

27 July 2009

The Research Director
Economic Development Committee
Parliament House
George Street
BRISBANE QLD 4000
Email – edc@parliament.qld.gov.au

Dear Sir,

Re: Submission to the Queensland Parliamentary Economic Development Committee

I am pleased to write in response to your letter of 8 July 2009 inviting comment to the Queensland Parliamentary Economic Development Committee.

I write in my capacity as CEO of the Australian Institute for Commercialisation (AIC), a company established by the Queensland Government in 2002. The Queensland Treasurer and Minister for Employment and Economic Development is the sole shareholder.

The AIC is Australia's leading not-for-profit consultancy organisation advising entrepreneurs, small business, research organisations, and governments on the commercialisation of their intellectual property (IP). We are also a leading think-tank on issues relating to innovation, collaboration and commercialisation, providing input to governments around Australia.

Since inception, the AIC has worked with thousands of entrepreneurs and researchers through its professional development programs to improve their understanding of the steps they need to take to commercialise their invention or research; facilitated over one hundred collaborations and commercialisation deals for government agencies and businesses to licence their IP or technologies; and provided direct commercialisation assistance to hundreds of clients in both industry and government, such as opportunity analyses, market research, and commercialisation strategy development

Throughout Queensland, the AIC provides a number of important innovation and commercialisation services for the Department of Employment, Economic Development, and Innovation (DEEDI) including the Regional Commercialisation Access Program (including AIC's TechFast program), Ideas2Market, Technology Clinics, the Queensland Wide Innovation Network Coaching program, including the Innovation Toolbox, and the Queensland Inventors Service. These all contribute to the Queensland Government's Q2 targets, particularly the "Strong" target to increase by 50 per cent the proportion of businesses undertaking Research and Development or Innovation.

Nationally, the AIC delivers a number of Commonwealth Government programs to assist industry, including the Clean Energy Innovation Centre and the Researchers in Business programs from which Queensland businesses and research organisations directly benefit. The AIC also delivers the TechFast program and policy assistance for the Victorian Government and the TechFast program for the South Australian Government, which both indirectly benefit Queensland business and research organisations by connecting them to interstate collaboration partners.

Internationally, the AIC works with Malaysian, Chinese and Philippine economic development agencies and uses these relationships for inbound and outbound trade facilitation.

A summary of the AIC's achievements is contained in Appendix I. Although it is difficult to estimate the real impact of these activities in terms of employment and economic growth, principally because causality is impossible to establish, and also because of the long time lag between AIC's involvement and future market returns by an AIC client, the impact can be observed anecdotally by comparison of

the early stage sector in Queensland with that in states where the AIC has not been able to achieve sustained involvement, for example in NSW. Quantitatively, from data obtained from our clients, the AIC estimates that its TechFast activity alone over the last five years has facilitated an additional \$64m in R&D commitments by Australian companies and created almost 50 new R&D jobs. From this additional R&D activity a total of \$210m in new revenues are forecast, resulting in an additional 1105 new manufacturing and service jobs. Approximately one quarter of these will be in Queensland, contributing to the government's election commitment to create 100,000 new jobs.

The literature is also very clear that the most innovative companies enjoy higher profitability and sustainability. For example, the 2009 BCG Innovation Survey of global companies found that the total shareholder returns of the most innovative companies surveyed versus those of their industry peers were 4.3 percentage points higher over a three year period.

Our recommendations therefore relate to innovation and its potential to create faster growing and more sustainable companies, improved international competitiveness, and ultimately new employment opportunities. In fact, the AIC's very mission is to work with Australian industry, research organisations, and governments to create high value jobs, exports, and wealth by taking innovative ideas to market.

It is on the above basis that the AIC offers the following recommendations to the committee.

R1. Stay the course and maintain investment in research, development, collaboration and commercialisation

The AIC's experience in working in other states in Australia convinces us that Queensland's economic development strategy is unsurpassed and matched possibly only by Victoria. From our observations of early stage companies and the vibrancy of the research sector in Queensland, we firmly believe that the Smart State Strategy programs are valuable and achieving results in growing new companies, and that the Q2 economic objectives are well embedded in government programs. Queensland enjoys a high reputation as a national leader in research, commercialisation, and innovation among those leaders with whom the AIC networks around Australia.

The critical message we would convey to policy makers is to maintain at least the current level of investment.

