Forum on built environment;
- preparing a built environment application for consideration under the 13<sup>th</sup> CRC funding selection round; and
- developing and promoting the advancement of building information modelling (BIM) to improve practices and processes in the built environment.

The Space Council identified the need to develop connections and networks within Australia's space sector and to encourage national and international collaboration between researchers and industry. Members, in encouraging networking and collaboration, identified a number of government programs that support collaboration and SME involvement in global supply chains that they are communicating to the space community. For example, the Space Council promotes the Australian Space Research program as a mechanism for encouraging collaboration between research and industry.

A number of the Councils identify opportunities in leveraging existing government programs to enhance the innovative capabilities of firms, and encourage the collaboration of research and industry. The *Automotive Australia 2020* roadmap recommended that industry should collaborate to apply to the Green Car Innovation Fund to support several R&D projects, including on supercapacitors for high energy batteries.

The TCF Council sees research as a key ingredient for innovation and has increasing the number of Researchers in Business placements in the TCF industries as one of its 2010 milestones. This Enterprise Connect program supports the placement of researchers in business to help develop and implement a new idea with commercial potential. Two of the members of the TCF Council have participated in the Enterprise Connect DVD which promotes the program.

The importance of R&D policy settings is reflected in the Future Manufacturing and the IT Councils' provision of advice and submissions on design elements of the R&D Tax Credit exposure draft legislation.

The IT Council also identified that information and communication technology (ICT) will play an increasing role in R&D providing the power to deal with complexity and the ability to link researchers in collaborative arrangements. As a corollary, the IT Council sees an adequately skilled research workforce trained in ICT as critical to economic success and has ICT education and training as priorities. The need for world class skills and education system is discussed under the next strategic goal, namely 'adaptive and skilled people'.

## Strategic outcome: Adaptive and skilled people

The goal of 'adaptive and skilled people' is perhaps the most pervasive goal shared by the members of all eight Industry Innovation Councils.

For members, skilled people include management as well as the general workforce. All are critical in driving innovation to strengthen the economy and society.

Members want to see:

- *people who are:*
  - highly skilled,
  - highly adaptive,
  - visionary, diverse and innovative;
- *coupled with systemic practices which:*
  - support world class R&D and a world class skills/education system with improved access to both,
  - promote entrepreneurial and leadership skills, and
  - enable Australia to attract, train and retain skilled capability and capacity.

### Council insights and initiatives

The strategic goal of 'adaptive and skilled people' is a high priority for all Councils. Members emphasise the key message from their stakeholders: Australia needs to be able to attract, train and retain people who are equipped to meet challenges in a globally connected work environment. To do this, Councils believe Australia needs a world class system which serves all people in the workplace, including management.

Councils have looked at cross-cutting issues under this priority and suggested solutions covering issues of design, delivery and accreditation. For example, Councils continue to explore a variety of issues and solutions, including identifying: needs, gaps, opportunities to engage with existing programs, and strategies to support their insights and initiatives.

Examples of Councils' insights and initiatives in relation to their strategic goal of 'adaptive and skilled people' include the following.

### **Insights**

- Australia can be proud of its highly qualified people, the issue is how to maintain and expand a diverse pool of talent;
- leadership and entrepreneurial skills are needed as much as specific upskilling of trades, undergraduates and postgraduates;
- Australia needs a coordinated and integrated skills/education system which focuses on a life time of learning;
- there is a need for multidisciplinary, integrated delivery mechanisms;
- for a sustainable construction sector, Australia needs to upskill trades to equip people to meet new demands for retrofitting buildings;
- the recruitment and training of professional engineers and highly skilled trades people are major issues for manufacturing;
- for the automotive sector, undergraduate and postgraduate training is required in areas of vehicle electrification, human machine interfaces and lightweighting;
- many sectors need to increase their ability to attract the 'brightest and the best' to their industry; some of these views were discussed earlier in this report. Issues identified by Councils include:
  - overcoming moribund views of manufacturing;
  - recognising the need for investment in skills accreditation and vocational education for TCF industries;
  - supporting, in cooperation with industry partners, workforce planning and development initiatives for the pulp and paper industries;
  - exploring how global sectors, such as space industries, can attract expatriates back to Australia, and
  - the need to develop globally recognised skills accreditation for ICT workers.

