

Manufacturing Industry Innovation

Cooperative Research Centre

August 2013 edition



FOREWORD

On behalf of The Australian Industry Group (Ai Group), you are invited to join us in the development of a new Manufacturing Industry Innovation Cooperative Research Centre (MIICRC).

Ai Group is regarded as the leading association representing manufacturing industry in Australia. Our membership also extends across many thousands of businesses in areas such as construction, transport, labour hire, technology, energy and procurement support for the mining and resources sector.

While there are of course many individual success stories, there is no doubt that most trade-exposed businesses have come under great competitive strain in recent years.

Australian manufacturing, in particular, needs new strategies and skills to generate a sustainable and prosperous future. The challenges facing our manufacturing capability in a globally demanding environment require a strategic, comprehensive and coordinated response.

Ai Group together with our key partners in innovation and research – CSIRO, the University of Melbourne and the Association of Superannuation Funds of Australia – intends to forge a new pathway to commercialisation of innovation and competitive growth through the establishment of a trisectoral Cooperative Research Centre for Manufacturing. The MIICRC will be a template for other CRCs that combine industry know-how, research innovation and investment opportunities in order to meet the innovation challenge of this century.

The industry know-how comes from Ai Group's members and their own supply chains in manufacturing.

Innovative processes and mechanisms come from two great Australian 'think tanks' in science and research: CSIRO and the University of Melbourne, developed in close collaboration with the other major research participants in this bid. And, the superannuation industry will take a key role in opening the gates to investment.

Through your engagement in Ai Group's MIICRC consortium, we hope to see real outcomes for our members and the nation in the near future: better access for all businesses, small and large, to new innovations. With agile, insightful and timely use of 3D printing technologies, new applications using novel materials, low cost robotics and more, Australian industry can create the next generation of iconic products.

I encourage you to review the details in this Information Memorandum and take the opportunity to work alongside Ai Group and its partners in making a MIICRC that works for you, your business and your industry.

Yours sincerely,

A handwritten signature in blue ink that reads "Innes Willox". The signature is written in a cursive style and is underlined with a single horizontal line.

Innes Willox
Chief Executive
Australian Industry Group

Manufacturing Industry Innovation Cooperative Research Centre

The combination of forces currently putting pressure on many Australian businesses threatens to undermine the capacity of the (manufacturing) sector to take advantage of future opportunities. If manufacturers are not in a position to capitalise on emerging opportunities, the Australian economy as a whole will be weaker and more vulnerable now and over the longer term.

Prime Minister's Manufacturing Taskforce, Report of the Non-Government Members, 2012

Driven by its members, the Australian Industry Group (Ai Group) is leading the **Manufacturing Industry Innovation Cooperative Research Centre (MIICRC)**. This ambitious initiative draws substantial industry support with 100+ firms across Australia already seeking to participate. Ai Group has assembled world-class researchers from both technology and business disciplines to work together on how Australian manufacturers can build capacity for innovation and attractiveness for investment by increasing their absorptive capacity, agility and speed to market.

MIICRC is tailored to the challenges of small-to-medium sized enterprises (SMEs) recognising that relatively small-scale, high value manufacturers are the major source of Australia's future manufacturing competitiveness. The Ai Group, which represents more than 60,000 businesses, will manage a novel member-based subscription model to achieve scale through clustering and maximise SME participation and benefit from the research. The challenges faced by manufacturers cannot be tackled in isolation, requiring collaboration among firms, industries, researchers, and governments. The Association of Superannuation Funds of Australia (ASFA) will guide research on new funding models to support agile SMEs and provide improved information to the finance sector about the quality of investment opportunities to support industry growth.

