



ADVANCED MANUFACTURING GROWTH CENTRE
AMGC IMPACT

10 AUGUST 2015 – 30 JUNE 2020

WHERE AMGC IS MAKING AN IMPACT

To 'Advance Australia Further,' AMGC's approach to industry-wide impact aims to address the manufacturing ecosystem across Australia. AMGC has State Directors positioned in the Australian metropolitan areas, who are available to support manufacturers within their urban and regional areas.

NORTHERN TERRITORY

9 Members
1 Project
4 Academy Users
2 Hosted Events

WESTERN AUSTRALIA

182 Members
4 Projects
37 Academy Users
7 Hosted Events

SOUTH AUSTRALIA

164 Members
5 Projects
35 Academy Users
6 Hosted Events

NUMBER OF MANUFACTURING MEMBERS



Low density

High density

EVENT LOCATIONS



VICTORIA

577 Members
28 Projects
126 Academy Users
14 Hosted Events



14 Members overseas

QUEENSLAND

350 Members
24 Projects
74 Academy Users
12 Events

NEW SOUTH WALES

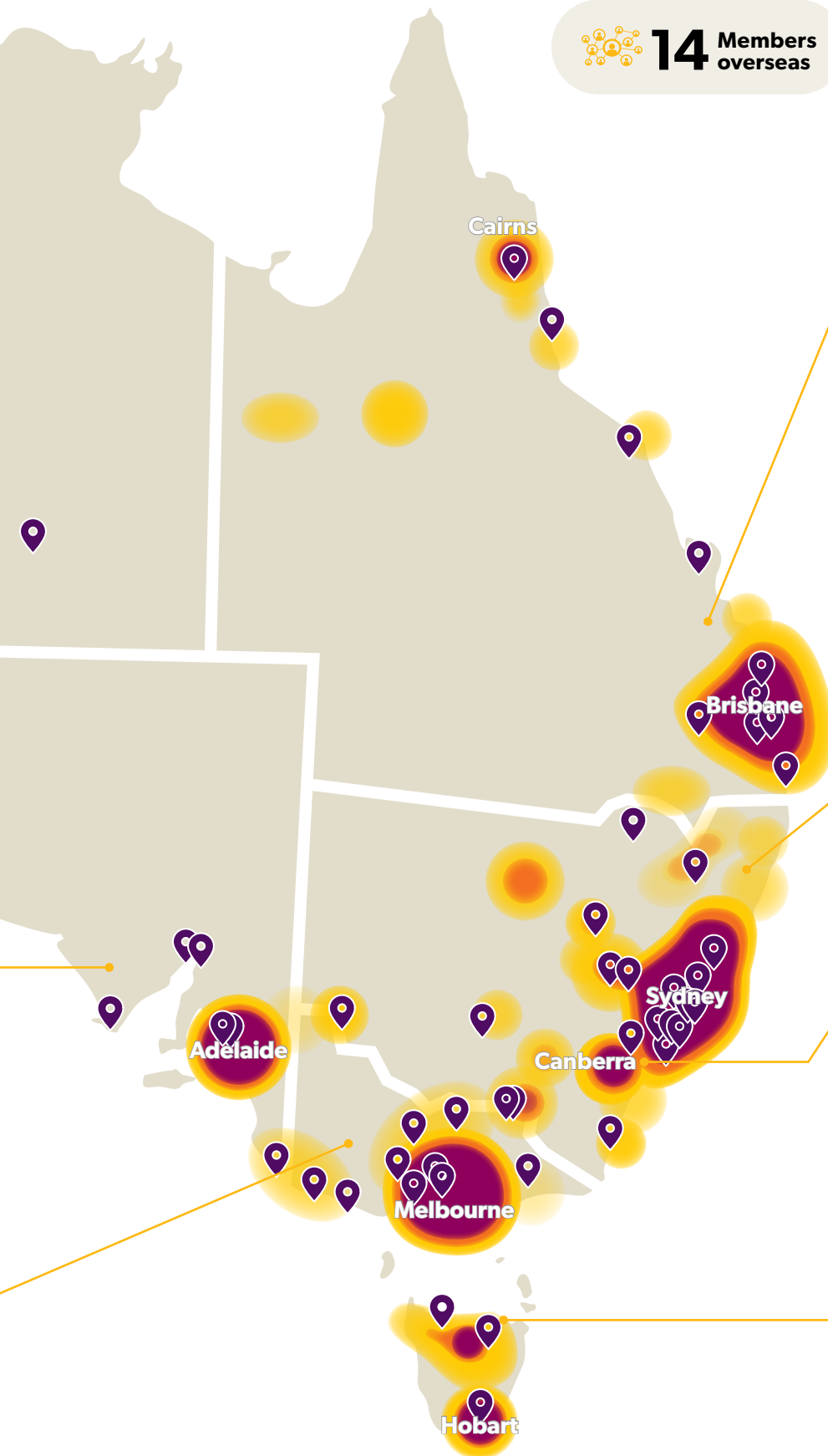
750 Members
14 Projects
166 Academy Users
26 Events


AUSTRALIAN CAPITAL TERRITORY

27 Members
1 Project
9 Academy Users
0 Events

TASMANIA

59 Members
1 Project
16 Academy Users
4 Events





The purpose of **AMGC** is to **transform** Australian manufacturing to be **more globally competitive** and **generate the demand for jobs**.

FOREWORD FROM THE MANAGING DIRECTOR

In almost five years, the Advanced Manufacturing Growth Centre (AMGC) has gone from being a visionary policy idea to becoming a national organisation that is reshaping the direction of Australian manufacturing. This report describes how AMGC was created, the organisation's purpose, the effect it has already had and its plans for the future.

The Australian Government established AMGC in 2015 as an industry-led, not-for-profit organisation. It is one of six Growth Centres created to drive innovation, productivity and competitiveness in areas where Australia had existing strengths and the potential to build significant export sales to underpin the country's future prosperity.

As an organisation, AMGC is incredibly proud of what it has been able to achieve in the short period since its creation. In late 2015, AMGC had just one representative and a mandate to help transform manufacturing in this country. Today, it has 14 staff, five state directors around Australia and a role at six manufacturing hubs and labs, approximately 2,132 members and has completed or started 78 projects to accelerate the growth of advanced manufacturing.

These acceleration projects are alone expected to generate 2,361 direct manufacturing industry jobs and \$1 billion in additional sales for Australian manufacturing businesses. This is just the tip of the iceberg in terms of the impact that AMGC is making in the industry.

Australia's manufacturing industry supports 1.3 million jobs (directly and indirectly) and contributes more than \$100 billion a year to the nation's economy. Many of the talented people who deliver this value every day have become members of AMGC, read its research, gained education, met members of its team and established relationships with each other, partners and customers through the events and other activities described in this report.

Most importantly, many more manufacturers understand what it means to be advanced and to move their operations up the value chain to areas where they can be globally competitive. This will be critical to their continued success and to ensuring that Australia has a successful and resilient manufacturing industry for years to come.



A handwritten signature in black ink that reads "Jens Goennemann".

Dr Jens Goennemann
Managing Director

Advanced Manufacturing Growth Centre Ltd



36T
Carbon Composite Cycle Wheels
Victoria



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EXECUTIVE SUMMARY

About this report

This report describes the growth and achievements of the Advanced Manufacturing Growth Centre from its establishment in 2015 to mid-2020. It was produced by AMGC for the reference of the Australian Government and other stakeholders interested in the impact AMGC has had so far and how Australia can continue to support its manufacturing industry.

AMGC's foundations

In 2015, Australia had just enjoyed 23 years of economic growth and seen the value of its exports rise fourfold over the previous three decades. However, the then incumbent government was not complacent. It noted that commodity prices were falling, the budget was in deficit, Australia's population was aging, and multifactor productivity was not growing.

In response, the Government introduced a wide-ranging Industry Innovation and Competitiveness Agenda.¹

This was designed to support job creation, growth and competitiveness through regulatory reform, workforce upskilling, improving economic infrastructure and changing industry policy to better foster innovation and entrepreneurship.

The centrepiece initiative to deliver on this agenda was the creation of six Industry Growth Centres with an initial investment of \$188.5 million over four years. These were focused on areas where Australia already excelled and had the potential to create smart, high-value and export-focused industries:

- ▶ Advanced manufacturing
- ▶ Cyber security
- ▶ Food and agribusiness
- ▶ Medical technologies and pharmaceuticals
- ▶ Mining equipment, technology and services
- ▶ Oil, gas and energy resources.

The centres were based on successful models already operating in the United States, the United Kingdom and Canada, and had industry-led boards. They employed a leadership team with broad industry experience. AMGC's founding Chair Mr Andrew Stevens was formerly the Managing Director of IBM Australia, and its current Chair and long-term board member is Paul Cooper, owner and Executive Chair of the industrial electronics manufacturing company Rinstrum. AMGC's Managing Director is Dr Jens Goennemann, the former Managing Director of Airbus Group Australia Pacific and Airbus Helicopters.

Vision and focus

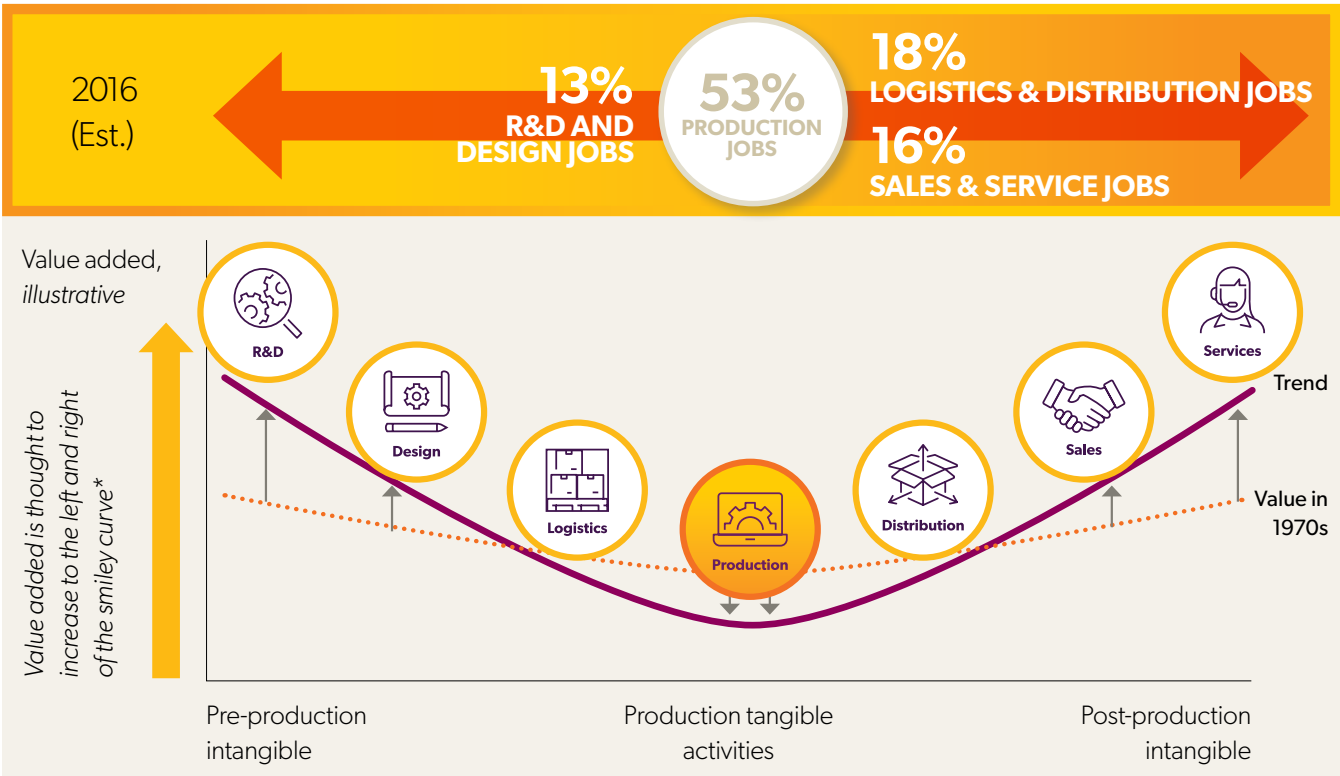
One of the key principles set out in the Government's founding documents for the Growth Centres program was that: 'Australian industry must boost its competitive capability based on collaboration, quality and innovation not simply volume and price.'

AMGC has articulated this principle in the following diagram, which has been central to the organisation's vision for how Australian manufacturers can succeed. It identifies that much of the value is created in global manufacturing supply chains now happens before and after core production steps in areas such as research, design, sales, distribution and service. These are all areas where Australia is well positioned to be globally competitive.