### **Initiatives**

- members from the Councils took leadership roles and participated in the discussions at the April 2010 *Collaborating for Success* conference, including sessions on 'Building adaptive capability and capacity in firms', and 'Leadership and management';
- Professor Caroline McMillen, an Automotive Council member, presented a discussion paper to the Council on options to build research skills, leadership capacity and to drive innovation in areas of priority, in particular in relation to opportunities at the 'PhD' level. In a forthcoming meeting, the Council will consider a proposal for the AutoCRC to further develop the paper's themes, including the potential expansion of the AutoCRC program to implement specific R&D needs arising from the *Automotive Australia 2020* technology roadmap;
- the Built Environment Council is contributing to the development of a green skills curriculum at the Vocational Education Training (VET) level for the construction trades;
- the IT Council continues to champion its message on the critical nature of upskilling people in information and communication technology (ICT) as a fundamental building block to meet the challenges of a digital economy and society;

- the IT Council is supportive of the Australian Computer Society's initiative to develop an ICT accreditation framework which will deliver whole-of-career pathways for ICT workers—this will be a significant break through for industry in general and the ICT industry in particular;
- the IT Council is scoping an analysis to investigate how to improve and coordinate ICT education, skills and training activities;
- the IT Council is developing a strategy to assist the Government Enterprise Connect business advisers to identify and advise on the enablement of IT as a business tool;
- the Built Environment Council is also championing the take up of building information modelling (BIM) and other digital technologies;
- the TCF Council is working with the department to map training capability to establish what TCF related courses are offered in Australia and what, if any, gaps exist;
- support for evidence based analyses and reports to assist the work of the Councils (See **Attachment C** for examples of Council related projects or for more details go to [www.innovation.gov.au](http://www.innovation.gov.au) ); and
- in championing innovation in industry, members also disseminate information about, and facilitate links with, government programs which can be accessed to assist stakeholders achieve strategic outcomes.

## **Strategic outcome: Adaptive policy and regulatory framework**

Members of the Industry Innovation Councils look to government to have the right policy and program settings for innovation to flourish.

In its ten year agenda for innovation in the 21<sup>st</sup> century, the Government said that: 'While profit opportunities and competition motivate most business innovation, government can support innovative businesses by reducing impediments and providing incentives to address specific market failures (*Powering Ideas* p.6).

Members in emphasising the need for an 'adaptive policy and regulatory framework' envisage having:

- government policies and programs which are consistent and sustained in their support;
- regulation which is enabling, including national and international regulation which is compatible in a competitive environment; and
- strong government to government relationships.

### **Council insights and initiatives**

Council members' continuing dialogue enables them to investigate impediments and propose solutions on cross-cutting issues. The strong message received from the Councils is the need for government policy and regulation to be consistent and sustained to give firms the confidence to make and action critical business decisions.

Councils recognise that regulation can be a catalyst for innovation. They recognise that changing policy settings can be contentious. In establishing the 'right regulation' the Built Environment Council emphasises the importance of matching changes with appropriate periods of time for implementation.

The Councils identify the need to harmonise, integrate and ensure government regulation is consistent. Across industries, the primary focus for regulation may vary from marked attention to international compatibility for those characterised by global operations such as automotive, IT, manufacturing, and space industries to those industries where the main focus is within Australia as firms juggle operating with three levels of government. Australia's three tier system of government can create challenges for companies, in particular when differences in regulations or policies, some of which may be conflicting, inhibit improvements in innovation, productivity and competitiveness—that is, sustainable wealth and job creation.

The goal of achieving nationally consistent regulation is shared by Councils. For example, the requirements for police vehicles differ in each jurisdiction which increases the production costs for local manufacturers. The Automotive Council provided advice on this to the Minister who in turn wrote to Federal, State and Territory Police Ministers requesting that harmonising of police vehicle specifications be considered. While early in the discussion process, initial responses indicate some support for a nationally agreed standard.

A practical issue for Councils is how to influence new and existing government initiatives. Councils are increasingly taking up the opportunity to engage with the Minister and departmental officers responsible for the development and implementation of policies. For example, the Future Manufacturing and IT Councils provided advice and made submissions on design elements of the R&D Tax Credit exposure draft legislation and Commercialisation Australia reflecting industry concerns. The IT Council also provided advice on the taxation treatment of employee share schemes. The Future Manufacturing Council is collaborating with the department to advance regulatory reform affecting health technologies, in particular medical devices.

The Automotive Council continues to advise the Minister on the effectiveness and operation of automotive industry policies and programs, in particular initiatives under *A New Car Plan for a Greener Future*. The Automotive Council will consider and advise industry on how to advance the *Automotive Australia 2020* roadmap and how existing government support can be used to facilitate its implementation.

The Pulp and Paper Council has met with representatives of Federal departments and agencies to ensure that the Government, when it considers the recommendations of the *Pulp and Paper Industry Strategy Group Final Report (2010)*, has a sound understanding of the industry's potential, the issues it faces and, particularly, the specific impacts on industry members from different policy measures.

Enabling actions for government policy and regulation are identified in the *Automotive Australia 2020* technology roadmap, including harmonisation of standards, realisation of enabling technologies, and an industry education campaign to inform stakeholders of capabilities of composite materials. Several Councils, including the Built Environment, IT and Space Councils, identified the benefits of an education program to raise community awareness on key issues.

Through the department, the TCF Council has a list of existing Commonwealth, State and local government programs that may be of assistance to TCF companies and the Council will look to make this information available to their stakeholders.