MIICRC bridges the innovation cleft between research and business, bringing the sectors together to work on the translation of technology advances to a future of sustainable industry growth. Taking research outputs to marketable products and services is a significant challenge

for SMEs, which account for 88% of businesses in the manufacturing sector[2]. In MIICRC, SMEs will work collaboratively with researchers in clusters, using designed innovation to: identify the markets where technologies might confer a competitive advantage; undertake further research and development to augment technologies to suit these markets; and in parallel develop sustainable business strategies.

The MIICRC research answers the recommendation of the Prime Minister's Manufacturing Taskforce Report, that measures should be introduced to lift the capacity of SMEs to absorb new knowledge, embed a greater focus on design and improve their access to finance.

An integrated research design involves six universities and the CSIRO, representing four states: Queensland, New South Wales, Victoria and South Australia. Research themes are: foresights on sector disruptions – identifies the technology and business combinations that will drive access to new value chains; agile manufacturing – key technologies for future competitiveness including assistive automation and additive manufacturing; rapid productisation – technology advances to enable dramatic increases in speed to market; and driving sector sustainability – new business platforms to support increased agility, participation in clusters and global supply networks and access to funding.

Industry has stepped forward to lead its transformation to an agile, innovative and sustainable manufacturing future.

BENEFITS OF PARTICIPATION IN THE MIICRC

A range of benefits can be achieved through participating in the CRC including:

RESEARCH BENEFITS

- Early access to new technologies
- Access to improved and innovative procedures and processes
- Development of new business and investment models
- Access to solutions for existing challenges in manufacturing
- Opportunity to influence the development of new models for equity and debt investment
- Understanding of effective business models and how firms can implement them
- Understanding of future manufacturing trends, and how firms can respond

COLLABORATION BENEFITS

- Ability to inform CRC research focus
- Ability to participate in the ongoing development of products
- Opportunity to collaborate with researchers and other firms
- Productive and lasting connections with research and other industry participants
- Opportunity to focus on long-term major industry challenges with Government, University and industry support

CAPABILITY AND INFRASTRUCTURE BENEFITS

- Access to research infrastructure, networks and research program outcomes
- Access to skills and capability through interaction with CRC research partners and industry focussed students
- Ability to enhance the capability of the industry workforce for the successful implementation of innovation initiatives

FINANCIAL BENEFITS

- Revenues and potential intellectual property licensing benefits
- Potential to reduce operating costs through implementation of improved processes
- Ability to leverage Federal Government funds for high impact CRC research initiatives

ABOUT THE CRC PROGRAM

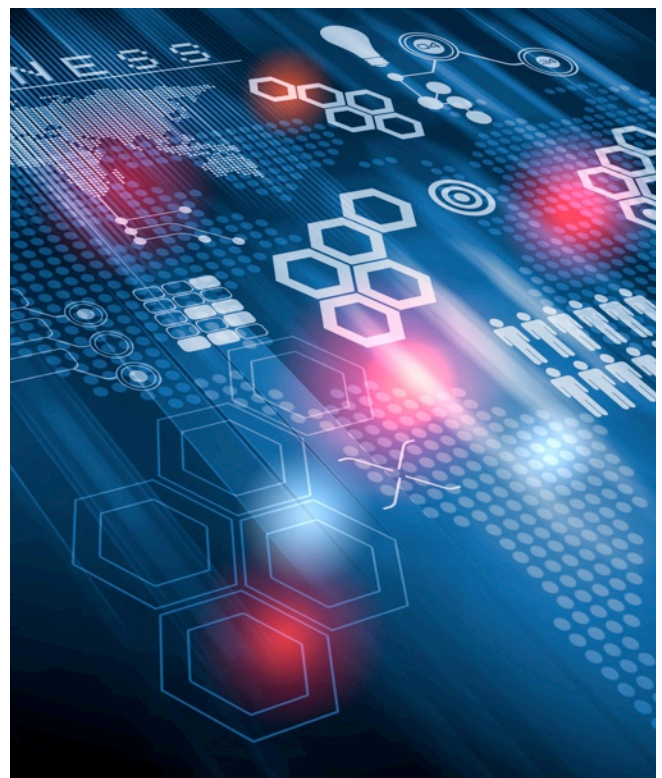
The CRC Program is a Federal Government funding program which focuses on delivering significant economic, environmental and social benefits to Australia.