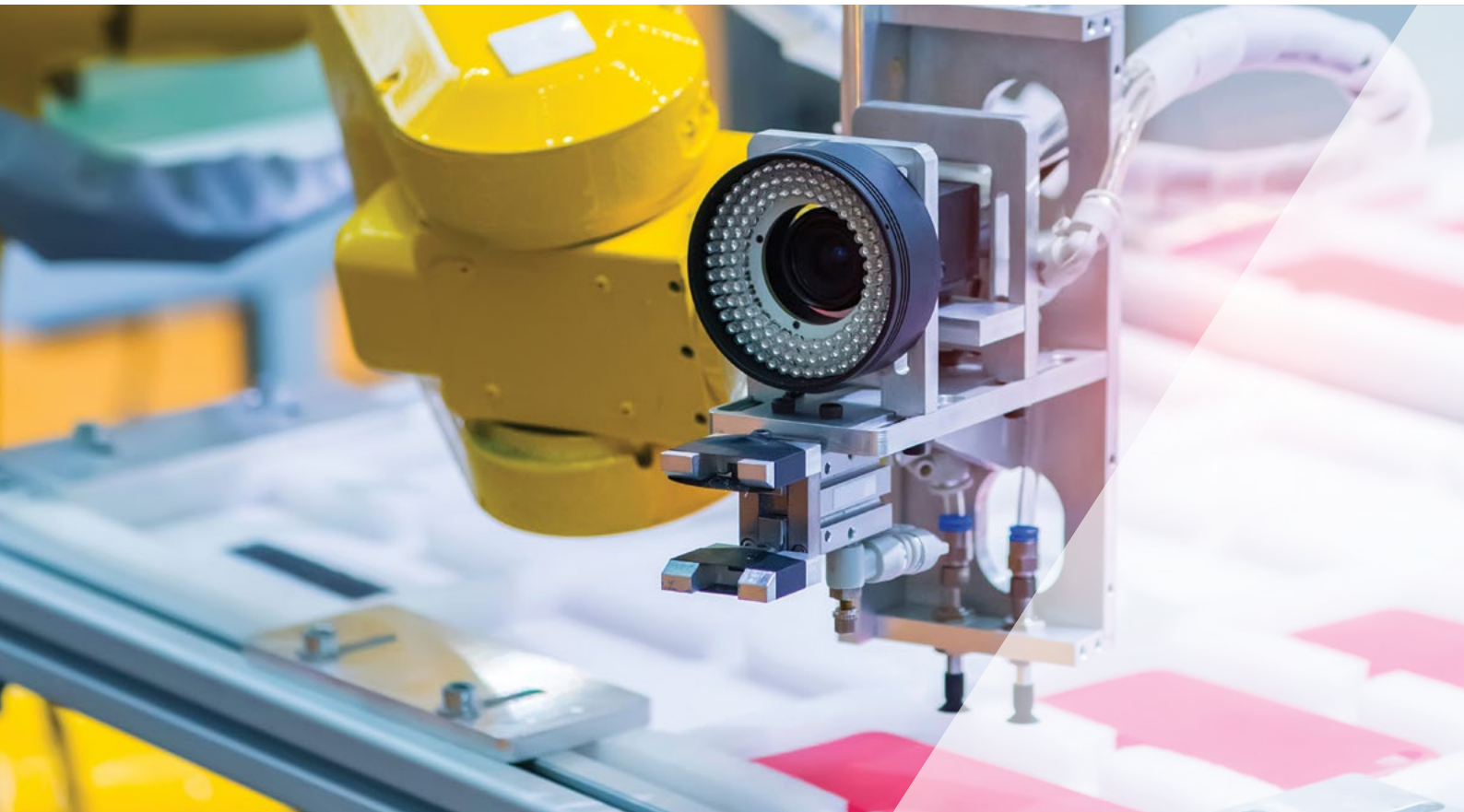
AMGC has also had a consistent and clear-eyed view that Australia must compete on value not cost, that it must be able to make complex items and that manufacturers should focus as much on how they produce items or contribute to processes as what they make.

¹ 'Industry competitiveness initiatives' overview, Department of Industry and Science, [2015].

The new manufacturing value chain



Source: ABS, US Bureau of Labor Statistics, Analysis conducted by AlphaBeta.



AMGC's approach

The Australian Government introduces the Industry Growth Centres Initiative in the following statement. It succinctly captures the overarching objectives that drives AMGC's activities and its achievements.

DIRECTION

Set an overall vision and direction to advance manufacturing in Australia. This is through providing respected industry research that challenges the paradigm of how Australian manufacturing is currently perceived, plus offers tangible advice on how to accelerate Australia's transformation to a leading manufacturing nation.

- AMGC has published 13 comprehensive research reports that have provided extensive new insights into Australia's manufacturing industry and where industry participants, governments, research bodies and other stakeholders can act to improve their competitiveness or that of the industry as a whole. See page 8.

DEMONSTRATION

Demonstrate ways to achieve this direction by offering Australian Government funding for projects that support productivity, competitiveness, and innovation. Inviting like-minded manufacturers to join AMGC as members to create a broad advocacy group. Establish technology hubs across Australia that showcase innovation and commercial outcomes.

As of 30 June 2020, AMGC had:

- approximately 2,132 members located across Australia, ranging from small to large manufacturing businesses (69%), governments, educational and research institutions, industry networks, and professional service firms.
- provided \$19.6 million in government funding to support 78 commercialisation projects.
- become an active participant in six advanced manufacturing hubs and labs.

“AMGC appears to have had significant impact on [relatively small number of] businesses to date. Of the 62 business that responded to our survey about how engaging with AMGC had impacted their bottom line, eleven of the businesses (eighteen per cent) said that AMGC provided great support to grow their revenue, seven (twelve per cent) had great support to improve their profitability, and nine (fifteen per cent) had great support to increase the number of employees.”

Nous Group²

² Performance Assessment of the Industry Growth Centres, Nous Group, 22 January 2019.

Government's role is to facilitate linkages between Australian industry and our scientific, research and higher education sectors to develop and deploy new cutting-edge exports to generate jobs and fuel the economy.

In practice, AMGC groups its activities in terms of the following four levers for effecting change in the manufacturing industry.

As a country we must play to our unique strengths.

We need to find new markets and develop new products and services that will set us apart internationally. We need to better integrate key parts of the economy through better collaboration. Having our businesses, universities, laboratories and national institutions work in isolation is a lost opportunity.

AWARENESS

Raise awareness among manufacturers and industry bodies on ways they can improve competitiveness and resilience.

- ▶ The AMGC's Manufacturing Academy provides online learning and interaction to educate and inspire businesses to transform. Over 500 people have enrolled.
- ▶ AMGC has held 71 events involving 1,001 organisations.
- ▶ AMGC has built up an active media and social media profile, featuring in news articles and coverage. In addition, it has built an audience for its newsletter and on LinkedIn, Twitter and YouTube.

“Survey responses indicate that AMGC has had a large impact on helping members to understand new technologies (eighty per cent) and trends in the sector (sixty-eight per cent).”

Nous Group³

IMPACT

To deliver industry-wide impact, AMGC takes steps to influence the strategies pursued by companies and governments. Companies require a comprehensive understanding of the capabilities and requirements needed in order to pivot towards more advanced manufacturing. AMGC has:

- ▶ provided over 1,591 connections among 600 organisations.
- ▶ advised the Australian Government on policy and regulatory reforms, submitting recommendations to strengthen manufacturing practices and enhance firms' ability to grow.
- ▶ reviewed 592 Commonwealth industry grant applications, of which 244 AMGC supported grants were awarded comprising ~338 million of awarded Commonwealth funds.

On 25 March, AMGC launched its COVID-19 Manufacturer Response Register. This online portal is the platform for Australian manufacturers, suppliers and buyers to connect for essential medical items.

“AMGC has played an important role as a connector and facilitator. Over seventy per cent of survey respondents indicated that AMGC has provided some or great support to: build relationships and networks with other businesses; better understand how to collaborate on challenges; connect to other government departments, researchers or academics.”

Nous Group⁴

³ Performance Assessment of the Industry Growth Centres, Nous Group, 22 January 2019.

⁴ Ibid.

ABOUT AMGC

In 2015, the Australian Government established the Industry Growth Centre Initiative. Under the emphasis of an 'imperative for change', the Industry Growth Centres formed the centrepiece policy direction for the Australian economy.

This industry-led initiative has been designed to 'focus on areas of competitive strength and strategic priority to drive innovation, productivity and competitiveness.' The Initiative aims to build capability and stronger industry systems through a collaborative, industry-led process – to grow excellence and create an economy that ensures Australia's ongoing prosperity. In short, the Industry Growth Centres aim to 'Advance Australia Further.'

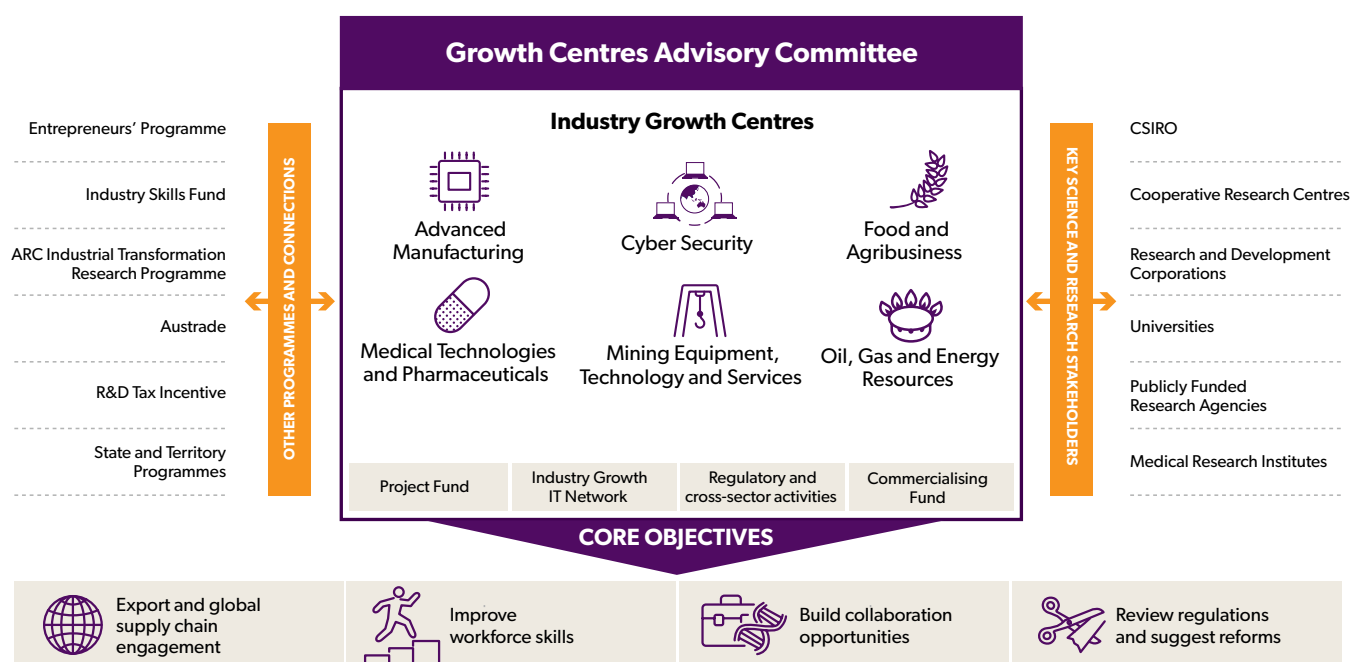
The Growth Centres are entrusted to lead the transition of cultural changes in four key areas:

- » increasing collaboration and commercialisation
- » improving international opportunities and market access
- » enhancing management and workforce skills
- » identifying opportunities for regulatory reform

The Advanced Manufacturing Growth Centre (AMGC) was established in 2015 as a key plank of the Australian Government's Industry Growth Centre Initiative. Its goal is to drive innovation, productivity, and competitiveness across Australia's manufacturing industry.

AMGC is an industry-led, not-for-profit organisation that is run by a board and management team of industry experts. It has created a nationwide network of manufacturers, universities and research institutions, and export hubs.

Industry Growth Centre Initiative



AMGC'S APPROACH

AMGC's role is to share its respected research on how the industry can transform to become more advanced. AMGC puts its research into action by engaging with manufacturers and universities in high-impact projects that create local jobs and deliver revenue growth for the Australian economy. Its broad membership base boasts over 2,000 participants, and its awareness activities are delivered through events, media engagements and digital communications. AMGC's impact is tangible. The Centre is the industry's peak body and is successfully shifting perceptions of manufacturing as a necessary manufacturing capability that Australia needs.

Impact will be generated through four key levers:

› DIRECTION:

Set an overall vision and direction to advance manufacturing in Australia. This is through providing respected industry research which challenges the paradigm of how Australian manufacturing is currently perceived, plus offering tangible advice on how to accelerate Australia's transformation to a leading manufacturing nation.

› DEMONSTRATION:

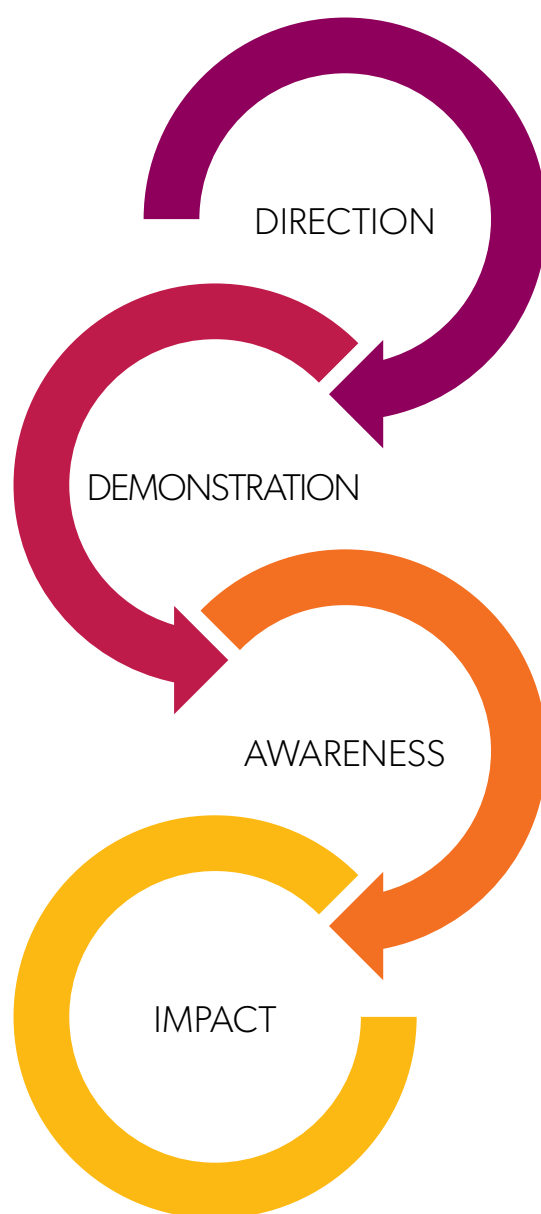
Demonstrate ways to achieve this direction by investing Australian Government funding for projects that support productivity, competitiveness, and innovation within the sector. Inviting like-minded manufacturers to join AMGC as members to create a broad advocacy group. Establishing technology hubs across Australia that showcase innovation and commercial outcomes.

› AWARENESS:

Work with manufacturers and industry bodies to improving awareness, perception, and encouraging action regarding competitive and resilient principles; advising the Australian Government on policy and regulatory reforms to strengthen manufacturing practices and enhancing firms' ability to grow.

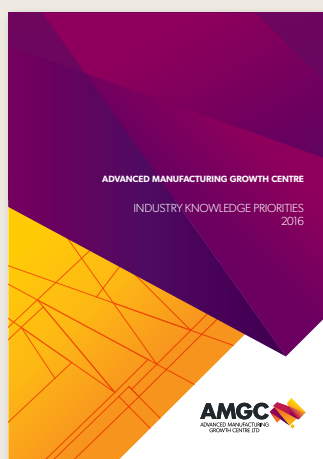
› IMPACT:

To deliver measurable industry-wide impact, AMGC takes steps to influence the strategies pursued by companies and governments. Manufacturers require a comprehensive understanding of the capabilities needed in order to become more advanced.