The Australian Government is developing a national space policy. The Space Council is engaging with stakeholders and working with the department to assist in the development of a national space policy. The Built Environment Council made a submission to the National Building Energy Standard Setting Assessment and Rating Framework which aims for consistency on how buildings are assessed and rated for energy efficiency, and set a strategy for increasing minimum performance standards over time.



All Councils identify government procurement requirements as pivotal in boosting industry innovation. The nexus between innovation and procurement is readily identified by Council members, as it is in a number of jurisdictions overseas. At the very least, members believe that government procurement should not hinder innovation, while many want procurement practices to drive innovation to improve the capabilities and capacities of firms in Australia. For example, the TCF Council is examining ways the Australian TCF industries can maximise their competitiveness in government procurement. From this investigation, the Council will be in a position to develop proposals to refine and/or enhance government procurement requirements to encourage innovation in the TCF industries.

Similarly, the Built Environment Council investigated and provided advice on how government procurement could actively support innovative practices in the built environment, including identifying practical steps such as supporting collaborative contracting. Of particular note in the built environment is the requirement in some countries, including Norway, Denmark, Finland and the Federal US Government, to adopt building information modelling (BIM) in procurement processes.

Representatives from industry and peak industry associations, unions, research and government participated in the Built Environment Council's industry forum which recommended the development of BIM industry standards, work practices and protocols. The Council supports a comprehensive review of existing regulations to improve significantly innovation in the built environment, and the processes used to deliver and maintain buildings and infrastructure.

Stakeholders in the built environment deal with all three levels of government which they see as placing government in a powerful position to create the conditions to drive innovation to improve productivity, competitiveness, skills and sustainability.

In contributing to governments creating an 'adaptive policy and regulatory framework', the Councils '...maintain continuous dialogue with industry about how we can maximise business innovation', a role articulated for Councils by the Government in *Powering Ideas: an Innovation Agenda for the 21<sup>st</sup> Century* (p. 6).

# Industry Innovation Councils Membership

## Attachment A

As at 30 September 2010

### Automotive Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Dr David Charles (Chair)</b>	<b>Senior Associate, Economics, Deloitte</b>	<b>VIC</b>	<b>Industry</b>
Mr Mark Albert	Managing Director, MtM Pty Ltd	VIC	Industry
Mr Zoran Angelkovski	President and Chief Executive Officer, Continental Pty Ltd	VIC	Industry
Mr Juergen Bracht	Managing Director, ZF Lemforder Australia	SA	Industry
Mr Marin Burela	President and Chief Executive Officer, Ford Australia	VIC	Industry
Dr Megan Clark	Chief Executive, CSIRO	ACT	Government
Mr Barry Comben	Independent Chairman, Cooperative Research Centre for Advanced Automotive Technology	VIC	Science and Research
Mr Mike Devereux	Chairman and Managing Director, GM Holden	VIC	Industry
Mr Charlie Donnelly	National Secretary, National Union of Workers	VIC	Union
Mr Bruce Griffiths	Executive Chairman, Futuris Automotive Group Ltd	VIC	Industry
Mr Wayne Hanson	Branch and State Union Secretary, Australian Workers Union	SA	Union
Mr Ian Jones	Chairman, Federation of Vehicle Industry Unions	VIC	Union
Mr David Latina	Executive Director, Sector Development, Department of Innovation, Industry and Regional Development	VIC	Government
Professor Caroline McMillen	Deputy Vice Chancellor and Vice President Research and Innovation, University of South Australia	SA	Science and Research
Mr David Oliver	National Secretary, Australian Manufacturing Workers Union	NSW	Union
Mr Steve Payne	Head of Manufacturing Division, Department of Innovation, Industry, Science and Research	ACT	Government
Mr Russell Pettis	Managing Director, Denso Automotive Systems Australia Pty Ltd	VIC	Industry
Mr Len Piro	Executive Director, Manufacturing and Business Services	SA	Industry
Mr David Robinson	Chairman and President, Robert Bosch (Australia) Pty Ltd	VIC	Industry
Mr Mike Shnier	Managing Director, Tenneco Australia and New Zealand	NSW	Industry
Mr Terry Stinson	Chief Executive Officer and Managing Director, Orbital Australia Pty Ltd	WA	Industry
Mr Hayden Williams	Global Leader, Automotive and Advanced Manufacturing, Austrade	VIC	Government
Mr Max Yasuda	President and Chief Executive Officer, Toyota Australia	VIC	Industry