The program supports “end-user” (industry) driven research partnerships to address major challenges which require medium-long term collaborative efforts. The program provides matched funding for translational research activities that directly address major industry challenges which will deliver lasting benefits for Australian businesses and communities.

Typically CRCs:

- Are funded through University, Industry and Federal Government co-investment
- Operate for between five to seven years
- Receive \$20-\$25m of Federal funding over an average of seven years
- Are driven by the needs of end-users
- Focus on the research priorities identified by the Federal Government
- Deliver translational research that has high impact for industry partners and the broader Australian community

Of particular note is that \$50m in funding has been allocated in support of manufacturing as a priority in the current funding round.



WHY A MANUFACTURING INDUSTRY INNOVATION CRC?

To be globally competitive, Australian firms need to develop highly customised goods and services, to be agile and responsive across multiple supply chains and excel in low volume, high value manufacturing.

Australian manufacturers must be able to develop or migrate their whole business model to new positions of high strategic value quickly. This means making integrated advances in technologies, business processes and workplace capabilities. These advances must respond to emerging market needs; their value proposition, in terms of risk and return, must be maximized and readily understood by investors.

The four programs of research embodied in MIICRC will generate new understanding, methods and measures to help Australian manufacturers, in particular, SMEs, to make these synergistic, fast and fruitful transitions. Developed in consultation with end-user firms and with key industry associations and service providers, research programs have been designed to identify and resolve significant opportunities and barriers for increased industrial competitiveness.

The MIICRC will stimulate Australian manufacturing innovation and enable SMEs, in particular, to grow into agile, highly innovative businesses by:

- implementing a three-tiered membership model that will involve networks and clusters comprising large numbers of SMEs;
- giving SMEs open access to intellectual property that will facilitate collaborative innovation, knowledge sharing and adoption of technology;
- delivering inter-disciplinary research outcomes to SMEs that target product, process, marketing, organisational innovation and funding opportunities; and
- complementing and enhancing activities in other Government and industry programs (such as precincts and the AI Council for Advanced Manufacturing) to avoid duplication and ensure maximum benefit.

Australia's broad manufacturing base is built on relatively small scale, high value manufacturers. Utilising Australian expertise in design and development, firms have been able to manufacture components for global manufacturing networks, traditionally in the automobile, aviation, machinery and electronics industries, and more recently moving into new materials, biomedical and nanotechnologies. However, rapid changes in the global manufacturing landscape mean we must rethink

conventional notions about the manufacturing sector in Australia.

Investors and lenders are increasingly constrained in how and where they can responsibly deploy funds, and how these resources can be used to support Australia's future economy. For example, the superannuation industry receives \$80-90 billion in contributions each year, with total funds under management expected to grow from the current \$1.5 trillion to around \$7 trillion by 2030. Without changes to the investment landscape in Australia, there is a danger that the lion's share of these investments will flow overseas.

A vibrant and growing manufacturing sector provides the financial services industry with opportunities for investment and provision of services. To realise this future, we need to improve the prospects for Australian manufacturers and at the same time explore how institutions, regulatory structures and new information can make manufacturing innovation more attractive to investment. MIICRC is addressed to both these objectives and provides essential research to underpin the Australian manufacturing industry's transformation to a highly agile, strategic and competitive sector.

MIICRC is a unique research and translation initiative, led by the key peak body for Australian firms, the Ai Group in partnership with the peak body for superannuation investors Association of Superannuation Funds of Australia (ASFA) and the best research capabilities in the country. The four Essential Participants in MIICRC are the Ai Group, ASFA, the University of Melbourne (UoM) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). These Essential Participants bring an unprecedented breadth and depth of expertise in research, technical knowledge and business innovation, supplemented by additional research expertise from the University of Technology Sydney (UTS), Queensland University of Technology (QUT), the University of Adelaide (UoA), RMIT University (RMIT) and Swinburne University of Technology (SUT).

