

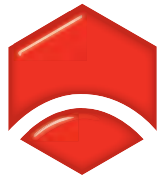


ENGINEERS
AUSTRALIA

Engineers Australia

ANNUAL REPORT

2016-17



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**WE ARE THE GLOBAL
HOME FOR ENGINEERING
PROFESSIONALS RENOWNED
AS LEADERS IN SHAPING A
SUSTAINABLE WORLD.**

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WHO WE ARE

The Institution of Engineers Australia (Engineers Australia) is the peak body of the engineering profession. We are a member-based professional association with a community of 100,000 individual members. Established in 1919, Engineers Australia is a not-for-profit organisation, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

OUR WORK



Accredit all Australian university engineering programs

15,000

Assess around 15,000 migrant skills applications on behalf of the Australian government.



Maintain the largest voluntary register for engineering, the National Engineering Register (NER)



Advance engineering knowledge through our nine discipline-based Colleges and 30 specialist Technical Societies



Deliver Continuous Professional Development (CPD) to the engineering profession



Operate in every state and territory, and chapters in Asia, the UK and the Middle East

100,000

Inspire over 100,000 primary school students with EngQuest



Represent Australia in the International Engineering Alliance and develop agreements for global professional mobility.

The Annual Report is presented by the Board at the Annual General Meeting 2017, together with the audited financial statements, as per By-Law 20.2 of the 2015 Royal Charter and By-Laws.



Engineers Australia's Annual Report Aims

- Inform members of measurable progress against annual and long-term goals.
- Ensure transparency in reporting, informed by contemporary approaches to corporate responsibility reporting.
- Give due emphasis to the key sections of the Institution including the Divisions, Colleges and Special Interest Groups, to ensure members are adequately updated on all areas of the organisation.
- Ensure the annual report process encompasses principal reporting obligations flowing from the Charter and By-Laws for the Board, Congress, Divisions, Colleges and Technical Societies.
- Inform members of key achievements for use with various stakeholders.

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NATIONAL PRESIDENT'S YEAR IN REVIEW

John McIntosh

BE(Hons) BBus FIEAust FIPENZ CPEng EngExec NER APEC Engineer IntPE(Aus) MAICD



Engineers Australia's purpose is to advance the science and practice of engineering for the benefit of the community.

Engineering is everywhere. It affects everyone, every day. Engineering provides our homes and workspaces; keeps us warm; improves our health; and helps us get around and keep in touch with colleagues, friends and family.

As Australia's peak engineering body Engineers Australia works constantly with others to deliver better outcomes for the engineering

profession and therefore for the community.

We are now a sought-after partner to government, providing evidence-based, impartial advice on all matters related to engineering. Our pitch for a better nation included reports on the engineering profession, skills and electricity, and has increased the understanding and appreciation of engineering amongst political decisions makers.

Our media profile has never been as high, supported by some outstanding Office bearer spokespersons. We have provided a voice for the profession on subjects including fire safety in the wake of the Grenfell tragedy; rail infrastructure; defence spending; the need for a strong engineering profession in Australia; the importance of STEM education and encouraging more women into engineering.

In November, we brought together influencers and decision makers from across the engineering profession at our Australian Engineering Conference in Brisbane. Over 1,200 people shared ideas and experiences and made connections that will help them to deliver engineering solutions

for communities around the world.

Looking to the future, Australia's ambitions depend on a strong, diverse engineering profession. We have a crucial role to play in inspiring young people to share the future as engineers. In June, in collaboration with the Chief Scientist, we launched the STARportal which provides access to hundreds of resources for students, teachers and parents to use to excite young people about STEM careers. That we were asked by the Chief Scientist to lead this project is an indicator of the esteem in which Engineers Australia is held.

As ever, our volunteers are the driving force of our activity to engage the next generation in engineering across Australia. More than 80 activities and events reached almost 40,000 school pupils.

We have publicly stated our intention that by 2020 at least 30% of people on our committees will be female. I am pleased to say that the Board achieved that target last year, and again this year. We must lead the way in promoting a diverse and inclusive profession if those who create solutions are to reflect the people who benefit from them.

Looking to the future, Australia's ambitions depend on a strong, diverse engineering profession.