## Built Environment Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
Ms Sue Holliday (Chair)	Managing Director, Strategies for Change	NSW	Industry
Mr Ross Batstone	Executive General Manager, Boral Plasterboard, Boral Ltd	NSW	Industry
Professor Catherin Bull	Professor of Landscape Architecture, Building & Planning, University of Melbourne	VIC	Science and Research
Mr Tristram Carfrae	Arup Fellow and Chair, Global Building Sector ARUP	NSW	Industry
Mr Peter Gow	Executive Director, Building Commission, Department of Commerce	WA	Government
Dr Michael Green	General Manager, Innovation and Space, Manufacturing Division, Department of Innovation, Industry, Science and Research	ACT	Government
Mr Mal Grierson	Director General, Department of Public Works,	QLD	Government
Professor Ralph Horne	Director, Centre for Design, Programme Leader, Global Cities Institute, RMIT University	VIC	Science and Research
Dr Matthew Inman	Research Leader, Urban Systems, CSIRO Sustainable Ecosystems	NSW	Science and Research
Mr James Kell	Chief Executive Officer, Kell and Rigby	NSW	Industry
Professor Martin Loosemore	Professor, Faculty of the Built Environment, University of NSW	NSW	Science and Research
Professor Ken Maher	Chairman, Hassell	NSW	Industry
Mr John McCarthy AO	Chairman, AEH Property, AEH Group	NSW	Industry
Mr Gene McGlynn	Assistant Secretary, Building & Government Energy Efficiency Branch, Department of Climate Change & Energy Efficiency	ACT	Government
Professor Peter Newman	Professor of Sustainability, The Curtin University Sustainability Policy Institute, Curtin University	WA	Science and Research
Mr Dave Noonan	National Secretary (Construction) Construction and General Division, CFMEU	VIC	Union
Mr Paul O'Keefe	Chief Executive, Australian Coated and Industrial Markets, BlueScope Steel Ltd	VIC	Industry
Mr Roger Olds	Managing Director, Coffey Int. Ltd	VIC	Industry
Ms Pru Sanderson	Chief Executive Officer, Victorian Urban Development Authority (VicUrban)	VIC	Government
Ms Kerstin Thompson	Principal, Kerstin Thompson Architects	VIC	Industry
Ms Siobhan Toohill	General Manager, Corporate Responsibility and Sustainability, Stockland	NSW	Industry
Ms Petie Walker	Project Manager, Northern Region Leighton Contractors Pty Ltd	QLD	Industry

## Future Manufacturing Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
Mr Philip Binns (Chair)	Vice President and General Manager, Spectroscopy Business, Agilent Technologies	VIC	Industry
Mr Pat Boland	Joint Managing Director, ANCA Pty Ltd	VIC	Industry
Mr Lyle Bruce	Chief Executive Officer, GroundProbe Pty Ltd	QLD	Industry
Dr Calum Drummond	Chief, CSIRO Materials Science and Engineering	VIC	Science and Research
Mr Brad Dunstan	Chief Executive Officer, Victorian Centre for Advanced Materials Manufacturing Limited	VIC	Industry
Dr Bronwyn Evans	Senior Vice President Quality and Regulatory, Cochlear Limited	NSW	Industry
Dr Michael Green	General Manager, Innovation and Space, Manufacturing Division, Department of Innovation, Industry Science and Research	ACT	Government
Mr Bruce Grey	Managing Director, Advanced Manufacturing CRC Ltd	VIC	Industry
Ms Lusia Guthrie	Chief Executive Officer and Managing Director, LBT Innovations Ltd	SA	Industry
Professor Erol Harvey	Chief Executive Officer, MiniFAB (Aust) Pty Ltd	VIC	Industry
Mr Erich Hofmann	Managing Director, Hofmann Engineering Pty Ltd	WA	Industry
Mr David Malloch	Chief Executive Officer, Malloch Digital Design	ACT	Industry
Professor Tanya Monro	Director, Institute for Photonics & Advanced Sensing, The University of Adelaide	SA	Science and Research
Mr Dave Oliver	National Secretary, Australian Manufacturing Workers Union	VIC	Union
Mr Tony Quick	Director, Enterprise Connect Defence Industry Innovation Centre	VIC	Industry
Ms Michelle Shi-Verdaasdonk	Product Continuous Improvement Manager - Asia Pacific, Electrolux Home Products Pty Ltd	SA	Industry
Mr Rohan Stocker	General Manager and Director, Marand Precision Engineering	VIC	Industry
Mrs Diane Tompson	Managing Director, Powercom Group Pty Ltd	TAS	Industry
Ms Sylvia Tulloch	Director, Dyesol Industries Pty Ltd	NSW	Industry
Mr Gary Zamel	Managing Director, Latitude Investments Pty Ltd	NSW	Industry