The MIICRC's four research programs have been crafted under the direction of an Industry Advisory Committee convened by Ai Group, and refined through industry forums in Victoria, NSW, South Australian and Queensland. The programs integrate technological, organisational and business innovation to support end-user firms in making swift and successful transitions to new competitive forms.

The research programs complement and enhance existing industry programs and initiatives related to the manufacturing sector such as the Government's precincts program.

WHAT WILL THE MIICRC DO?

Informed by industry and research views, the MIICRC is focused on four critical areas of need.

RESEARCH PROGRAM 1: FORESIGHTS ON SECTOR DISRUPTIONS

The Foresights program will assist companies respond positively to industry disruptions by delivering strategic tools, market intelligence and agile business models. The results and outputs from this program support improvements for Australian manufacturers and inform the other CRC programs. Most importantly, this program elevates and enhances current road-mapping activities by bringing to them the rigour of foresighting and providing timely benefits to manufacturers through an active and immediate feedback loop.

Sector transitions and market opportunities: Evidence-based foresight will report on key megatrends and strategic opportunities to assist Australian manufacturers gain competitive advantage by anticipating opportunities and building strategies upon which they can capitalise. Key sectors have been selected for focused research; resources, energy, assistive devices for aged and disabled care, defence, cleantech and medical devices. The research outputs will help manufacturers plan for growth in expanding value chains and to progressively exit declining

ones. Results of this work will be applicable across sectors, and the work will both inform, and be informed by the technical programs (Programs 2 and 3) in the MIICRC.

Benefiting from disruptive innovation: This project will review the mechanisms that enable manufacturers to identify disruptive innovations and explore the necessary structures and processes that enable firms to respond and benefit from them. A major output from this project is a decision support tool that will assist manufacturers to measure the level and impact of risks and identify possible mitigation approaches that reduce the risks and subsequent costs of production.

Agile business models: This project focuses specifically on design-led innovation to assist manufacturers to develop agile business models, resilient to sector disruptions and changing market needs. By developing flexible systems, businesses can adapt to maximise value chain opportunities. The outputs of this project are evidence-based frameworks, indicators and approaches to help manufacturers maximise the agility and responsiveness of their business models to markets and supply networks supported by a business model agility index, expected to be a competitive advantage for businesses seeking investment income.

DEVELOPING INDUSTRY SOLUTIONS THROUGH COLLABORATIVE INNOVATION

Within the four research programs of the MIICRC, industry focused projects will be developed collaboratively by the research participants working closely with firms to achieve the enduring outcomes needed to increase the competitiveness of Australian manufacturing.



RESEARCH PROGRAM 2: AGILE MANUFACTURING

This program will investigate a suite of agile manufacturing technologies aimed at improving the performance of workers and the utility of systems that focus on short run and personalised production. Coupled with the business model innovation research conducted in Programs 1 and 4, along with the results from an observatory study to capture lessons from the integration of new technologies, this program will provide an integrated, systems-based approach to drive growth from the uptake of the technological advancements made.

High performance worker: This project will conduct research into the latest in ICT-enabled technologies aimed at improving the productivity and safety of tomorrow's manufacturing workers by augmenting them with a suite of light weight assistive and virtual guidance/support systems. The research will allow light weight robotics to navigate in unstructured environments, and cooperate seamlessly and safely with the human workforce. New manipulators will be developed that are reconfigurable in real time to take

on new work processes, thus improving productivity by reducing setup time between tasks. Research to develop user-centric virtual assistance/guidance will provide a mechanism for firms to access remote experts in real time via the NBN to assist in solving problems, guide the repair of breakages to reduce plant down time or simply as a mechanism of improving quality.