R2. Use government procurement across all agencies as a more sophisticated tool to encourage growth of innovative Queensland companies

Those managing the procurement cycle in large government procurement spends generally have little knowledge of the multiplier effects of innovation, nor an understanding of industry development imperatives. Indeed, their procurement focus on reducing risk, time to deploy, and cutting costs will never favour cash strapped or small, early stage innovators – exactly those Queensland companies that government industry policy should encourage.

The challenge for small business is not just to access the procurement cycle; rather, it is to enter the long value chains that are sometimes required, and to meet full compliance with specifications that can sometimes effectively exclude them. Simple but effective steps to develop and deploy new intellectual capital to meet its own procurement needs can be taken by government, such as by hosting technology clinics along the value chain to build linkages, and encouraging collaboration between small companies to build scale. Funding collaborative ventures during a pre-procurement cycle reduces risk and enables SME participation in government contracts such as in Health, where the specifications often emerge only during the bidding process or are driven by a multinational supplier. Probity requirements and transparency and accountability throughout the process can still be maintained using an organisation like the AIC as a third-party intermediary between government and industry, using government endorsed frameworks. Supporting the AIC's approach are Crown Law approved procedures, templates and documentation that regulate research and development collaborations and manage the development of intellectual property, according to simple and fair principles of shared risk, shared ownership and shared investment.

R3. Support and recommend project and operational funding to the AIC beyond the expiry of its core services agreement with DEEDI in June 2010, of the order of \$2.5M per year

Queensland programs initiated by DEEDI such as TechClinics, TechFast, and Innovation Coaching run by the AIC have proven effective in solving challenges faced by existing businesses and increasing their level of innovation. By helping to build new value chains to solve specific industry problems, the AIC is also able to help large industry end-users better target their own investments, create new and local solutions, and create new paths to market for smaller businesses.

For example, TechClinics are initiatives operated by the AIC in conjunction with DEEDI, to assist the development of innovation and technology in SMEs. They are an activity implemented to reach agreement on a series of priorities that enable the growth of SMEs by technology problem solving, technology intelligence gathering and technology transfer. These opportunities ultimately create high value employment and new products or services filling international market demands. In one recent TechClinic facilitated by the AIC in the area of bio-diesel fuels derived from algae, stakeholders included researchers, growers, refiners, transportation companies, and end users. Several new collaborative opportunities arose, for instance a project between three universities and a grower, and an offer by a regional power station to test new trial fuels.

Queensland Government core operational funding of the AIC expires in June 2010. We would urge the Committee to push for budgetary provision to be made beyond that so the AIC can continue to deliver, and indeed scale up, its services to help meet the Q2 targets in following years. Such funding will be further leveraged by funding from the Commonwealth and other sources, and ensure Queensland remains aligned with and benefits from Commonwealth programs that the AIC delivers such as Researchers in Business and the Clean Energy Innovation Centre. As an example, the AIC's historic leverage of Commonwealth funds to Queensland funds for the TechFast program that links SMEs to research organisations is over 2.5 to 1.

In its release of "Powering Ideas: An Innovation Agenda for the 21st Century" and the May 2009 budget, the Australian Government committed \$196M over the next four years to create a new Commonwealth Commercialisation Institute (CCI). Although the AIC has been part of the DIISR stakeholder focus group helping to shape the new institute, the exact role the AIC will play within that is still unclear. In any event, it is likely that Queensland can continue to benefit from leverage in the same way the AIC has already achieved in the past with other Commonwealth programs. However, the strong backing of the Queensland Government has been instrumental in achieving this in the past. Ongoing commitment to the AIC of around \$2.5M per annum for projects is small compared to the CCI operating budget, and would significantly leverage CCI activities into Queensland. It will also send a message to the Commonwealth that Queensland intends to remain a national leader in innovation and that it deserves to play a leadership role in the CCI.

We believe this recommendation is important to ensure skills retention at the AIC and program certainty for its clients beyond 2010.

I trust that the comments I have made above are helpful to the Parliamentary Committee, and would be happy to contribute to further discussions as required.