IMAGE: create Magazine

Engineers Australia is doing more than ever to uphold standards across the engineering profession. Our credentials are a great source of pride among our members, recognising their achievements and providing valued indicators of competence for those they work with and for.

This year we welcomed almost 300 new Fellows, and 1,700 Engineers Australia members became Chartered. Demand for EngExec has grown significantly this year and signifies the outstanding leadership provided by many engineers. The National Engineering Register includes more than 17,000 engineers and, as with all Engineers Australia credentials, provides assurance to the public on the quality of engineers.

Our growing partnerships with engineering leaders such as Transport for New South Wales, Siemens, and ExxonMobil have allowed us to offer even more high-quality CPD as part of our work to upskill engineers.

Our increasing international presence, including the Leadership Insights series in Singapore and Malaysia, has helped us to boost the capability of engineers beyond

Australia. Our hosting of the Federation of Engineering Institutions of Asia Pacific's General Assembly has cemented our ties with Asia.

Throughout the year we have continued to improve the way we work to make sure we are delivering valuable services to our members, the profession and the wider community. We have introduced quarterly member surveys to provide regular feedback on our performance and we have once again met with our senior volunteers around Australia and beyond to create a shared direction for Engineers Australia and discuss key challenges. We are privileged to have so many members who want to give back to the profession and community and do so as Engineers Australia volunteers.

We have reduced the time to process a new membership application from six weeks down to just two days and updated our facilities in Newcastle and Hobart. Innovations such as EngInsure, which protects assets and manages exposures for engineers, and the trials of a new mentoring service, are further examples of our work to continually improve the value we offer.

Towards the end of the year Engineers Australia's Board finalised a new and simplified Strategic Direction for Engineers Australia, to provide more focus to staff and volunteers. We are also working on a membership growth strategy to ensure that we maintain a strong and vibrant membership. This will include a more customer-focused approach to developing products and services; in particular, to make sure we support engineering students and new graduates as they begin their careers.

2016-17 has been another good year for Engineers Australia, full of new initiatives and improved performance. We are more visible and more connected than ever before, supported by a membership and volunteer force unrivalled in Australian engineering.

Having made great progress over the past 12 months I am delighted to welcome Peter McIntyre to Engineers Australia as CEO and look forward to working with him in the upcoming year.

John McIntosh

A handwritten signature in black ink, appearing to read 'John McIntosh', written over a light grey background.

2017 BOARD



From left to right:
John McIntosh (Chair, National
President), Greg Walters, Trish
White, Simon Orton, Michelle
Kennedy, Nick Fleming (Not
pictured: Leeanne Bond)

The Board is Engineers Australia's governing body, and its role is comparable to that of a company board. It appoints and liaises with the Chief Executive Officer, sets regulations, policies and strategic directions, and monitors the organisation's financial sustainability and performance.



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BOARD DIRECTORS



Mr John McIntosh

BE(Hons) BBus FIEAust CPEng EngExec
NER APEC Engineer IntPE(Aus) MAICD

John is a loud and proud Chartered professional engineer. He has degrees in engineering majoring in civil engineering, and business studies majoring in accounting.

John's early career was in water supply before moving to the petroleum industry. He has worked in a range of industries including design engineering, construction, operations and transport, as well as marketing, public relations, human resources and industrial relations.

In 2000 John set up his own consulting and coaching business with a focus on leadership development. John has served in a number of roles at Engineers Australia including: Chair of the Board of Engineering, Victoria (2010 and 2011), Deputy President (2011), Civil College Board (2011 and 2012), President, Victoria Division (2012 and 2013), Congress (2013 to present), Council (2014 to 2015), National Deputy President 2015, National President, Chair of the Board 2016 and 2017.

John also has formal qualifications in quality management, quality system auditing, business excellence evaluation, ontological coaching, solution-oriented hypnosis, team management systems profiling and PRISM brain mapping. John is a member of the Australian Institute of Company Directors (AICD) and completed the AICD Company Director's Course in 2010.

John is a member of the Rotary Club of Melbourne, the Chair of the Program Advisory Committee for civil engineering at RMIT University and is a member of the evaluation panel for the Australian Organisational Excellence Awards.