Agile production systems: This project will conduct the largely neglected research required to enable additive and other flexible, scalable manufacturing technologies (like flow chemistry) to be production ready. The project will reduce the risks associated with investing in new agile manufacturing equipment by developing design principles, and materials – process – performance relationships. This will provide designers with the tools and knowledge they require to realise the full potential of their equipment. At the same time, research into the development of real time 'on-line' analytics will complement the agile production systems by providing methods to simultaneously produce a digital fingerprint of the part during production, ensuring compliance to design for quality control and thereby fast tracking the steps needed for certification.



RESEARCH PROGRAM 3: RAPID PRODUCTISATION

Rapid productisation is a new paradigm for the translation of ideas and innovative thinking into products and services whereby products are manufactured rapidly using new technology platforms and released onto the market to assess demand and functionality. Many businesses within the Ai Group's membership base have identified the urgent need to get products to market in 3-6 months instead of the 1-2+ years using current practices. However, a number of important barriers must firstly be overcome for this to be achieved.

The first of these is how to rapidly and cost-effectively upgrade existing factory processes to make new products without disrupting existing production lines. This **Plug and Play manufacturing** system has the capacity to reduce the time to modify a factory from months to days or weeks. The development of simulation tools that take into account the complexity of various manufacturing environments require research into how computer systems can 'imagine' an entire manufacturing process. Overseas experience indicates that adoption of these tools can result in savings of between 30-50% for SMEs. Key 'early adopters' for this research are automation and control systems integrators, such as Australia's leading company in this area: SAGE Automation. The second challenge is to reduce the risk for the development of new products.

In the project **Manufacturing in the cloud**, two crucial questions will be answered. Firstly, can models be developed that are reliable enough to predict the performance of manufactured components (such as those made by additive manufacturing), and secondly, can a computer system be made 'smart' enough so that the

design can be sent into the 'cloud' which then sends instructions to various facilities to manufacture products without further input from the designer. In this venture, the manufacturing facilities at RMIT, CSIRO, UoA and SUT will be brought under one software umbrella. Target industries for this capability are the electronics and electrical hardware cluster of industries in the Ai Group, especially design companies, for example, Hydrix.

The third plank of the program is the identification of missing **Critical components and capabilities** necessary for the development of medical devices and technologies. World-wide demand exists for medically implanted devices such as pace makers and deep brain stimulators. The **Bionics foundry** will capture the design rules and tools for implantable bionic devices including integration of specialised integrated circuits. The main output of this program will be the design and fabrication of a fully implantable (wireless) neural recording and stimulation system ready for clinical testing.

Finally, the program will determine how products meet current Australian and overseas standards, the compliance costs of which can be up to 50% of the cost of the product. In collaboration with Standards Australia, principles will be developed around the use of **digital fingerprinting** to establish the pedigree of manufactured components and their compliance with best manufacturing practice. This will speed the entry of products into the market provided that the research can demonstrate that the fingerprint is a reliable measure of fitness for purpose as is traditional product testing. The output of this program will ensure that rapid productisation can be realised without products being blocked at the final hurdle by compliance issues, responding directly to the needs articulated by Ai Group members.



RESEARCH PROGRAM 4: DRIVING SECTOR SUSTAINABILITY

Complementing Program 1, which explores future strategic opportunities for Australian manufacturers and translates this knowledge into positioning strategies for participating SME clusters, this program investigates how the agility, competitiveness and resilience of Australian manufacturers can be improved.

Building industrial competitiveness examines what connects the prospects and activities of individual firms to national-scale aspirations of innovation, productivity, sustainability and competitiveness and how gaps and barriers can be bridged. **Addressing challenges of SMEs through cooperation** investigates how cooperation among SMEs can be purposefully designed and managed to build scale without compromising agility. **Making change for productive workplaces** explores how key capabilities in absorptive capacity, leadership and design-led thinking drive innovation to increase workplace productivity. **Investing in sustainable industrial futures** investigates how new investment models can support the SME innovation that is essential to sustained growth in Australian manufacturing.