Yours sincerely



Dr Rowan Gilmore
Chief Executive Officer

APPENDIX I

ACHIEVEMENTS OF THE AUSTRALIAN INSTITUTE FOR COMMERCIALISATION May 2002 – June 2009

Policy advice and thought leadership

The AIC has provided thought leadership in innovation and raised the profile of Queensland's Smart State initiatives by

- in 2008-09 delivering policy research for the Victorian Department of Innovation, Industry, and Regional Development (DIIRD) titled "Industry Access to University Knowledge and Infrastructure"
- providing expert advice and consultancy to the (former) Commonwealth Department of Education, Science, and Technology (DEST) on its Commercialisation Training Scheme (curriculum design) and the incorporation of CRCs (the "AIC Incorporated CRC Templates"), and for the Commonwealth Department of Industry (DITR) Science Industry Action Agenda (Technology Roadmap) as well as the Pharmaceutical Action Agenda (Biopharmaceutical Manufacturing)
- producing a popular "Innovation Quiz" for the Future Manufacturing Industry Innovation Council of the Commonwealth Department of Innovation, Industry, Science and Research
- producing comprehensive policy documentation for the Victorian Department of Innovation, Industry, and Regional Development (DIIRD) on "Optimising the Value from Knowledge Created by CRCs"
- advising the Queensland Government on a number of Smart State policy initiatives through working groups such as its Fusion (the commercialisation of publicly funded research) and Smart Regions papers, and for service initiatives such as the Queensland Wide Innovation Network and Smart Industry Toolbox.
- participating on a number of Queensland Government bodies, including the Innovation Funds (ISUS) Selection Committee, the Queensland Sustainable Energy Advisory Council, the DETA Roundtable on Increasing Science Awareness in Schools, and collaborating with industry bodies such as the innovation advisory committee of the Business Council of Australia (BCA)
- preparing submissions on innovation and commercialisation to a number of bodies, including the Productivity Commission, the Australian Senate, Parliament of NSW, the Garnaut Review, and the National Innovation Review.
- presenting at leading Australian and international conferences, including those of APEC (Asia Pacific Economic Forum), CEDA, The Melbourne Institute/Australian Future Prosperity Conference, Ausbiotech, CRC Association, Nanotechnology ICONN, Malaysian Ministry of Science Technology and Innovation Conference on IP, and many others.

TechFast (TF) program

- The TechFast program has provided innovation and commercialisation advice, skills development and linkages to approximately 150 SMEs, 40 Research organisations and 14 government, economic development and industry organisations per annum over the past four years.
- Approximately 40 formal technology/knowledge transfer deals have been facilitated between Queensland SMEs and research organisations/other collaboration partners to create leading edge new products and services
- In 2008-09, the AIC assisted 31 regional Queensland firms through the TechFast program.
- In 2006, the AIC confirmed a four year TechFast and other services funding agreement with the Victorian Govt for a total value of \$2.6M. This allowed the AIC to expand its activities in Victoria to an additional three staff in 2007 and to formally participate in Victorian innovation policy development. This also created a direct conduit for the AIC to connect Queensland businesses and research organisation through collaborative partnerships with Victorian organisations. Few other initiatives play this role.
- In 2007, confirmed a three year regional TechFast funding agreement with the Queensland Govt for a total value of \$500,000 specifically to focus on regional Queensland SMEs with 64% of the SMEs serviced through TechFast being regional companies.
- In 2008, confirmed a three year funding agreement with South Australia. Previously, the SA Govt funded an AIC person for the financial years 2006/07 and 2007/08 as well. As a result, the AIC has become more integrated with the SA Government's innovation initiatives, delivering additional commercialisation services on behalf of DTED.

This relationship allows AIC to connect Queensland businesses and research organisation through collaborative partnerships with South Australian organisations.

→ The AIC through TechFast has leveraged the following Commonwealth government funding that was made available for each of the States:

▪ Queensland –	\$1.8 million
▪ NSW –	\$300,000
▪ Victoria –	\$1.1 million
▪ Tasmania –	\$300,000
▪ South Australia -	\$700,000
▪ Western Australia -	\$100,000

The \$1.8M of Commonwealth funding TechFast activity has brought to Queensland is from a total Queensland investment of \$650,000. Adding the follow-on company growth and jobs created in Queensland from TechFast illustrates that this type of activity generates a clear, strong return on investment.

Government Innovation Services

→ Outcomes (since July 2005) include over 219 project opportunities identified and reviewed, of which over 20 resulted in licensing deals between government agencies and industry. Typical 'projects' include ICT or other intellectual property being licensed from an agency either to other agencies, or to industry, through the AIC's commercialisation governance framework.