## Information Technology Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Mr John Grant (Chair)</b>	<b>Managing Director, Data#3</b>	<b>QLD</b>	<b>Industry</b>
Mr Glen Boreham	Managing Director, IBM Australia & New Zealand	NSW	Industry
Mr Michael Clifford	Queensland State Secretary, Finance Sector Union	QLD	Union
Mr Steve Conolly	Vice President, Siemens IT Solutions and Services, Siemens Ltd	VIC	Industry
Professor Peter Cole	Associate Professor & Dean School of IT, Murdoch University President, Australian Council of Deans of ICT	WA	Science and Research
Mr Tom Crago	Chief Executive Officer, Tantalus Media	VIC	Industry
Mr Bob Cupitt	Former Chief Executive Officer, The Learning Edge International Pty Ltd	TAS	Industry
Mr Peter Dalton	Group General Manager Innovation Australia & New Zealand Banking Group	VIC	Industry
Ms Belinda Dennett	Adviser, Office of the Minister for Broadband, Communications & the Digital Economy	VIC	Government
Ms Ros Eason	Senior Industrial Officer, Communications Division Communications Electrical & Plumbing Union	VIC	Union
Ms Tracey Fellows	Chief Executive Officer & Managing Director, Microsoft Australia	NSW	Industry
Ms Mia Garlick	Assistant Secretary, Digital Economy, Department of Broadband, Communications & the Digital Economy	ACT	Government
Mr Ben Hamilton	General Manager Corporate, Information & Technology Strategy Country Energy	NSW	Industry
Dr Graham Hellestrand	Chief Executive Officer, Embedded Systems Technology Inc	NSW	Industry
Ms Amanda Heyworth	Chief Executive Officer, Playford Capital Pty Ltd	SA	Industry
Mr Jan Janssen	Senior Vice President, Design and Development, Cochlear Limited	NSW	Industry
Mr Paul Kristensen	Executive Chairman, Capital Technologies Pty Ltd	WA	Industry
Mr Mike Lawson	General Manager, Competitive Industries Branch, Department of Innovation, Industry, Science and Research	ACT	Government
Ms Suzanne Roche	Director, Smartnet Pty Ltd	ACT	Industry
Mr Neville Stevens AO	Chairman, National ICT Australia (NICTA)	ACT	Science and Research
Mr Randall Straw	Deputy Secretary, Department of Innovation, Industry and Regional Development, Victoria	VIC	Government
Mr Chris Winter	Manager, New Services ABC Innovation	NSW	Government
Mr Anthony Wong	President, Australian Computer Society	NSW	Industry
Dr Alex Zelinsky	Director & Group Executive, CSIRO Information & Communications Technologies Centre	NSW	Science and Research

## Pulp and Paper Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Mr Stephen Payne (Chair)</b>	<b>Head of Manufacturing Division, DIISR</b>	<b>ACT</b>	<b>Government</b>
Ms Lorraine Cassin	National Secretary, Printing Division, AMWU	VIC	Union
Mr Sonny Coleiro	Group General Manager, Amcor Australia	VIC	Industry
Mr Stephen Deane	Operations Director, Pulp and Paper, Pratt Holdings Pty Ltd (Visy)	VIC	Industry
Mr Milo Foster	Vice President, Family Care-South Asia, Kimberly-Clark Australia	NSW	Industry
Professor Gil Garnier	Director, Australian Pulp and Paper Institute	VIC	Science and Research
Mr Jim Henneberry	Chief Executive Officer, Australian Paper	VIC	Industry
Mr Bill Hurditch	Principal and Director , The Fifth Estate consultancy	NSW	Industry
Mr Greg L'Estrange	Chief Executive Officer, Gunns Limited	TAS	Industry
Mr Don Matthews	Chief Executive Officer, Protavia	VIC/QLD	Industry
Mr Alex Millar	Secretary, Pulp and Paper Workers' Branch, CFMEU	VIC	Union
Mr Michael O'Connor	National Secretary, Forestry and Furnishing Products Division, CFMEU	VIC	Union
Ms Linda Sewell	Chief Executive, Hancock Victorian Plantations	VIC	Industry
Dr Bob Smith	Director, Board of VicForests	NSW	Government
Mr Paul Thompson	President, SCA Hygiene Australasia	VIC	Industry
Dr Nafty Vanderhoek	Research Group Leader, Materials Science and Engineering, CSIRO	VIC	Science and Research

## Space Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Dr Rosalind Dubs (Chair)</b>	<b>Former Deputy Vice Chancellor, University of Technology Sydney</b>	<b>NSW</b>	<b>Science and Research</b>
Dr Sue Barrell	Observations and engineering Branch, Bureau of Meteorology	VIC	Government
Mr Brett Biddington	Chair, Australian Space Industry Chamber of Commerce	ACT	Industry
Dr Phillip Diamond	Chief, CSIRO Astronomy and Space Science	NSW	Science and Research
Dr Michael Green	General Manager, Innovation and Space Brach, Manufacturing Divisions, Department of Innovation, Industry, Science and Research	ACT	Government
Dr Ben Greene	Chief Executive Officer, Electro Optic Systems Holdings Limited	ACT	Industry
Professor Peter Hall	Professor and Director, Radio Astronomy Engineering Curtin Institute of Radio Astronomy, Curtin University	WA	Science and Research
Mr Chris Jenkins	Managing Director, Thales Australia	NSW	Industry
Mr Rob Lorimer	Business Director, Wealth from Oceans National Research Flagship CSIRO	TAS	Science and Research
Dr Roger Lough	RML Science Consulting Pty Ltd	VIC	Industry
Dr Naomi Mathers	Program Developer, Victoria Space Science Education Centre	VIC	Science and Research
Dr Davis Nagayam	Research Fellow, Bionic Ear Institute	VIC	Science and Research
Professor Andrew Parfitt	Pro Vice Chancellor, Division of Information Technology, Engineering and the Environment, University of South Australia	SA	Science and Research
Dr Chris Pigram	Chief Executive Officer, Geoscience Australia	ACT	Government
Dr Susan Riding	Manager, R&D Tax Concession, BAE Systems	ACT	Industry
Mr Paul Sheridan	Director of Satellites, Optus	NSW	Industry
Dr Terry Stevenson	Chief Technology Officer, Raytheon Australia	ACT	Industry