The program researches the essential components of the manufacturing innovation system, bringing new knowledge on workplace, firm, cluster/supply/value/sector-based

networks, industry support services and investment capabilities together. This research will close critical gaps for practitioners who lack guidance on the combination of innovations that will result in enduring competitive advantage. SMEs working in isolation do not have the resources to resolve these complex interfacing questions.

Working with key end-user partners will ensure outputs are as relevant as possible and maximise their uptake by industry practitioners. For example, Standards Australia will take selected outputs such as excellence frameworks in innovation, efficiency and agility, dynamic compliance processes and prospective risk-return information, and will generate and maintain materials for widespread use by industry. The Ai Group will inform the research through their sector focus groups. ASFA will guide finance industry dialogue on alternative models for investing in manufacturing innovation. Alternative investment models will be examined from the perspective of both: (i) SMEs - how they can re-position and provide improved information for potential funders; and (ii) equity and debt providers - what types of alternative models, such as private equity markets, can better adapt to support a new breed of agile SMEs.

HOW WILL THE MIICRC BE GOVERNED?

The CRC will adopt a corporate governance structure with a clearly defined company purpose and scope of activities. The organisation will be governed by a mid-sized board including an independent chair and a representative from each of the research, manufacturing and financial sectors. The balance of the board will be a mixture of end-user stakeholder and independent parties.



HOW WILL MIICRC BUILD A SKILLED WORKFORCE?

The MIICRC will build manufacturing industry skills and knowledge through a multi-lateral education and training program.

Postgraduate program: Thirty PhD/Masters students will be involved over the duration of MIICRC. Of these, around 75% will be placed with industry partners to support technology research and development projects. It is anticipated these technology-based postgraduates will work with particular firms or clusters on critical industry-relevant research. The remaining 25% of students will work within the business programs. While some of these may work closely on design-led innovation with industry clusters, others may work on broader questions, for example, the problem of alternative investment models.

Capstone project teams: Capstone subjects are a mandatory component of university courses as they help

students apply their learning and make the transition to work after study. Students work in teams under academic supervision on industry-specified challenges. While capstones are common in business and engineering courses, they are not currently offered extensively in manufacturing. MIICRC will liaise with capstone subjects to expand their focus on manufacturing. This will enhance industry-research dialogue for MIICRC and will boost supply of industry-ready graduates.

Training: MIICRC addresses training in several ways. Industry partners include associations and service providers who routinely provide training courses, forums, seminars, newsletters and webinars to practitioners. New and valuable material generated by MIICRC will be added to these partner programs, for example, on design-led innovation processes. Training may also be extended to facilitate broader discussions around issues such as skills development, utilising links with manufacturing demonstration sites and TAFE such as Tonsley Park and Techport in Adelaide.

HOW WILL INDUSTRY BE ENGAGED?

The Ai Group will facilitate engagement across a wide cross section of Australian industry. This will be effected through a number of existing facilities embedded in Ai Group’s current business model together with new CRC-motivated activities: the Ai Group Industry Engagement Portal.

Through the Industry Engagement Portal, Ai Group will develop extensive and pertinent networks and create, coordinate and manage specific enterprise clusters. The majority of SMEs across the Australian manufacturing industry will be reached through this Portal, drawn from a number of sources including:

- Ai Group’s extensive membership base
- Established clusters of firms around either major technologies or regions e.g. Additive Manufacturing and Materials cluster and the South East Melbourne Innovation Precinct
- Government initiatives such as the new Manufacturing Precinct and Innovative Regions
- Supply chains of large firms participating in MIICRC programs

In addition, the Ai Group has developed a tiered subscription model that offers three levels of benefits with minimum contributions for each tier set at \$10,000 (Tier 3), \$50,000 (Tier 2) and \$250,000 (Tier 1). Participants can therefore choose the level of investment they make to MIICRC.