1 SET THE DIRECTION

INDUSTRY-LED RESEARCH



Industry Knowledge Priorities



Sector Competitiveness Plan



Advanced Manufacturing, a new definition for a new era

2016

→ 2017

AMGC conducts thorough analysis of opportunities for Australia's manufacturing industry's growth.

This step is referred to as Direction. AMGC's inaugural *Sector Competitiveness Plan* sets the benchmark for industry. This road map identifies competitive strategies for companies to follow to become more globally competitive. This is followed closely by further insights into Defining Advanced Manufacturing, Building Resilience, 10 Ways to Succeed in Manufacturing, Key Policy Submissions and Annual Reporting.

PROJECTS REPORT



Project Report 2018



Project Report 2019



Project Report 2020



Building Resilience in Australian Manufacturing



Ten Ways to Succeed in Australian Manufacturing



AMGC Impact - 2015 to Present

2018

2020

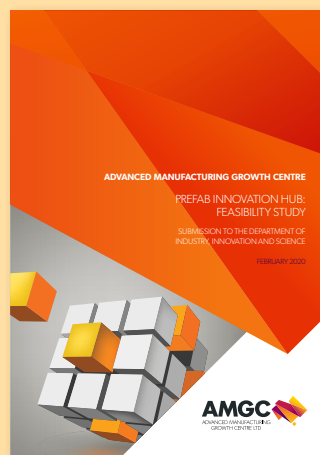
POLICY SUBMISSIONS



Submission to Innovation and Science Australia



Industry 4.0: The Australian Way



Prefab Innovation Hub: Feasibility Study



COVID-19 Manufacturer Response Register Progress Report

2 DEMONSTRATE THE VISION

AMGC translates its vision through co-funded industry projects, a thriving membership base and its focus on technology hubs.

This step is referred to as Demonstration. It encompasses the Centre's investment strategy into bringing innovative projects toward commercialisation; creating an ecosystem of like-minded stakeholders; and establishing centres of technical excellence across Australia.



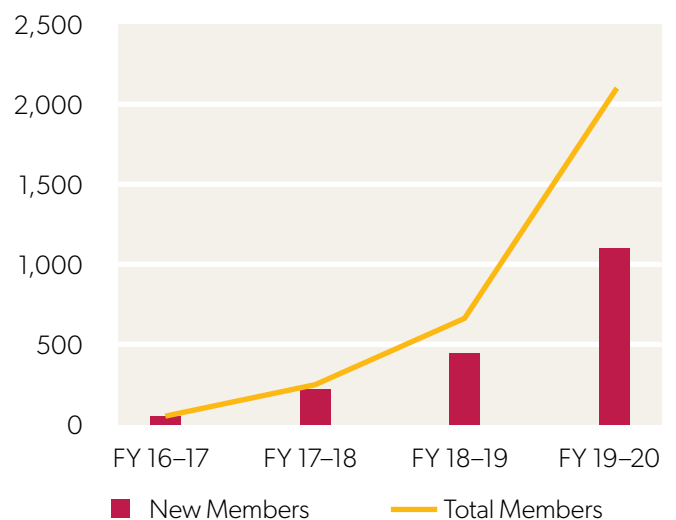
**Rotacaster
Conveyor Table and
Motion-Control System
NSW**

MEMBERSHIP

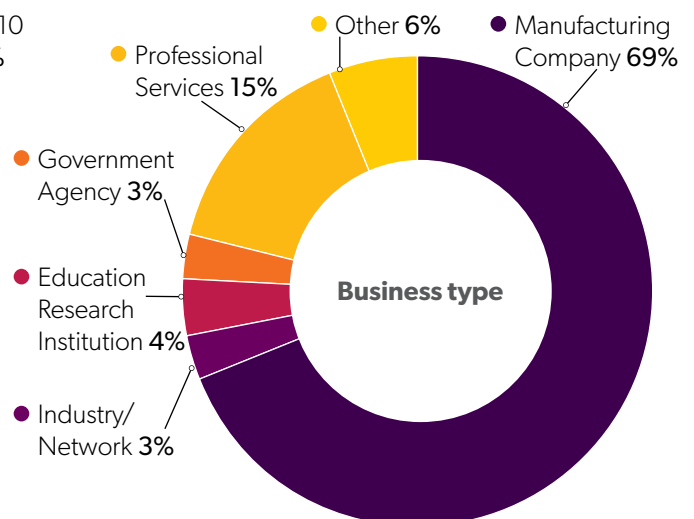
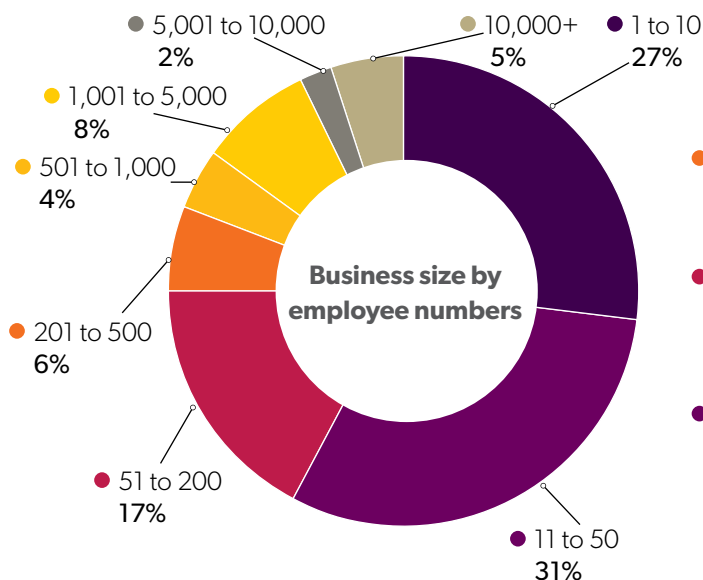
AMGC membership is an ecosystem of like-minded stakeholders from across Australia. It comprises manufacturers, research institutions and industry bodies. Each is committed to developing a more innovative and globally competitive manufacturing industry.

Building a thriving community lifts the overall industry's capability. Members are encouraged to share best practices, to collaborate and to champion each other's success stories. The more the word spreads, the more manufacturers' benefit from their participation and networking opportunities.

AMGC Membership Growth



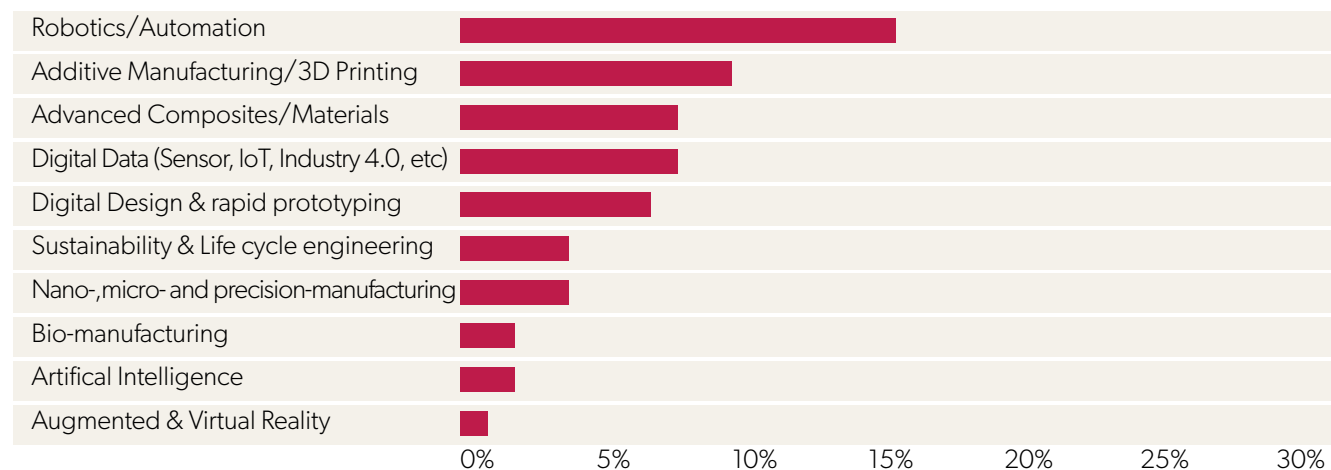
MEMBER DEMOGRAPHICS



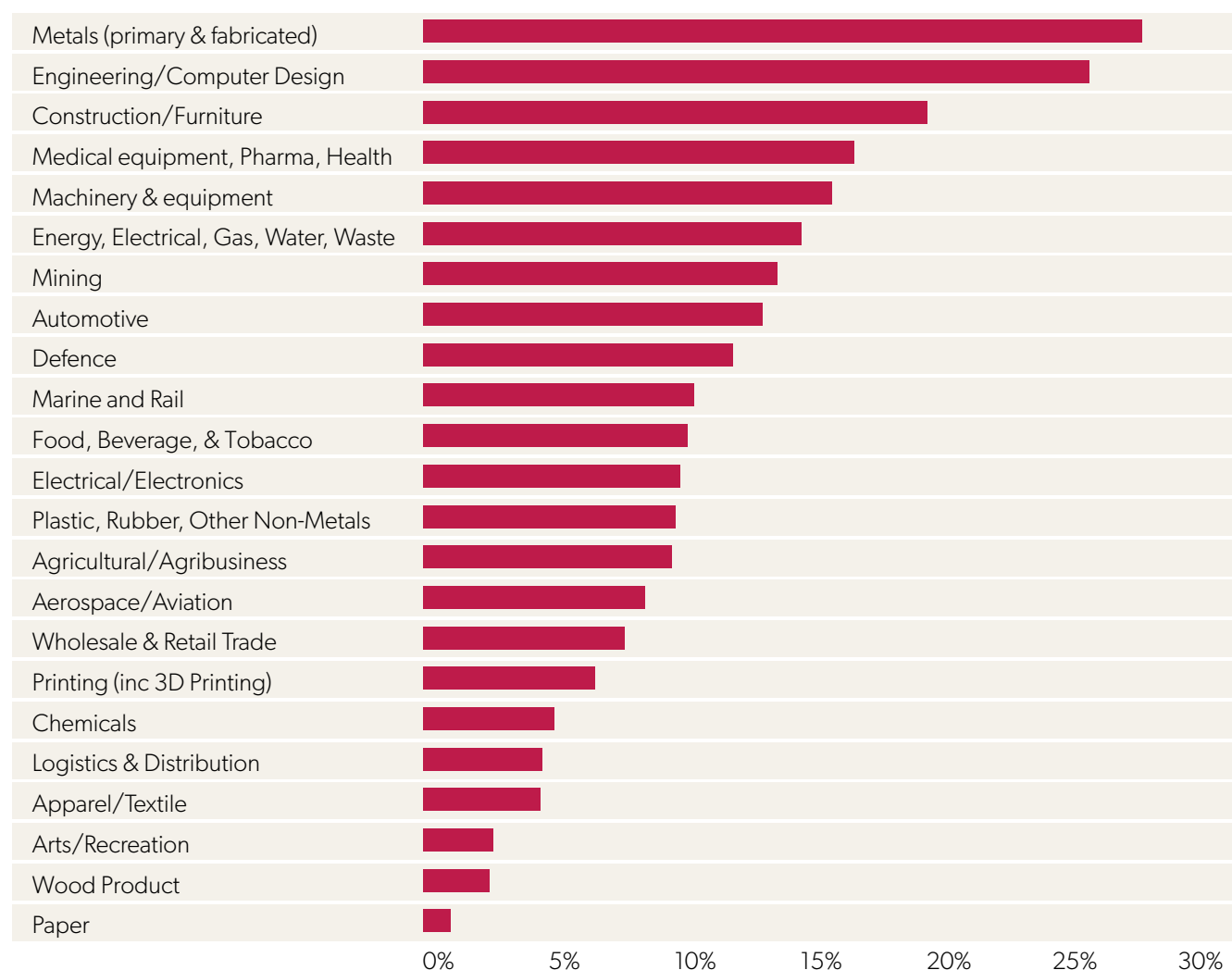
2 DEMONSTRATE THE VISION

AMGC's Membership Profile

Advanced Capability



Member sub industries





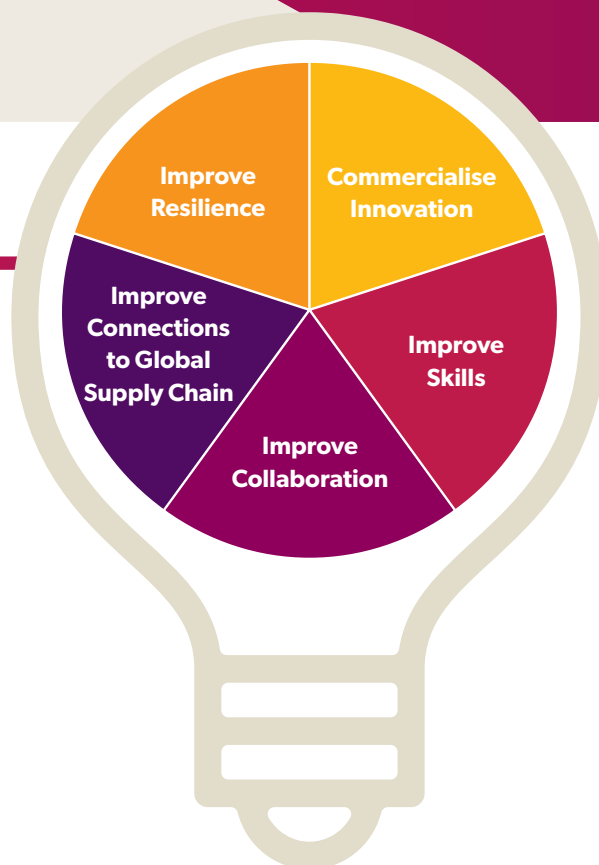
Dresden
Customised Prescription Eyewear
NSW

2 DEMONSTRATE THE VISION

AMGC PROJECTS

AMGC co-funds projects to commercialise innovation. In this way, approved projects demonstrate how to enhance Australia's competitiveness landscape and to set the direction for industry across the country.

AMGC projects strive to encourage deeper collaboration between industry and research partners for commercial outcomes, as well as increase connections into global supply chains, promote the development of advanced skills and jobs, and foster best practice and resiliency.