## Steel Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Mr Mark Paterson AO (Chair)</b>	<b>Secretary, Department of Innovation, Industry, Science and Research</b>	<b>ACT</b>	<b>Government</b>
Mr Paul Bastian	National President, Australian Manufacturing Workers Union	NSW	Union
Professor Lyndon Edwards	Head, Institute of Materials and Engineering Science, ANSTO	NSW	Science and Research
Mr Paul Howes	National Secretary, Australian Workers Union	NSW	Union
Mr Don McDonald	CEO, Australian Steel Institute	NSW	Industry
Dr Steve Morton	Group Executive, Manufacturing, Materials and Minerals, CSIRO	ACT	Science and Research
Mr Paul O'Malley	Managing Director and CEO, BlueScope Steel Ltd	VIC	Industry
Mr Geoff Plummer	Managing Director and CEO, OneSteel Ltd	NSW	Industry
Professor Gerard Sutton	Vice Chancellor, University of Wollongong	NSW	Science and Research



## Textile, Clothing and Footwear Industry Innovation Council

<b>Name</b>	<b>Position and Organisation</b>	<b>State</b>	<b>Group</b>
<b>Mr Phillip Butler (Chair)</b>	<b>Director, Textor Technologies</b>	<b>VIC</b>	<b>Industry</b>
Mr Phil Butt	Managing Director, J. Robins & Sons	NSW	Industry
Mr Ross Fitzgerald	General Manager – Sales, Steel Blue	WA	Industry
Ms Colette Garnsey	Group General Manager - Apparel, Cosmetics, Accessories and Footwear, David Jones Limited	NSW	Industry
Mr John Garrett	Director, Godfrey Hirst Australia	VIC	Industry
Mr Michael Gerakios	General Manager, Global Filtration, Albany Filtration Technologies	NSW	Industry
Mr Mike Lawson	General Manager, Competitive Industries Branch, Department of Innovation, Industry, Science and Research	ACT	Government
Mr Daniel Leipnik	Chief Executive Officer, The Specialty Group of Australia	VIC	Industry
Dr Steve Morton	Group Executive, Manufacturing, Materials and Minerals, CSIRO	ACT	Science and Research
Professor Marie O'Mahony	Professor of Advanced Textiles and Fashion Design, University of Technology Sydney	NSW	Science and Research
Ms Michele O'Neil	National Secretary, Textile, Clothing and Footwear Union	VIC	Union
Mr Lindsay Packer	Managing Director, Packer Leather	QLD	Industry
Mr Brian Rush	Managing Director, Australian Defence Apparel	VIC	Industry
Mr Charles Szakiel	Managing Director, Tascot Templeton Carpets	VIC	Industry
Mr Barry Tubner	NSW, South Australia and Tasmania Branch Secretary Textile, Clothing and Footwear Union of Australia	NSW	Union
Mr Peter Waddell	CFO, Stafford Group Pty Ltd	VIC	Industry

## Attachment B

### Industry Innovation Councils Chairs, membership numbers and meeting dates

As at 30 September 2010

Council	Chair + Members	Meetings		Stakeholder
		Past	Next	
Automotive	Dr David Charles +22	6 May 10 26 Feb 10 5 Nov 09 1 June 09 29 Jan 09	5 Nov 2010	
Built Environment	Ms Sue Holliday +21	4 June 10 5 Mar 10 27 Nov 09 10 Aug 09 29 May 09 27 Feb 09 30 Oct 08	10 Dec 10	23 April 10 8 Dec 09 24 April 09
Future Manufacturing	Mr Philip Binns +19	20 April 10 10 Feb 10 31 Aug 09 19 June 09 27 May 09 26 Feb 09 2 Dec 08	12 Oct 10	6,7,8 May 09
Information Technology	Mr John Grant +23	23 June 10 9 Mar 10 18 Nov 09 21 July 09	3 Dec 10	9 Mar 10 18 Nov 09 13,14,18,19,20 Aug 09
Pulp and Paper	Mr Stephen Payne +15	27 July 10	7 Oct 2010	
Space	Dr Rosalind Dubs +16	3 Aug 10 11 June 10 13 April 10 10 Feb 10	9 Nov 10	
Steel	Mr Mark Paterson AO +8	29 April 10 5 Nov 09	23 Nov 10	
Textile, Clothing and Footwear	Mr Phillip Butler +15	2 June 10 23 Feb 10 17 Nov 09 17 Sept 09	14 Oct 10	2 Dec 09 25, 27 Nov 09