Membership benefit	Tier 1	Tier 2	Tier 3
	\$250k	\$50k	\$10k
Annual financial contribution			
Able to co-invest in projects as a single firm	Yes		
Able to co-invest in projects as part of a cluster	Yes	Yes	
Collaboration to leverage IP and drive competitive advantage:			
• To benefit the firm	Yes		
• To benefit clusters of firms with common challenges	Yes	Yes	
• Developing solutions to industry-wide challenges	Yes	Yes	Yes
Share in open access and relevant project IP	Yes	Yes	
Access to Open IP with sector wide relevance	Yes	Yes	Yes

Manufacturing Industry Innovation CRC

Building broad capability for innovative manufacturing in Australian firms
by transforming their agility, absorptive capacity, speed to market and investment capabilities.

THROUGH INTERVENTIONS THAT DELIVER...

CRC OUTCOMES	Foresights on Sector Disruptions	Agile Manufacturing	Rapid Productisation	Driving Sector Sustainability
		<ol style="list-style-type: none"> 1. Improve manufacturers capacity to pre-empt and respond to opportunities and challenges resulting from a globalised manufacturing marketplace 2. Identify understand and address links between technological disruptions and manufacturing 	<ol style="list-style-type: none"> 3. Build industry knowledge base that enables broad adoption of additive manufacturing technologies to deliver new flexible, scalable and sustainable manufacturing 4. Increase productivity, safety and adaptability of future workforce through virtual and assistive automation technologies 5. Develop agile business systems and models to enable firms to maximise competitiveness by adopting new and disruptive technological advances 6. Enable firms to model optimum production solutions through advanced simulation technologies 	<ol style="list-style-type: none"> 7. Implement an open source innovation model that is broadly accessible 8. Create greater access for SMEs through a new innovation centre and makers precinct for advanced electronics design capabilities utilising ASIC platforms for new bionic devices 9. Build capability for high quality, low volume personalised production, including advanced on-line real time analysis and advanced design tools 10. Create low cost access for product testing and compliance and promote the development and implementation of standardisation for innovative manufacturing

HOW DO I GET MY FIRM INVOLVED?

The MIICRC is seeking input on the CRC's research programs and financial commitment from industry representatives who are keen to drive industry change.

The MIICRC will employ a three tiered membership structure to enable industry to align contributions with their level of interest and organisational capacity for participation.

If you would like to discuss opportunities for your organisation, we invite you to contact:

Peter Burn

Ai Group Director - Public Policy

Phone: 02 02 9466 5566

Email: Peter.Burn@aigroup.asn.au



LEAD PARTICIPANTS

AUSTRALIAN INDUSTRY GROUP

The Australian Industry Group (Ai Group) is a peak industry association in Australia which along with its affiliates represents the interests of more than 60,000 businesses in an expanding range of sectors including: manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. The businesses which we represent employ more than 1 million employees



THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. Its aspiration is to continue to develop as a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society through the impact of its research and research training, learning and teaching and engagement



THE COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

CSIRO is Australia's national research agency and is one of the largest scientific research organisations in the world. CSIRO has over 6,400 staff working across 57 locations around Australia and the world. As an Australian Government agency its primary purpose is to carry out scientific research to benefit Australian industry and the economy, and to provide environmental and social benefits to all Australians



THE ASSOCIATION OF SUPERANNUATION FUNDS OF AUSTRALIA

ASFA is the peak policy, research and advocacy body for Australia's superannuation industry. It is a not-for-profit, sector-neutral, and non-party political national organisation whose aim is to advance effective retirement outcomes for members of funds through research advocacy and the development of policy and industry best practice



CURRENT RESEARCH PARTICIPANTS



CURRENT INDUSTRY PARTICIPANTS