→ Industry engagements and outcomes to date for Queensland include:

- Industry briefing sessions held: 14
- Licensing deals with Queensland firms: 26
- Establishment of a new QLD service centre by a NSW firm (investment of \$800,000)
- Venture capital raised by QLD industry licensees: \$2.5M

→ Anticipated government benefits expected over the next three years from actual and anticipated executed agreements include revenue back to Queensland government of \$2.5M and cost savings (value of access to licensee modifications/improvements) of over \$6M.

Solutions and Consultancy

The AIC's Commercialisation Solutions and Consultancy (S&C) business unit (established in 2006) includes market research and business intelligence activities, professional development programs (Commercialisation Bootcamps and Ideas2Market), on-line business tools (CMS and Gateway Enterprise), an inventor support service, policy research, and general advisory services.

In that time the S&C business unit has achieved the following:

- Raised skills of 1266 researchers and 1236 entrepreneurs through 63 Commercialisation Bootcamps and 68 Ideas2Market courses.
- Provided market research and business intelligence reports to 84 organisations
- Directly assisted 390 businesses with their commercialisation needs
- Conducted 87 one-hour commercialisation strategy workshops for entrepreneurs
- Conducted 32 half-day or full-day commercialisation client workshops
- Developed a whole-of-government IP training and awareness program for the Qld Govt
- Implemented 9 Commercialisation of IP frameworks for government and research organisations
- Provided assistance with deal parameters and deal negotiations to 15 organisations
- Assisted five organisations in capital raising
- Assisted seven organisations in evaluating their IP portfolios

Other programs

- **Q-WIN** - Worked with the Queensland Government to successfully launch the Innovation Coaching program in Queensland. The innovation coaches, who are part of the Queensland Wide Innovation Network (QWIN), work with small to medium businesses to develop and help implement innovation plans. In 2008-09, five businesses (three in the Northern directorate and two in the Southern directorate) were engaged and assisted with their innovation plans. A total of 43 businesses were visited in Queensland by the innovation coaches during 2008/09.
- **Inventor service** - Developed an online inventor service to provide inventors with tools and resources to enhance commercialisation. The inventor service offers inventors an online self assessment that generates a report identifying gaps and future actions. The self assessment is a first step in de-risking the opportunity and preparing the inventor for the next steps in commercialisation. Since March 2009, 90 Queensland inventors registered on the online inventor service of which 43 were provided with free consultations. An additional 105 inventors were assisted before then.
- **Innovation Toolbox** - AIC and DEEDI worked together to develop the Innovation Toolbox, an online service to assist companies and service providers to access knowledge, tools and resources to drive their innovative journey. The website was launched on 25 June 2009. The site contains a range of topics designed to educate and guide companies through the innovation journey.
- **Technology Clinics** - Successfully hosted a number of Technology Clinics (TechClinics) and R&D Forums including Advanced Technologies in Biofuels-Algae, Waste Management in the Marine Industry and Alternative Energy options for Tourism Boat Operators. The objectives of the TechClinics include gaining a better understanding of stakeholders across the industry value chain, access to new research and technology developments, and increased collaborative opportunities.
- **International Reach:**
 - Delivered a Commercialisation of IP Framework for the Malaysian Industry-Government Group for High Technology (MiGHT). Together with the online Commercialisation Management System (CMS), the commercialisation framework will assist the research sector to identify new opportunities and assess their commercial potential.
 - Facilitated an IP Primer for over 100 representatives from Malaysian universities and research institutes. The workshop aimed to assist researchers and commercial practitioners working in the research sector to identify and capture valuable intellectual property for future commercialisation and utilisation by industry.
 - Signed an MOU with Jiangsu Centre for International Technology Transfer in China, and showcased Queensland IP to SME clients for commercialisation in Jiangsu Province.
- **Commercialisation Masterclass Workshops** - Delivered and facilitated a Commercialisation Masterclass workshop to over 83 attendees from Cooperative Research Centres (CRCs). Workshops participants were exposed to leading knowledge and practise in intellectual property commercialisation, negotiating technology deals and managing multiple stakeholder relationships.
- **Other Governments:**
 - Engaged with the Victorian government to deliver 80 Gateway Enterprise business systems to Victorian SMEs, to increase commercialisation outcomes from innovation activities.
 - Commissioned by the Commonwealth government to manage the Clean Energy Innovation Centre in partnership with Newcastle University and the Western Australian Sustainable Energy Association
 - Commissioned by the Commonwealth government to manage the Researchers in Business program Australia wide.