78 Projects – in progress or completed



~2,361
Projected Jobs



343
Nation-wide collaborations



\$66.8M
Committed (AMGC, industry and in-kind)



\$19.6M
Committed (AMGC)



~\$1.2B
In estimated revenue generated

AMGC completed project results



10 (13%)
Completed projects



\$8,049,922
Committed (AMGC, industry and in-kind)



\$2,317,225
Committed (AMGC only)

COMMERCIALISE INNOVATION

From the 10 completed projects:



~224%
Average ROI on
project funding



~\$31 – 33M
Estimated increase in
domestic sales



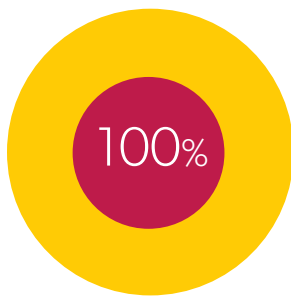
~\$25.5 – 27.5M
Estimated increase in
export sales



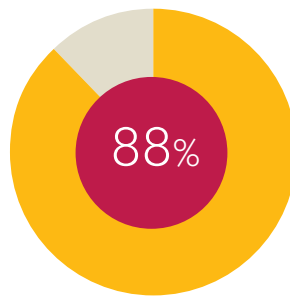
~\$1.4M
Estimated net increase
in R&D Expenditure

**Project participants reported an increase in...
Compared to before the project**

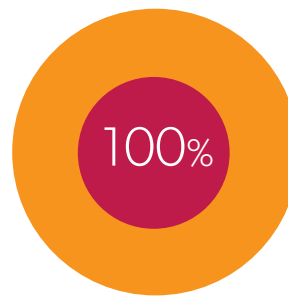
Profitability



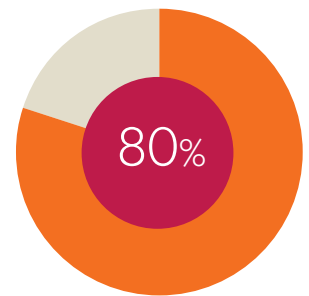
Productivity



Range of products
or services



Margin



**Manufacturers reported improvements
across the Smiley Curve⁵**

89% reported
an improvement
in research
(R&D) efforts of
a good, service
or process



89% reported
an improvement
in changes to the
design of a good
or service



78% reported
an improvement
in logistics &
supply chain
methods
for goods
and services



100%
reported an
improvement
in methods of
manufacturing
or producing
goods/services



86% reported
an improvement
to the packaging
of a good
or service



78% reported
sales business
development

67% reported
new media or
techniques
for product
promotion

56% reported
an improvement
in sales or
distribution
methods



89% reported
new methods of
pricing goods or
services

44% reported
new methods
of product
placement of
sales channels



89% reported
an improvement
in supporting
activities
for business
operations

⁵ Questions developed using the Business Characteristics Survey.

2 DEMONSTRATE THE VISION

IMPROVING SKILLS

From the 10 completed projects:



Job Growth

~163 jobs were created or upskilled

- › 97 New jobs created
- › 66 Employees were upskilled
- › 67 Employees received formal training (obtained certificate, diploma, etc.)



STEM Skills

Increase in STEM skilled staff

- › 90% of manufacturers reported an increase in STEM skills in their business as a result of the project



Management Skills

70% of manufacturers reported strong improvement in...

- › knowledge of management processes
- › new methods of organising work responsibilities and decision making
- › reviewing business models and strategic direction
- › getting involved in high risk/high reward projects
- › taking a proactive approach to market competition

IMPROVING COLLABORATION

Manufacturers engaged in the following collaborative arrangements as part of their project:



- › Joint research and development (67%)
- › Joint manufacturing/production of goods and services (44%)
- › Integrated supply chains (22%)
- › Other (11%)



~343

Nation-wide collaborations



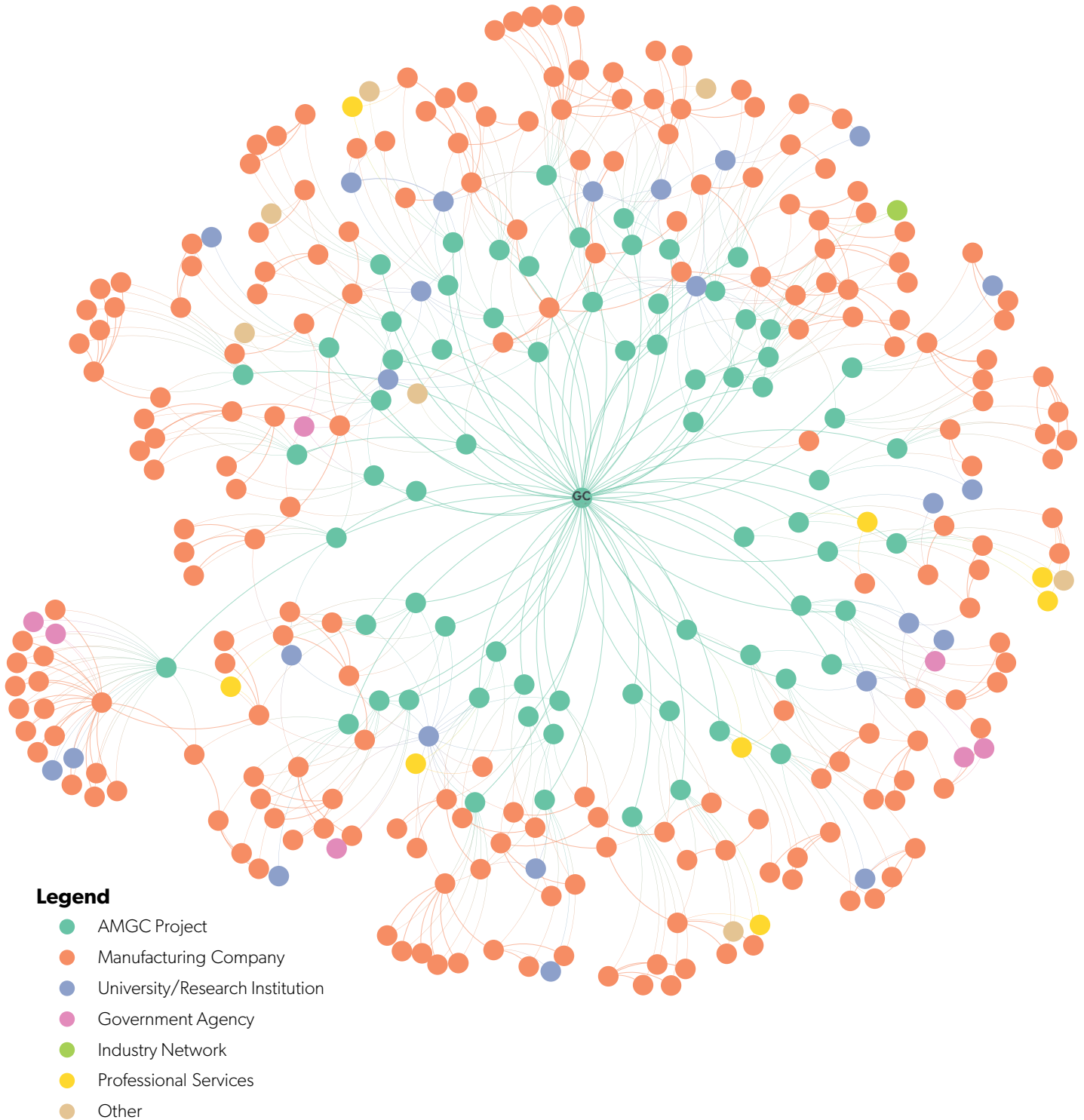
~65-161+

Additional connections



AMGC PROJECT NETWORK

Connecting industry with research institutions, governments, industry associations and professional services



2 DEMONSTRATE THE VISION

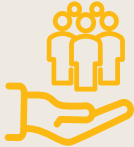



IMPROVING CONNECTIONS INTO GLOBAL SUPPLY CHAIN



80%

Of participants reported an increase in identifying or targeting export, niche, or underserved markets

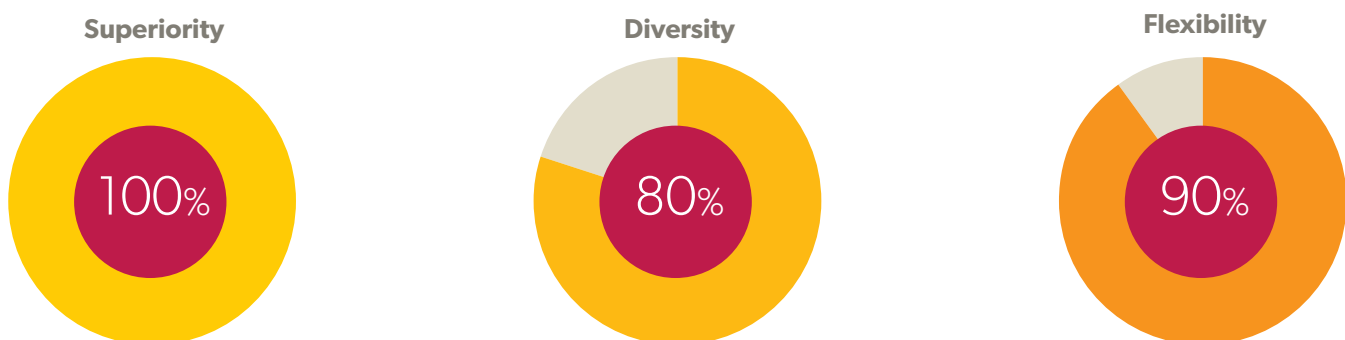
Manufacturers reported being better connected into global value and/or supply chains through...

Customers	Suppliers	Businesses	Formal agreements/ partnerships
80% Strongly Agree 	80% Strongly Agree 	30% Strongly Agree 	40% Strongly Agree 

IMPROVING RESILIENCY



Project participants reported an increase in... Compared to before the project



PROJECT SATISFACTION

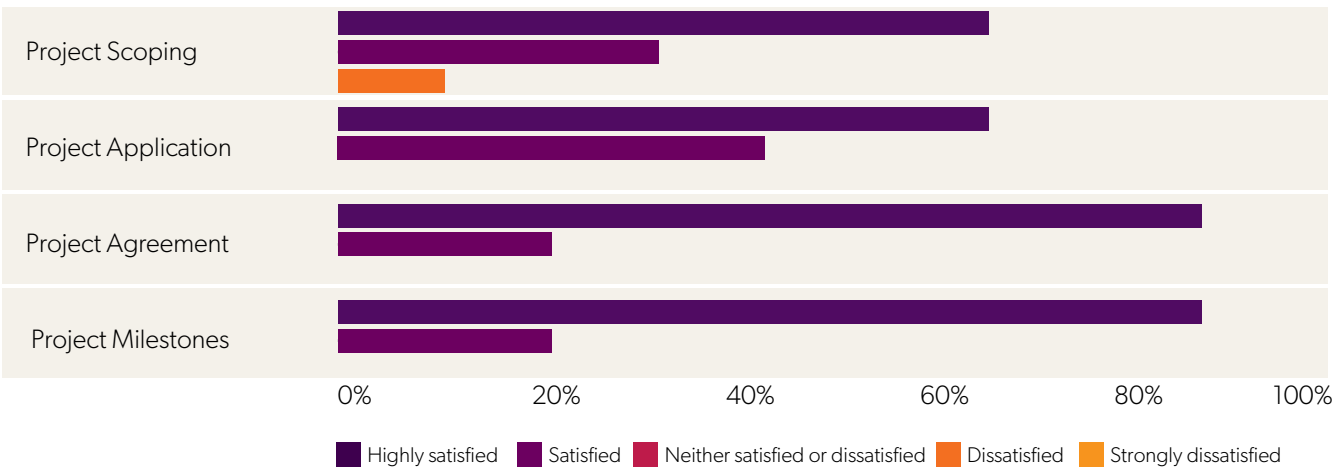
Overall, how would you rate the quality of your AMGC project experience?



“More project funding for reshoring projects would be beneficial as there are many companies approaching our firm to help reshore their manufacturing from China in particular.”

Marco Engineering Pty Ltd, QLD (now Evolve Group)

To what extent were you satisfied with the following project processes?



“AMGC’s involvement in industry is vital for small to medium firms to access additional funding. The funding is central to a company like iOrthotics to undertake strategic and very specific R&D activities. Without it, it would have been very difficult to provide the overarching justification to undertake the material testing, the technology improvement, and enhance business processes across our supply chain.”

iOrthotics, QLD

2 DEMONSTRATE THE VISION

AMGC HUBS

AMGC continues to support hubs as a pathway for manufacturers to collaborate. The hubs facilitate the sharing of resources, research outcomes, capabilities and skills between firms that have similar needs due to their location, their supply chain demand, or technology priority.

AMGC hub network consists of six industry hubs:



Prefabrication Innovation Hub

On 16 June 2019, The Hon Karen Andrews announced a \$2 million investment into the feasibility and potential establishment of an Australian Prefabrication Innovation Hub.

Globally, prefabrication is becoming more prevalent as an alternative construction technique. It offers ecofriendly and affordable building solutions. Plus, its rapid installation process is suitable for providing much-needed dwellings after natural disaster events or for international aid relief purposes.

To kick start the initiative, AMGC was tasked to undertake a feasibility study. A steering committee was formed with representatives from across industry and academia. The study draws on national input from a broad cross-section of stakeholders directly and indirectly linked to the construction supply chain.