## Industry Innovation Councils

### Summary of projects, activities and reports

As at 30 September 2010

## Attachment C

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
<b>Chairs and Members of Councils</b>	<i>Collaborating for Success</i> Conference	<i>Collaborating for Success</i> Conference for all members of the Department of Industry, Innovation, Science and Research (DIISR) innovation and industry focussed policy advisory bodies.	Completed 18 to 20 April 2010
<b>Chairs of Councils</b>	Integrated strategic outcomes	Chairs of Councils met on 18 February 2010 and developed an integrated list of strategic outcomes for Councils drawn from the strategic roadmaps of five Councils.	Completed April 2010
	Chairs of Councils twice met with Chairs of DIISR advisory bodies	The Chairs of DIISR Advisory Bodies and key stakeholders in government attended workshops.	Completed 18 Feb 2010 15 Sept 2009
	Minister's Dinner	Minister Carr hosted a dinner to bring together and engage personally with innovation leaders he appointed to Chair: Industry Innovation Councils, Enterprise Connect Interim Advisory Boards, and Innovation Australia. Representatives from CSIRO and the department were also present.	Completed 14 April 2009
<b>Central Unit</b>	Innovation for business: achieving a systematic innovation capability	Professor Danny Samson examined the factors associated with successful innovation at the enterprise level. The report included ten case studies of Australian based companies and 20 principles of systematic innovation capability.	<a href="#">Completed</a> July 2010
	Examining the Characteristics of Innovative Firms in Australia	Melbourne Institute of Applied Economic and Social Research analysed the characteristics of innovative firms in Australia and compared these results with results in the UK and Europe.	<a href="#">Completed</a> June 2010

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
	Urban planning, information technology and evidence based decision making for emission reductions in our cities	Kinesis Pty Ltd analysed and quantified greenhouse gas emissions and social equity issues associated with the built environment. The report analysed the use of information technology to develop tools to support analysis to achieve sustainable outcomes in major planning and development decisions.	<a href="#">Completed</a> January 2010
	<i>Innovation Profiles</i> multimedia	Twenty five innovation leaders from five Industry Innovation Councils share their views and experiences of innovation in industry in Australia. These multimedia <i>Innovation Profiles</i> are freely available online, DVD and in print.	<a href="#">Completed</a> December 2009
<b>Automotive</b>	Automotive industry technology roadmap: <i>Automotive Australia 2020</i>	The Automotive Council endorsed the development of a comprehensive technology roadmap for the Australian automotive industry. The technology roadmap identifies green automotive technologies with commercial potential in Australia to 2020 and beyond.	<a href="#">Completed</a> Released August 2010
	Coordination of non-production days' information	The three major vehicle producers agreed for the Federation of Automotive Products Manufacturers to coordinate information on producers' non-production days to assist supply chain efficiency.	Ongoing
	Availability of bank finance	A meeting of automotive industry stakeholders and bank representatives, chaired by the Hon Steve Bracks AC, Automotive Envoy, discussed the availability of bank finance to automotive suppliers.	Meeting held 22 March 2010. Report on outcomes to Automotive Council on 6 May 2010. Further engagement between automotive stakeholders and banks in future.
	Automotive Industry Innovation Council Communiqué	The Communiqué forms part of the Automotive Council's communication strategy.	<a href="#">Completed</a> August 2009

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
<b>Built Environment</b>	Built Environment Council Newsletters	A newsletter to form part of the Built Environment Council's industry engagement.	<a href="#">Completed</a> July 2010 October 2009 July 2009
	A framework for a community engagement strategy for the built environment	The Framework identifies key elements of sustainable built environments that are more desirable, affordable and durable; determines how best to visualise, describe or convey this future in order to engage with the broader community; and considers other ways to engage the broader community in the idea of a more sustainable built environment.	<a href="#">Completed</a> June 2010
	Stakeholder workshops	The Built Environment Council held three stakeholder workshops to validate their strategic plans and engage with industry.	Completed 23 April 2010 8 December 2009 24 April 2009
	Cities of the future	The Australian Sustainable Built Environment Council (ASBEC) project is a preliminary exploration of the links between cities, land use and transport facilities in the reduction of greenhouse gas emissions.	Completed February 2010
	Innovation initiatives E-booklet	This e-booklet was developed to share stories of innovation across Industry Associations and Peak Bodies. The e-booklet covers description and purpose of the organisation, current and future initiatives, what's new and innovative, and contact details.	<a href="#">Completed</a> Development completed December 2009, Updated June 2010
	Issue Paper: Digital modelling and the built environment	This discussion paper by the Building Information Modelling Working Group explores issues surrounding the adoption of digital modelling by the Australian built environment industry.	<a href="#">Completed</a> November 2009 and revised in June 2010