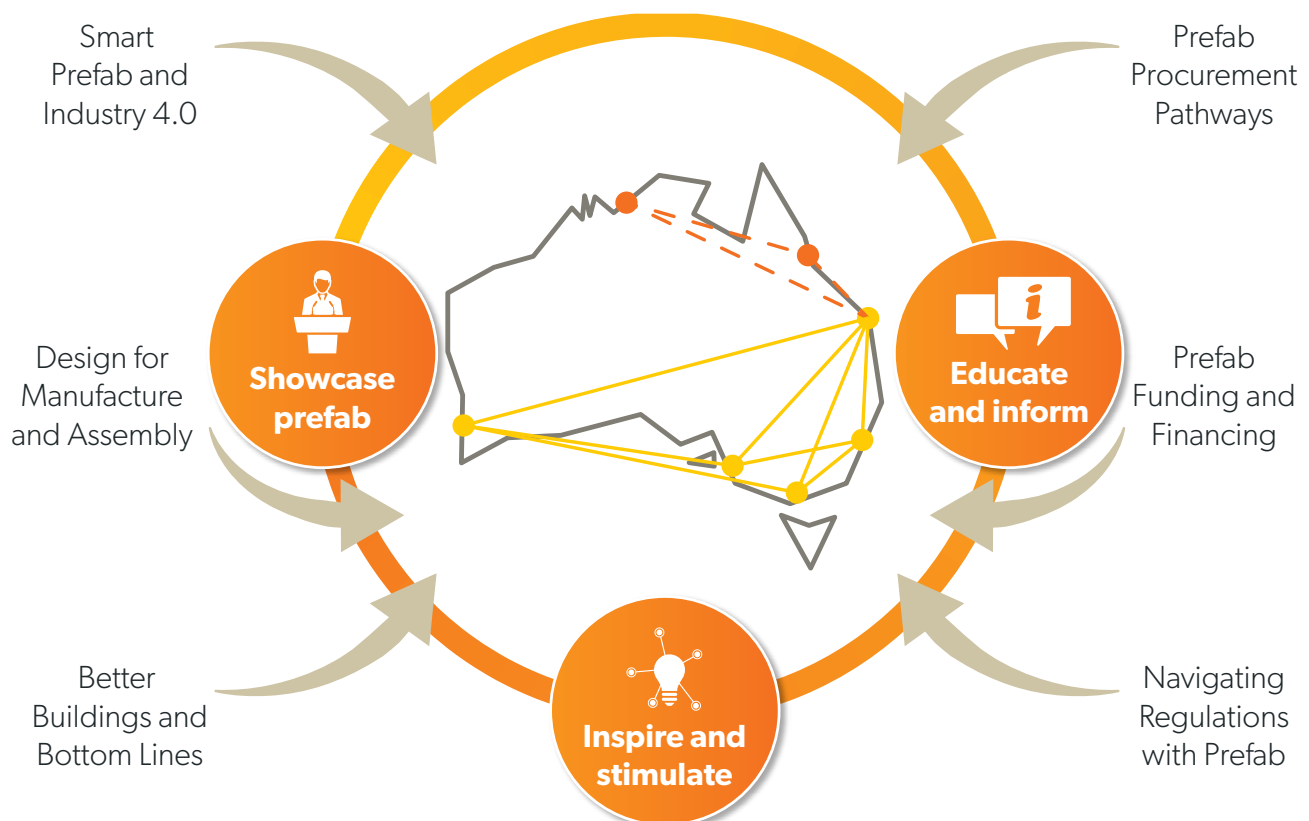
The outcome of the feasibility study is a strong recommendation for the establishment of a central Prefabrication Innovation Hub supported by a national network of Innovation Labs.

The Prefabrication Innovation Hub is underpinned by a set of operating principles. These are to:

- › showcase prefab success
- › educate and inform participants about its benefits
- › inspire and stimulate new collaborations.

The network of Innovation Labs will be geographically distributed across Australia. These satellite sites will each focus on a 'growth driver', such as, Design for Manufacture and Assembly (DMA), Navigating Regulations with Prefab, and Prefab Procurement Pathways.

The feasibility study and its recommendations can be found at: <https://www.amgc.org.au/pre-fab-innovation-hub/>



3 DRIVE AWARENESS

AMGC openly shares its insights through media engagements, highly attended event series – in person or online – and across other popular communication channels, including its Manufacturing Academy and organisation's website.

This step is referred to as Awareness. AMGC encourages manufacturers to seek out information that can help lift their understanding of how the industry is transforming. Every AMGC awareness activity is borne from experience – and speaks directly to manufacturers.

Manufacturing Academy Launch



MANUFACTURING ACADEMY

AMGC's Manufacturing Academy contains real advice and success stories for Australian manufacturers.

It contains over four hours of video content delivered by manufacturers for manufacturers.

The program introduces the Competitiveness Framework covered in six tailored courses and 53 chapters.



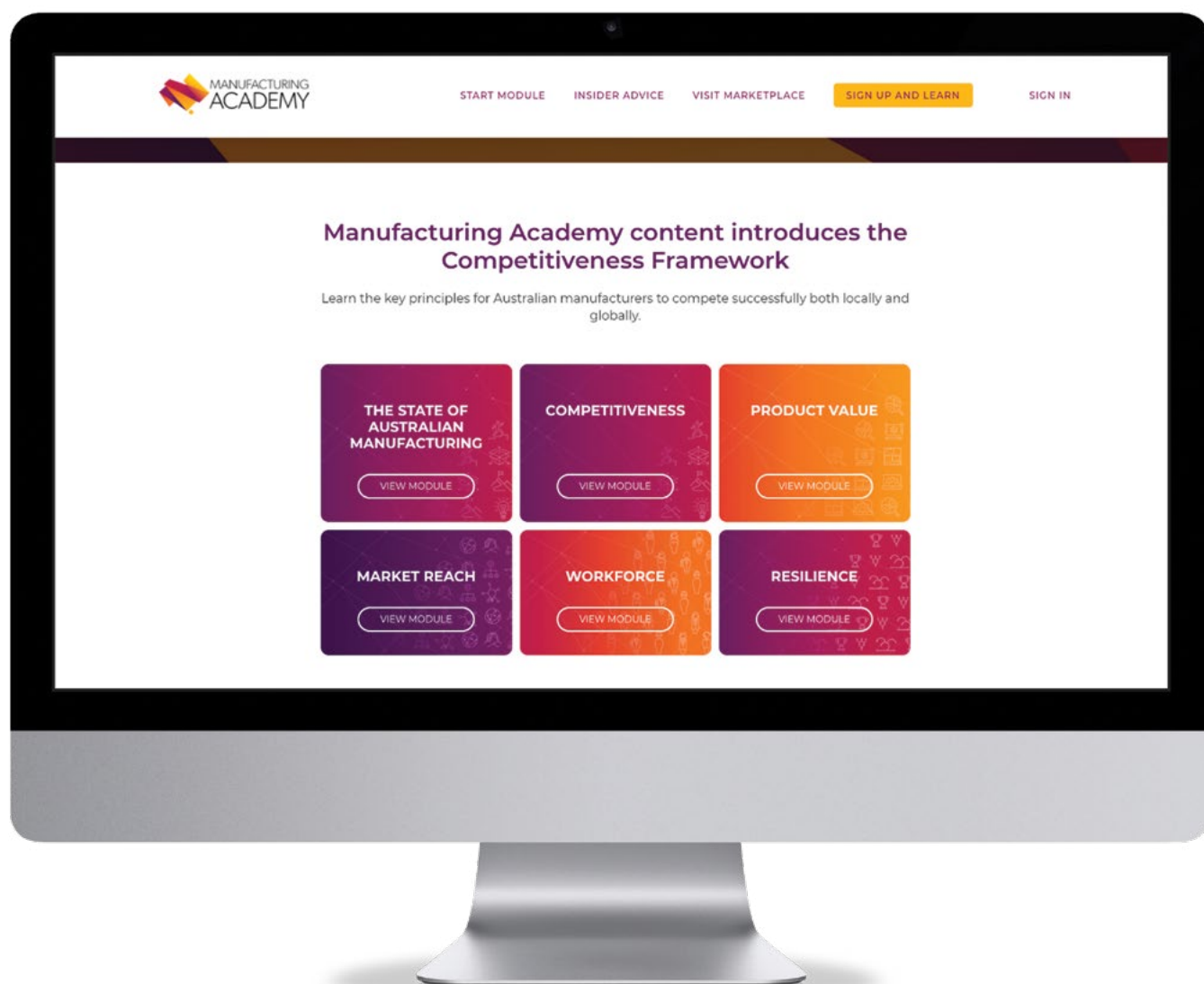
517 Unique Users



955 Enrolments

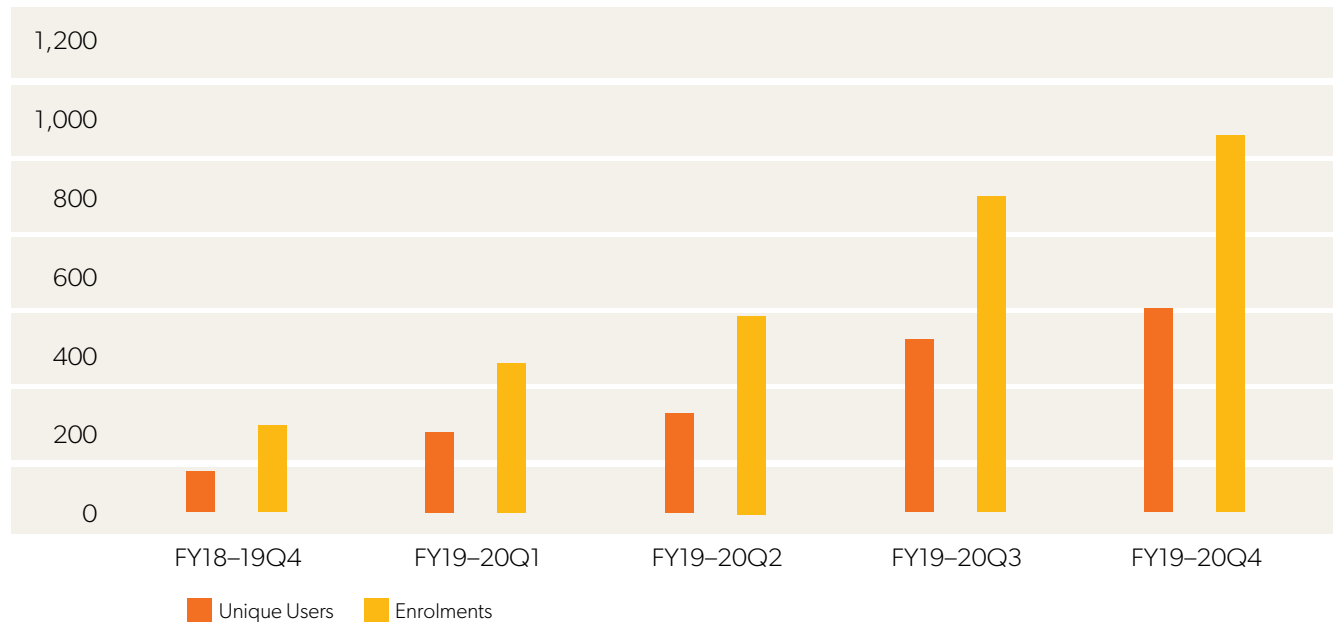
LOG IN AND LEARN:

manufacturingacademy.org.au

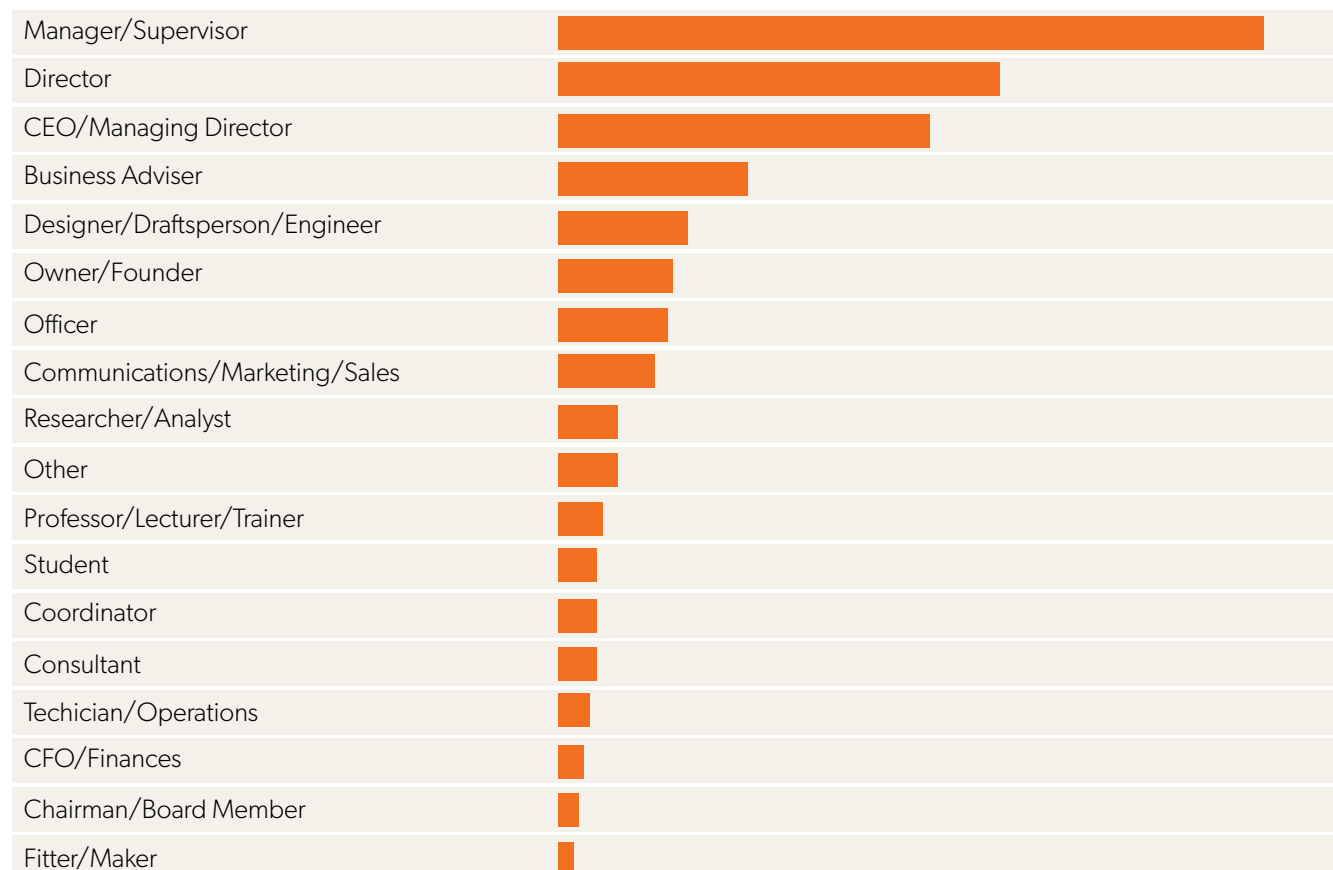


Manufacturing Academy

Platform growth



Platform user company position



Manufacturing Academy – increasing awareness and skills

The Manufacturing Academy delivers research and advice to Australian manufacturing leaders. This increases their exposure, awareness, and skill levels to AMGC's direction setting best practices.

THE STATE OF AUSTRALIAN MANUFACTURING	251 users	Average test score: N/A
COMPETITIVENESS	183 users	Average test score: 83%
PRODUCT VALUE	122 users	Average test score: 86%
MARKET REACH	93 users	Average test score: 78%
WORKFORCE	86 users	Average test score: 79%
RESILIENCE	71 users	Average test score: 70%

Manufacturing Academy MarketPlace

Manufacturing Academy offers a digital Marketplace for information and resources about growing your business and business capability. Users can further 'get in touch' with these resources within the platform.



3 DRIVE AWARENESS

EVENTS

AMGC events are highly popular. Whether they are delivered in person or online, attendees rate their satisfaction as high and would strongly recommend for other manufacturers to attend in the future. Events involve the dissemination of AMGC's research findings, outcomes from industry-led projects, and networking opportunities. Site visits often follow events which encourages collaboration and knowledge-sharing among participants.

AMGC holds its events across Australia in regional towns and capital cities.

AMGC events serve 3 purposes:

1. Providing networking opportunities
2. Increasing awareness of direction setting research
3. Increasing the intention to act on direction setting practices



71 Total Events



1151 Attendees



1001 Organisations attended

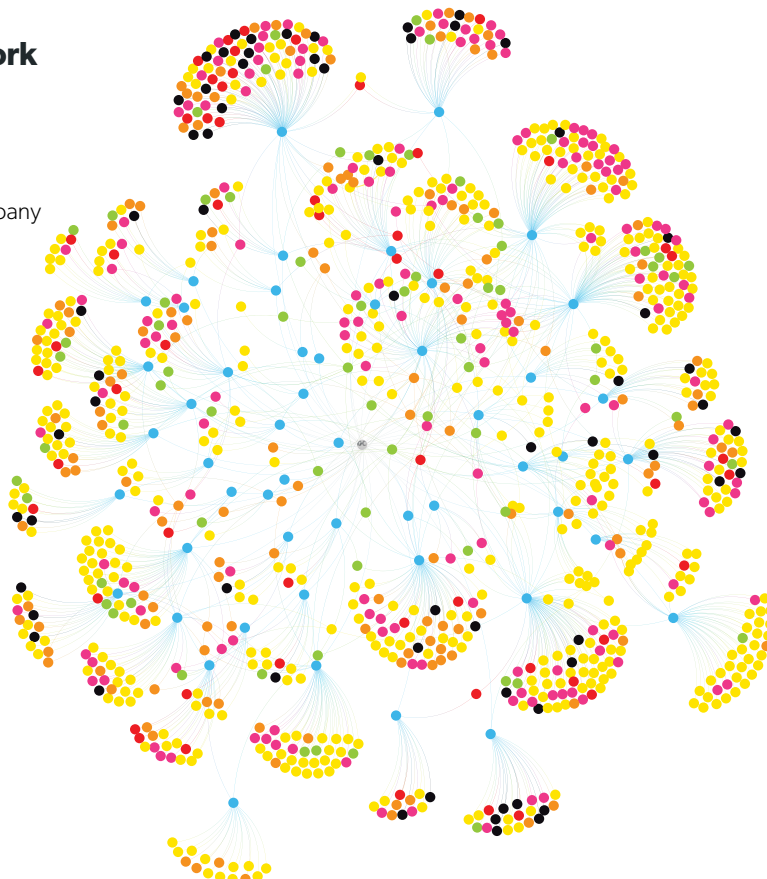
Providing networking opportunities

On average, **83%** of event participants reported to make approximately **1 to 5 connections** because of the event. **8%** of event participants reported to make approximately **6 to 10 connections** because of the event.

AMGC Event Network

Legend

- AMGC Event
- Manufacturing Company
- Education/Research
- Government
- Industry Body
- Professional Services
- Other



Increasing awareness



Emerging Trends in Manufacturing

On average, **85%** of Industry Connect event participants reported an increase in awareness of emerging trends in manufacturing.



Government Support Initiatives

75% of event participants reported an increase in awareness of government support initiatives and resources available.



Circular Economy

On average, **78%** of Circular Economy event participants reported an increase in awareness of circular economy (overall).

On average, **83%** of Circular Economy event participants reported an increase in awareness of circular economy techniques.



Space Opportunities

89% of Space Opportunities event participants reported an increase in awareness of emerging trends in the space sector.

Increasing intention to act



Circular Economy

On average, **78%** of Circular Economy event participants reported intending to incorporate more circular economy techniques into their business.



Government Support Initiatives

100% of event participants reported intending to utilise the government support initiatives discussed in the event.



Space Opportunities

100% of event participants reported believing that their business can get more involved in future space sector opportunities.



Infrastructure

100% of event participants reported believing that their business can get more involved in future infrastructure opportunities.

3 DRIVE AWARENESS

Event Satisfaction

On average, **88%** of respondents were satisfied with AMGC hosted events

On average, **74%** of respondents were likely to recommend an AMGC event to another manufacturer

“Michael Sharpe was an amazing speaker, interesting, easy to follow and information was beneficial to our company. In fact all the speakers delivered relevant information to assist strategic planning across the manufacturing industries. Thank you to AMGC, DSDMIP, TAFE, and the Ai Group for holding this forum.”

Manufacturing Company,

Growing a Stronger Manufacturing Business Event
Cairns, QLD



COMMUNICATION METHODS

Evidence-based messages through different communication channels (presentations, industry events, Industry Edge newsletter, broadcast, print, on-line, videos, etc.) increase the manufacturing industry’s awareness surrounding value-driven best practices.

AMGC’s communication channels are very well subscribed compared to industry standards. Its monthly newsletter open rate is four times average benchmark and three times click through rate. AMGC SEO is unpaid and ranks in the top three searches. Its social media following growth rate exceeds 10 per cent per annum.



6,021

People receive Industry Edge by June 2020



34

Postcards



179,352

Website pageviews



51

YouTube Subscribers



1,086

Twitter Followers



2,235

LinkedIn Followers

4 DELIVER A MEASURABLE IMPACT

A consistent and comprehensive approach is needed to transform the Australian manufacturing industry. It must be done over an extended period of time to build momentum and to gain widespread support. AMGC's initiatives are the spark to ignite a cultural shift, however, it requires government commitment over the long term.

This step is referred to as Impact. AMGC's approach is to lift manufacturers' awareness, build complex capability nationally, and to reinforce best practices. AMGC's co-funded projects deliver high-value jobs and revenue growth to the Australian economy. Impact is the culmination of AMGC's efforts of Direction, Demonstration and Awareness.

AMGC NETWORK

Since its inception, AMGC has meticulously and strategically grown a large network of organisations and stakeholders that influence the Australian manufacturing industry.

Industry change is shaped by manufacturers and their relationships between each other and their relationship with

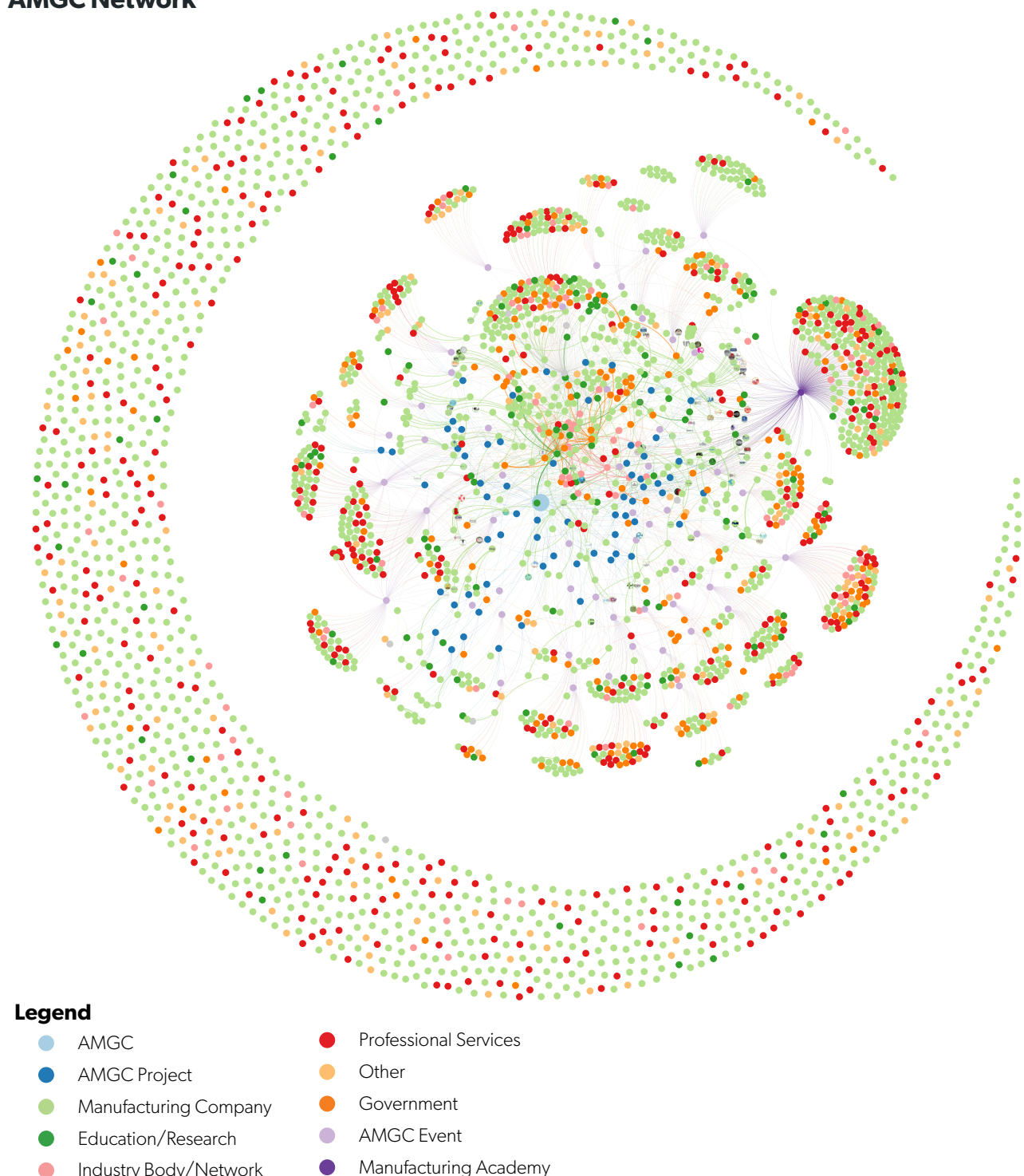
other organisations (e.g. government agencies, education institutions, research organisations, industry bodies, professional services, etc.). It is this ecosystem that creates the environment within which manufacturers can receive positive reinforcement on their steps toward transformation.

	2016–17	2017–18	2018–19	2019–20
Number of Members	39	290	741	2132
Number of Projects	3	22	32	78
Number of organisations attending an AMGC event	N/A	N/A	364	1001
Number of organisations participating in Manufacturing Academy	N/A	N/A	106	517
Number of Staff	6	10	12	13

AMGC Network visually demonstrates how companies engage through AMGC membership, projects, Manufacturing Academy, events, and other connections. Industry consultations by AMGC provide advice and support on a wide range of topics including, business models, pivot ability, supply chain connections, leadership, and mental wellbeing.

AMGC Network further includes specific introductions and connections made between organisations within the network for greater collaboration and impact, all facilitated by AMGC.

AMGC Network



4 DELIVER A MEASURABLE IMPACT

Industry connections

AMGC leverages its existing network to connect over 381 manufacturers to other manufacturers, government agencies, universities or research institutions, industry networks and professional services. These connections helped to facilitate projects and build new local supply chains and strengthen existing supply chains.

1,591 connections made or maintained among **600** organisations*



359 connections were made to other manufacturing companies



81 connections were made to industry networks



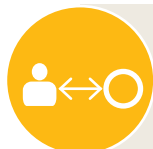
327 connections were made to government agencies



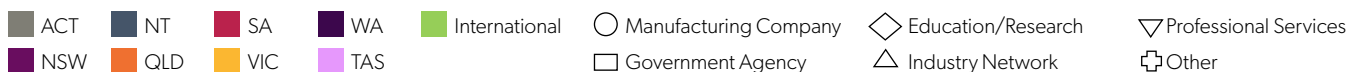
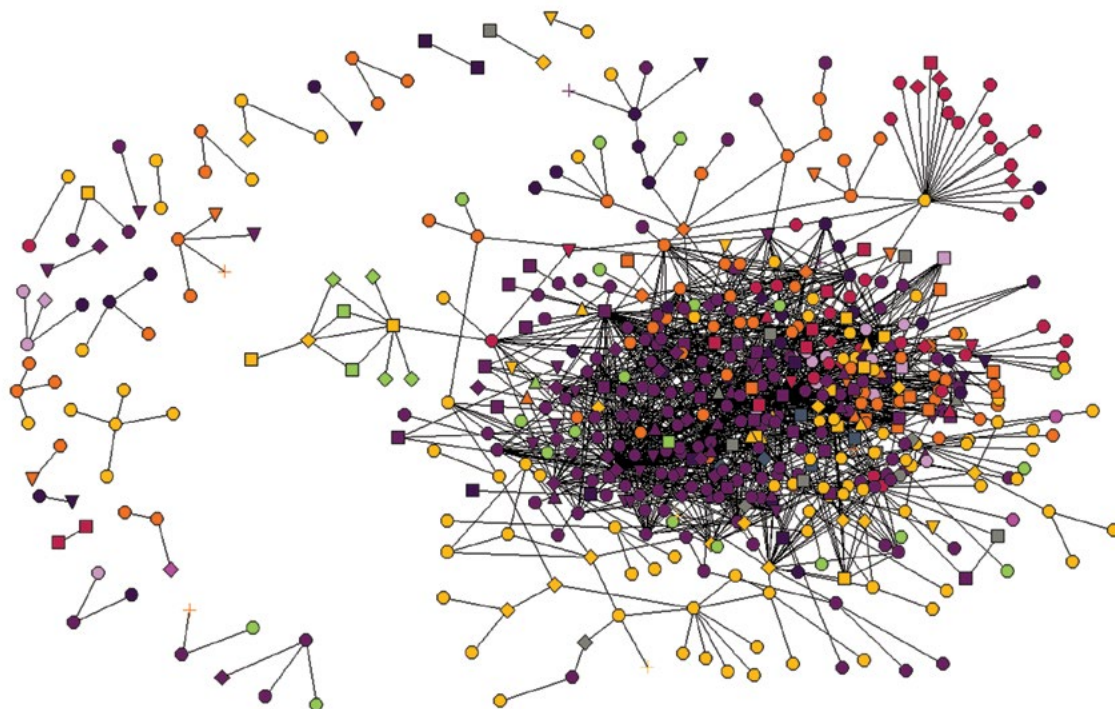
53 connections were made to professional services



250 connections were made to universities, education, or research institutions



16 connections were made to other types of organisations



* Connections made via projects from 15 June 2020, events from FY2019–20, and industry consultations from FY2019–20. These connections exclude support and advice given for COVID-19 specifically.