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
	Innovative Practices in the Australian Built Environment Sector	The project involved research on current innovations across the Australian built environment industry and recommended a knowledge exchange strategy for accelerating adoption of innovative practices in the built environment industry.	<a href="#">Completed</a> June 2009
	Built Environment Procurement Practices	The project outlined a range of issues needing to be addressed for procurement processes to facilitate innovation and deliver more efficient, effective and sustainable built environment infrastructure.	<a href="#">Completed</a> June 2009
	Strategic roadmap 2009–2014	The roadmap outlines desired outcomes for the built environment industry by 2014, pathways to achieving these outcomes, and a set of eight milestones that the Council aims to achieve in 2010.	<a href="#">Completed</a> May 2009
	Retrofitting residential housing and precincts	The project investigated and reported on current practice and new strategies in retrofitting residential housing in the context of climate change. It reviewed industry up skilling and training responses in the residential building and construction industry for sustainable residential precinct and building retrofitting practices.	<a href="#">Completed</a> May 2009
<b>Future Manufacturing</b>	Strategic roadmap 2009–14	To guide the direction of the Future Manufacturing Industry Innovation Council.	<a href="#">Completed</a> May 2009 and revised in January 2010
	Advice	Examine and provide advice on R&D Tax Credit draft legislation; the establishment of Clean Technologies Supplier Advocate; the design of Commercialisation Australia; and innovation performance indicators.	Completed 2009 and 2010
	Stakeholder workshops	The Future Manufacturing Industry Innovation Council held three workshops to validate their strategic plans and engage with industry.	Completed 6,7,8 May 2009

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
	Innovation Quiz	Developed in association with the Australian Institute of Commercialisation, the quiz is highly accessible and designed to raise awareness of innovation at all levels of an organisation.	<a href="#">Completed</a> May 2009
<b>Information Technology (IT)</b>	Stakeholder engagement	<p>The Information Technology Industry Innovation Council held workshops and pursued other engagement opportunities to validate its strategic plan and engage with industry.</p> <p>The Council engaged with portfolio agencies and IT Supplier Advocate, Enterprise Connect, and other Councils to establish linkages on cross cutting issues.</p>	<p>Completed</p> <p>26 May 2010</p> <p>9 March 2010</p> <p>4 March 2010</p> <p>18 November 2009</p> <p>13,14,18,19,20 August 2009</p>
	Industry development	<p>The Council provided input to the Government's consideration of the R&amp;D Tax Credit draft legislation, Employee Options Scheme, the Board of Commercialisation Australia and the IT Supplier Advocate.</p> <p>The Council also embarked on a communications strategy to promote the benefits of IT as a tool for business. A package of six articles has been distributed to other Councils for use in sectoral trade magazines, and other journals and newspapers.</p>	<p>Completed</p> <p>23 June 2010</p> <p>9 March 2010</p>
	Strategic plan 2009–14	The strategic plan identifies the Information Technology Council's immediate priorities and the first steps in achieving the Council's agreed outcomes.	<a href="#">Completed</a> 9 March 2010 and revised 23 June 2010
	Advice on IT supplier advocate appointment	The Information Technology Council provided advice to the Minister on appointment of an Information Technology Supplier Advocate.	Completed March 2010

<b>Council</b>	<b>Project title</b>	<b>Description</b>	<b>Status</b>
	Technology First	The Chair wrote an article on his views on innovation and the role of technology in the Australian Computer Society's journal <i>Information Age</i> Oct/Nov edition.	<a href="#">Completed</a> October 2009
<b>Space</b>	Advice on development of Research Workforce Strategy	Council provided advice on current and future research for workforce needs within the industry.	Completed May 2010
	Strategic Roadmap	The roadmap outlines the desired outcomes for the space sector by 2020, pathways to achieving these outcomes, and a set of milestones that the Council aims to achieve in 2010.	Completed April 2010
	Presentations to stakeholder forums	Space Council members provided presentations to domestic and international space sector forums, including the Australian Defence Space Seminar and Swedish Space Seminar.	Ongoing
	Chair held high-level meetings with stakeholders	The Chair held high-level meetings with domestic and international stakeholders including: the Australian Space Chamber of Commerce, Thales, the Italian Space Agency, and the European Space Agency.	Ongoing
<b>Steel</b>	Advice on the Steel Supplier Advocate appointment	The Steel Council provided advice to the Minister on the appointment of a Steel Supplier Advocate.	Completed November 2009
<b>Textile, Clothing and Footwear (TCF)</b>	Strategic roadmap 2009–14	The strategic roadmap outlines the desired outcomes for the TCF Council by 2014, pathways to achieve these outcomes, and a set of ten milestones that the TCF Council aims to achieve in 2010.	<a href="#">Completed</a> 23 February 2010.
	Stakeholder workshops	The TCF Council held three workshops to validate their strategic plans and engage with stakeholders.	Completed 2 December and 25, 27 November 2009
	Investigation of Commonwealth, state and local government programs available to TCF industries	List of existing government programs which TCF companies may be eligible and program details.	Completed September 2010