IMPACT ON GOVERNMENT

Governments can accelerate the transition of Australian companies to a future of advanced manufacturing. As an industry-led but government-supported body, AMGC is well positioned to ensure that government assistance is properly targeted. Drawing on analysis and learnings, AMGC continues to work with relevant government agencies to ensure that its policy, programs and regulations are optimally aligned.

Identifying Regulation Reform

Each AMGC research report identifies recommendations for government action in topics such as R&D, smarter procurement, smarter programs and changes in sector measurement.



40 Total recommendations were given to federal government

Sector Competitiveness Plan: **7 recommendations**

Advanced Manufacturing: A New Definition for a New Era: **3 recommendations**

Advanced Manufacturing: Building Resilience in Australian Manufacturing: **4 recommendations**

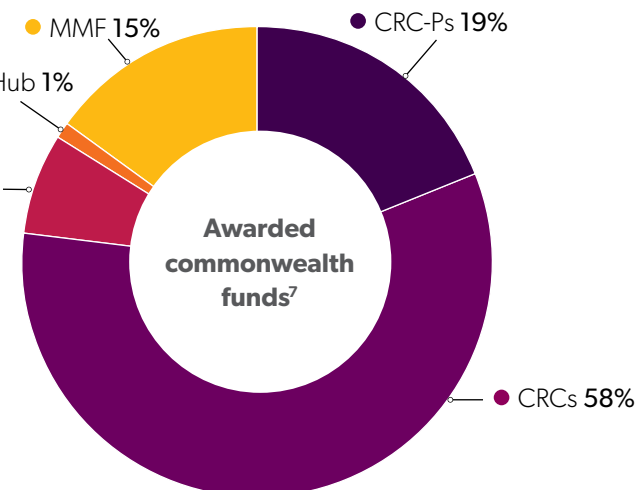
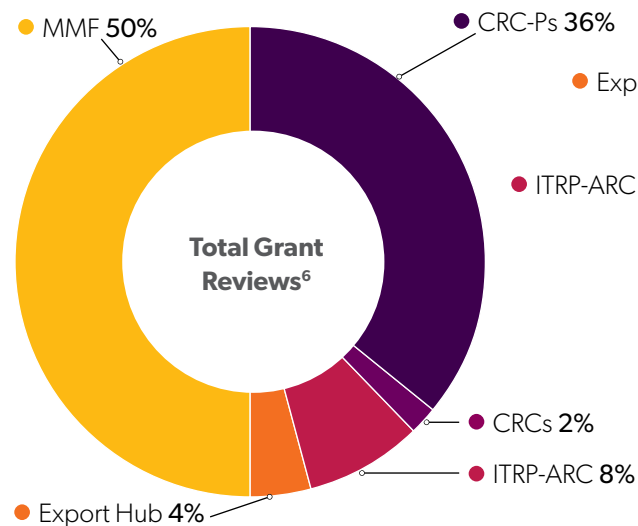
Industry 4.0: An Opportunity for Every Australian Manufacturer: **10 Recommendations**

Innovation and Science Australia 2030 Submission: **6 recommendations**

Prefab Innovation Hub: Feasibility Study: **10 recommendations**

Reviewed Grant Applications

AMGC reviews and provides recommendations on CRCs, CRC-Ps, ARC-ITRPs, Export Hubs and Manufacturing Modernisation Fund (MMF). Each grant is independently assessed by two AMGC Directors.



592 Total grant applications reviewed



416 Total grants supported by AMGC



244 AMGC supported grants awarded



~\$338M of awarded commonwealth funds

6. Grants Reviewed is calculated by the total number of grants AMGC reviewed. This is not reflective of time spent regarding the different grant types.

7. Proportion of Awarded Funds is calculated by the total number of funds awarded for successful grants.

4 DELIVER A MEASURABLE IMPACT



Industry Reference Council

AMGC participates in the review committee for the skills training package for the industrial sector for TAFE. A renewed training package has been revised. This will have the potential to impact over 800,000 workers as they retrain and reskill.

Connecting government to industry

AMGC engages its existing network to connect government agencies with manufacturing companies, industry networks, research institutions, professional services that support industry, and other government agencies.

674 industry connections made or maintained among
79 Government agencies



327 Connections were made to other manufacturing companies



90 Connections were made to industry networks



110 Connections were made to government agencies



22 Connections were made to professional services



118 Connections were made to research institutions

Government Agencies we work with*

ANSTO
AusIndustry
Austrade
Australian Space Agency
Centre for Defence Industry Capability (CDIC)
Department of Defence
Department of Education and Industry
Department for Energy and Mining
Department of Industry, Science, Energy and Resources
Export Finance Australia
Economic Development Board
Growth Centres Advisory Committee
Innovation and Business Skills Australia
Minister's Manufacturers Round Table
MTP Connect
Mets Ignited
NERA

New South Wales

Albury City Council
Campbelltown City Council
Central Coast Council
City of Canterbury Bankstown
Defence NSW
Dubbo City Council
Mid North Coast Business Chamber
Moree Plains Shire Council
Nambucca Shire Council
NSW Chief Scientist
NSW Circular
NSW Department of Planning, Industry and Environment
NSW Industry Training Advisory Bodies (ITABs)
NSW Investment Attraction
NSW Productivity Commission
NSW Treasury
Penrith City Council
RDA Orana
RDA Southern Inland
Tamworth Regional Council
Western City Aerotropolis Authority

Victoria

Adult, Community and Further Education
City of Wodonga
Department of Education and Training (VIC)
Geelong Chamber of Commerce
Glenelg Shire Council
RDA Mildura
RDA Victoria
Victoria State Government

South Australia

Department for Industry and Skills (SA)
South Australia Government
Port Pirie Regional Council
RDA Limestone Coast
South Australia Health

Queensland

Cairns Manufacturing Hub
Fraser Coast Council
Griffith City Council
Ipswich City Council
Maranoa Regional Council
Queensland State Government
Queensland Manufacturing Council
Rockhampton Manufacturing Hub
Townsville Manufacturing Hub

Tasmania

Department of Industry (TAS)

Western Australia

Chamber of Commerce and Industry (WA)
Defence Science Centre
Department of Jobs, Tourism, Science, and Innovation (WA)
Western Australia State Government
Industry Reference Group
RDA Midwest Gascoyne

Northern Territory

Department of Trade, Business, and Innovation (NT)
Northern Territory Department of Industry
Northern Territory Government

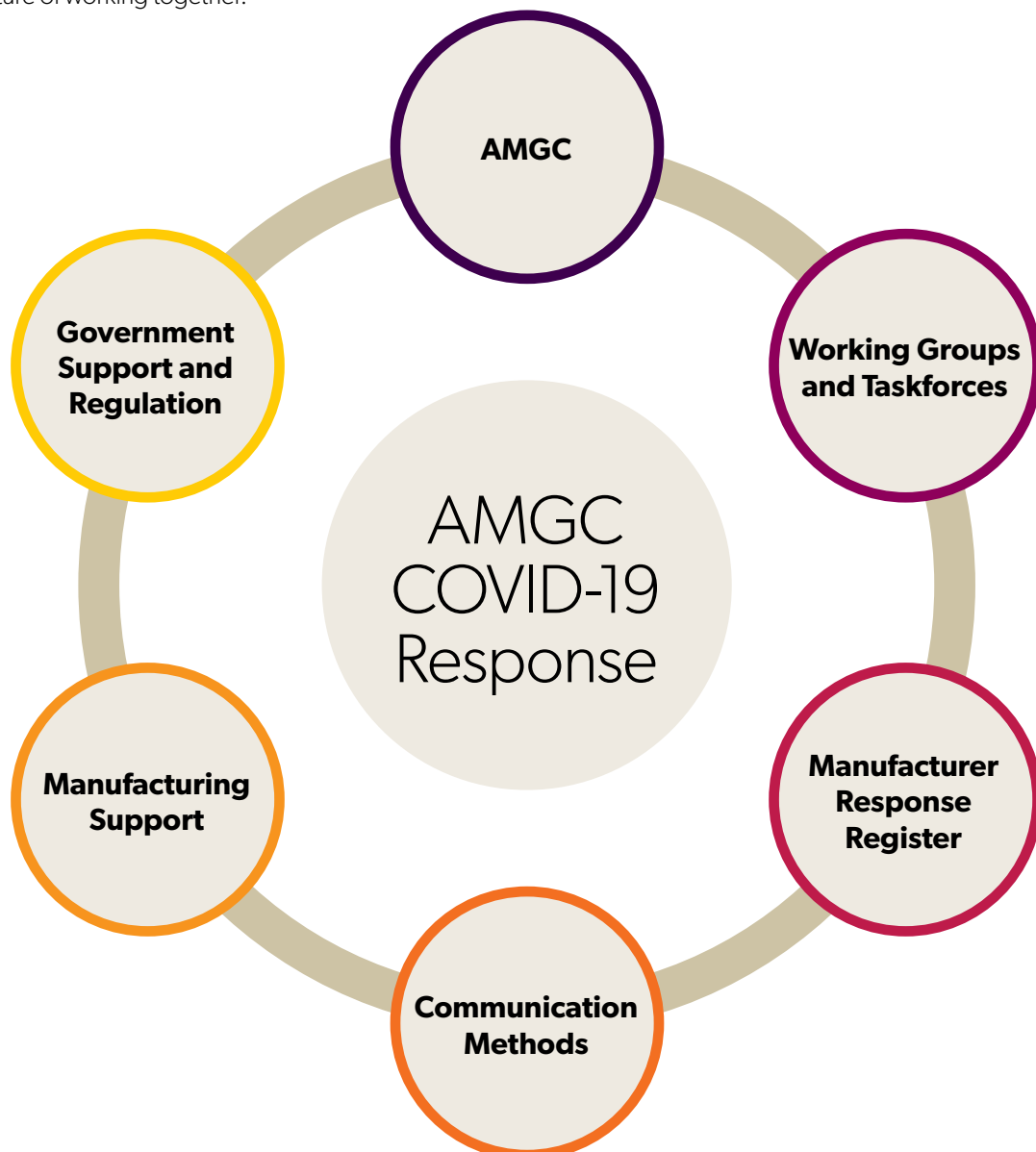
* List is not inclusive

COVID-19 RESPONSE 2020

AMGC's COVID-19 response encompassed six core activities: AMGC Network; Working Groups and Taskforces; the AMGC Manufacturer Response Register; Communication Methods; Manufacturer Support; and Government Support and Regulation.

One of the key threads running through all six of AMGC's core activities was collaboration. Collaboration is valuable in the best of times, but it took the opportunities presented by the COVID-19 crisis to remind the community of the truly essential nature of working together.

For instance, four Australian manufacturers teamed up with one of the world's leading medical technology companies – in record time – to map a local supply chain, adapt design specifications, create prototypes, and begin production of an Emergency Relief Hospital Bed. A.H. Beard, Fallshaw Wheels & Castors, AmTek Australia and Varley Group all signed up to help Stryker South Pacific get production moving – quite literally – within hours. This is just one example of how collaboration has played a key role in generating highly successful commercial outcomes.



COVID-19 network, connections, and support

AMGC was able to engage its existing network to connect manufacturers to other manufacturers, government, and media.

AMGC offered support and advice on a range of topics, including business models, pivot ability, supply chain connections, leadership and mental wellbeing. In total:



2,404 Organisations
in the entire network



270 Organisations
received direct support and
advice on COVID-19



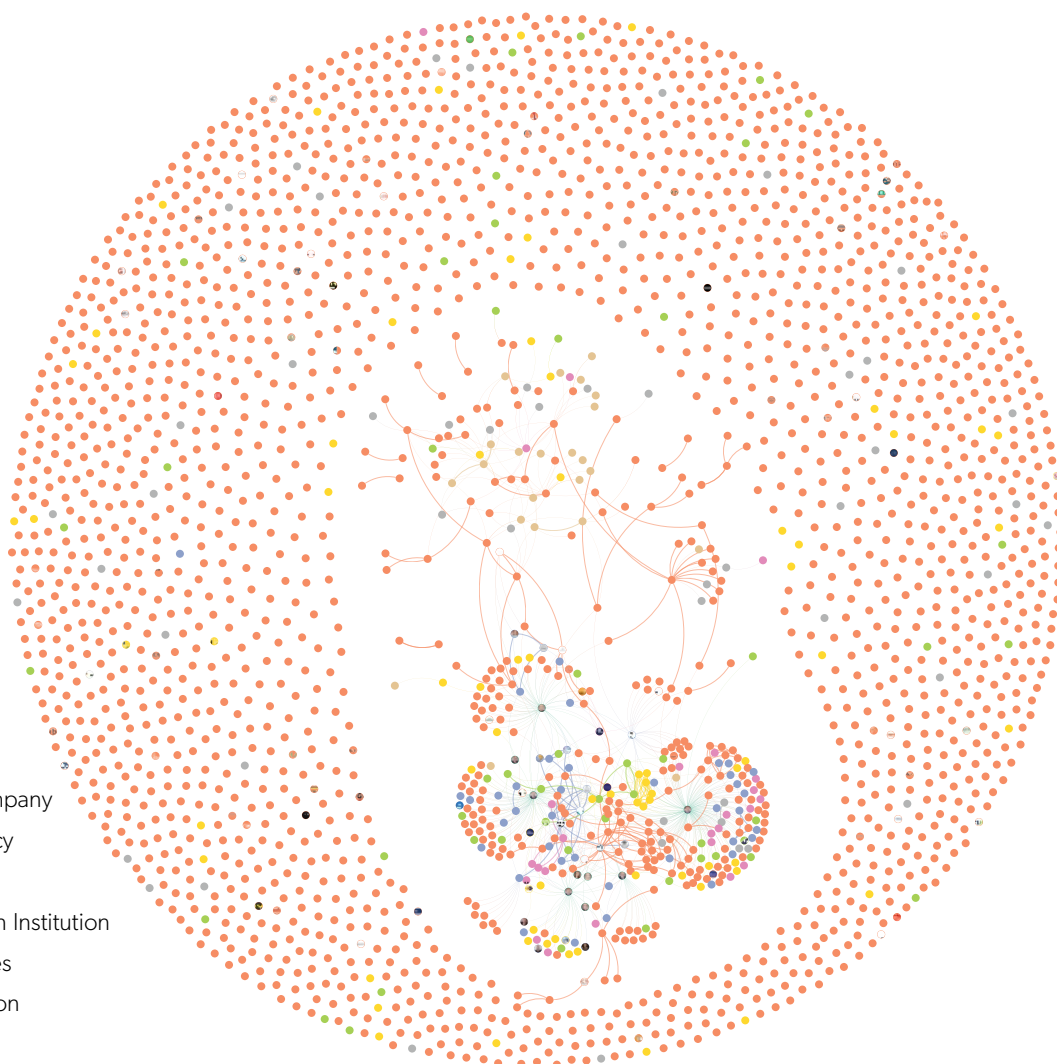
1,648 Connections
made among **455 companies**



722 Meetings were
conducted to support
companies through COVID-19

Legend

- AMGC
- Manufacturing Company
- Government Agency
- Industry Network
- Education/Research Institution
- Professional Services
- Medical Organisation
- Other



4 DELIVER A MEASURABLE IMPACT

COVID-19 Taskforces and government support

AMGC participated in several Federal Government Working Groups and Taskforces, including the National COVID-19 Coordination Commission, the Health Industry Coordination Group, the Ventilator Taskforce, and the PPE Taskforce.

National COVID-19 Response Taskforce (NCCC)	AMGC's Managing Director participated in the NCCC Manufacturing Taskforce on long-term objectives for the manufacturing industry, providing insights and expertise.	<p>AMGC provided a range of support to various state and federal government departments and bodies, and assisted with advice in the development of regulation, including:</p> <ul style="list-style-type: none"> ▶ advice, consultation, and industry connections to 43 different federal, state and territory government. ▶ increasing government reach by distributing informative EDMs to 3,221 Australian businesses. ▶ co-chaired a roundtable discussion with the Department of Industry, Science, Energy and Resources on Domestic Manufacturing of PPE Gowns, which had over 60 industry members in attendance. ▶ presented key insights that emerged from AMGC's discussions with manufactures across Australia on COVID-19 effect on business and recommendations based on them. ▶ collaborated with the Therapeutic Goods Administration to develop industry-informed Frequently Asked Questions for COVID-19 regulations. ▶ recommended 17 companies to AusIndustry's PPE Fund. Two of these companies received funding: Nobody Denim (\$400,000) and B&C Plastics (\$392,000).
Health Industry Coordination Group (HICG)	AMGC's Managing Director participated in the HICG to provide more effective coordination across government and the private sector to support and facilitate procurement, transport, distribution, and where relevant local Australian production or repurposing, of medical equipment and supplies.	
Ventilator Taskforce	AMGC participated in the Ventilator Taskforce to provide procurement recommendations, work to build domestic manufacturing capability and facilitate connections and undertake due diligence on manufacturers offering to help.	
PPE Taskforce	AMGC contributed to DISER's regular PPE Industry Working Group forums, including via the support of AMGC's South Australia State Director, who led DISER's PPE Technical Working Group to address technical PPE issues arising from the Industry Working Group.	

CASE STUDY: GREY INNOVATION VENTILATOR PROJECT

Company: Grey Innovation Pty Ltd

Headquarters: Richmond, VIC

Employees: 51 to 200

Key Industries: Medical

To ensure diversity in the market for supply of ventilators and to promote opportunities for local manufacturing the DISER Ventilators Taskforce approached the Advanced Manufacturing Growth Centre (AMGC) for assistance in identifying potential options. AMGC subsequently undertook a scan of the market and liaised with Australia's Chief Scientist to identify the most promising options for local ventilator manufacturing.

With support from AMGC, Grey Innovation put forward a proposal to the DISER Ventilators Taskforce outlining a consortium of Australian manufacturers led by Grey Innovation.



The Department of Health has now contracted Grey Innovation to locally manufacture 2,000 Notus invasive ventilators by August for the National Medical Stockpile, with the first 300 to be provided in June/July. The TGA is actively working with Grey Innovation to provide guidance regarding documentation required for regulatory approval and Robert Bosch Australia commenced production of test equipment to be provided in June/July.



**Grey Innovation
Ventilator project
NSW**

4 DELIVER A MEASURABLE IMPACT

COVID-19 Manufacturing Response Register*

The Manufacturing Response Register was launched in acknowledgment of the overwhelming number of Australian manufacturers stepping up and volunteering to help.

The Manufacturing Response Register aims to:

- ▶ provide a central location to direct companies that want to be involved in the COVID-19 response/opportunity
- ▶ understand Australian skills, supplies, and capabilities that exist relating to COVID-19, and
- ▶ connect Australian businesses to government, manufacturer or buyer.

“I find this register a great way to network and find much needed stock with businesses you may not conventionally have found or searched for prior to COVID-19. Was a God send and made my life so much easier.”

“Very good platform, would not have found Australian manufacturers had it not been for the platform.”



1,164 Live company profiles within the Register

1,011 Suppliers

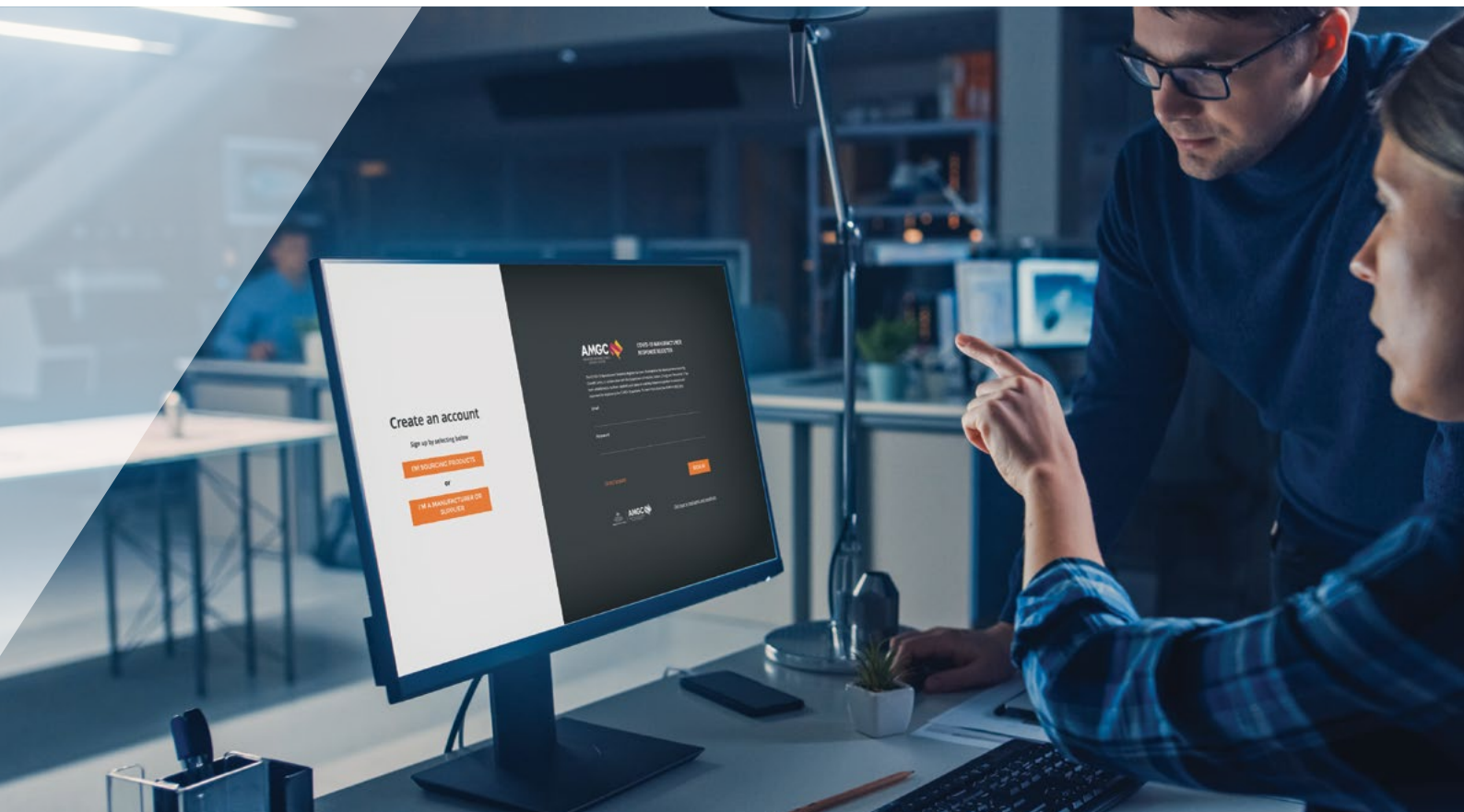
145 Buyers



294 Dashboard Posts



1,187 Connection Requests



COVID-19 Manufacturing Response Register: Connections



627

Connections accepted



243

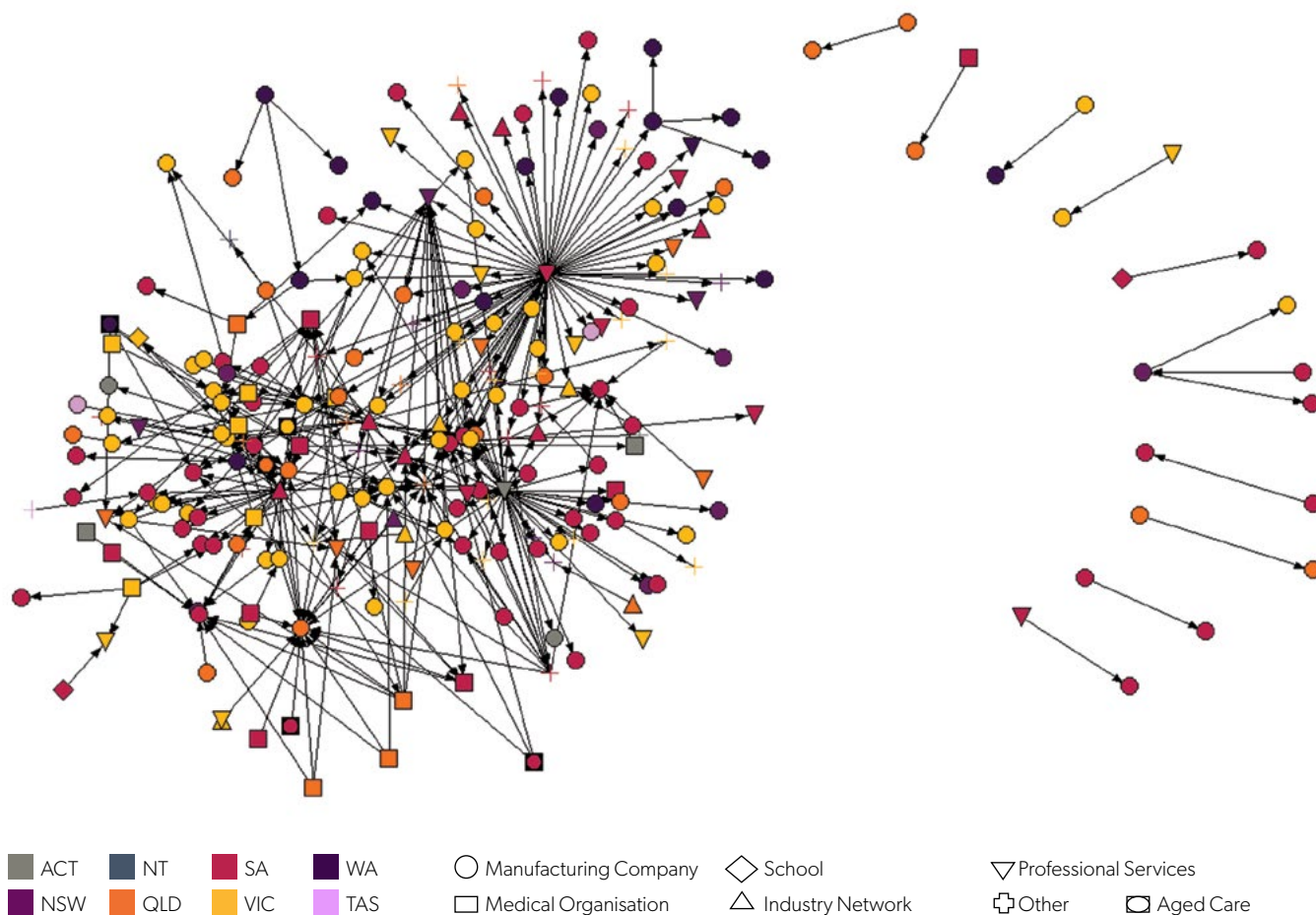
Individual companies



373

Connections

This is the best example of a platform I've used in 21 years, it reminds me of the idea around clustering – not only have I found some possible customers but I have also found companies that I can collaborate with. What has been achieved is fantastic."



* COVID-19 Manufacturing Response Register data reported updated to 27 September 2020.

OUR LEADERSHIP



Paul Cooper
Chairman



Michelle Shi-Verdaasdonk
Board Member



Richard Palmer
Board Member



Dr Jens Goennemann
Managing Director



Angela Doyle
State Director
Western Australia



Mark Peters
State Director
Queensland National
Director Projects



Michael Haddy
State Director
South Australia,
National Director
Defence and Space



Michael Grogan
State Director
Victoria, Tasmania
National Director Skills
and Training



Brigadier Darren Naumann AM (Ret'd)
Industry Facilitator



Michael Sharpe
State Director NSW,
National Director
Industry



Kelly Godeau
Director
Corporate Affairs



Katie O'Connell
Director Research



Tim Gibson
Director Business
Development



Jayne Ashton
Senior Analyst



Sarah Boase
Company Secretary



Tyson Bowen
Manager PR and
Communications



Ellen McGarrity
National Membership
and Events



Emilia Sheltson
Communications
Coordinator



Australian Government
Department of Industry, Science,
Energy and Resources

Industry Growth Centres

AMGC
ADVANCED MANUFACTURING
GROWTH CENTRE LTD