Hon Trish White

BE(Elec) FIEAust CPEng EngExec
NER APEC Engineer FAICD

Trish is a Fellow of Engineers Australia in the Information, Telecommunications and Electronics Engineering College.

Trish holds electrical engineering and arts degrees from Queensland University, and is a Member of the College of Leadership and Management. She is an executive director of professional services and business advisory firm, Slingsby Taylor, and provides advisory services to boards and executives of both commercial and not-for-profit organisations.

Formerly, Trish was Executive Strategic Adviser for an ASX-50 engineering services firm, working in the global resources and energy industries. That followed a career as a cabinet minister in the South Australian government, where she served in the infrastructure, development, transport, science and education portfolios.

Previously, her career had been in applied research with the Defence Science and Technology Organisation. Prior to that, she managed national infrastructure projects in Canberra.

Trish is an experienced professional company director, having served on the boards of several large Australian companies. She is a Fellow of the Australian Institute of Company Directors.

The Board has a number of sub-committees such as the Audit and Risk Committee and the Professional Standards Committee. The Board also forms short-term working groups to provide advice on key strategic issues, as needs arise.



Mr Greg Walters

BE(Elec) MSc(GW) MMAS(Strategy)
FIEAust CPEng EngExec NER GAICD

Greg is an electrical engineer with Masters Degrees in both Guided Weapon Systems and Strategy.

Greg is a graduate of the US Command and General Staff College and a qualified 'Master Strategist'. He is a member of the Australian Institute of Company Directors (AICD) and a graduate of the AICD Company Director's course.

Greg has over 29 years' experience in business and program management with extensive experience leading multidisciplinary teams across multiple geographies. He spent 19 years in the Army where he retired as a Lieutenant Colonel, followed by 13 years in senior leadership positions as a Principal of SKM (now Jacobs), a global engineering consultancy and project delivery organisation. He is currently a Senior Manager at Frazer-Nash Consultancy (FNC).

He has held numerous senior roles within Engineers Australia over the past 23 years including President of Canberra Division 1997, Deputy President of South Australia Division 2000 and President of Tasmania division 2011.

Greg led the inaugural Canberra Chapter of the Australian Society for Defence Engineering (ASDE) in 2003 and was the ASDE National President in 2004. He has served on the board since 2012 and held various committee positions including Chair of the Audit and Risk Committee and Chair of the Governance Committee.

Greg is currently the Chair of the Engineering Practice Advisory Committee, the Chair of the College Chairs Forum and our National Spokesperson on Defence issues.



Mr Simon Orton

FIEAust CPEng EngExec NER RPEQ APEC
Engineer IntPE(AUS) JP(Qual) MAICD

Simon is an experienced director with a background in the coal, automotive, professional services, manufacturing and extractive industries. Simon's experience includes leading high-performance teams, business improvement, research programs, and implementation of effective business transformation programs. He has also worked in quarry operations, mechanical and system design, and development and implementation of continuous culture improvement programs. Simon is a past Engineers Australia 2013 Queensland Division President and past Queensland Chair of the Centre for Engineering Leadership and Management (CELM).

Simon currently runs an advisory consulting business supporting businesses with Cyber Security, growth and innovation strategies.



Ms Leeanne Bond

BE(Chem) MBA(UQ) HonFIEAust CPEng EngExec
NER RPEQ APEC Engineer FAICD MNACD

Leeanne's almost 30 years of corporate experience includes 12 years as a professional company director. As an executive, Leeanne helped establish the WorleyParsons business in Queensland, NT and Papua New Guinea, growing it from 3 to 600 people over 10 years.

Leeanne has a Bachelor of Chemical Engineering and an MBA from the University of Queensland. She has been an active member of Engineers Australia for many years, serving on branch committees, on the national Chemical College Board, as President of Queensland Division in 2002 and as Chair of the Engineering Leadership Conference held in Brisbane in 2010.

Leeanne's current board portfolio includes ASX-listed Liquefied Natural Gas Limited (LNG), Snowy Hydro Limited, Territory Generation and JK Tech Pty Ltd. She is the owner of Breakthrough Energy Pty Ltd and is a Registered Professional Engineer in Queensland. She is a Fellow of both the Australian Institute of Company Directors and Engineers Australia and is a member of the National Association of Corporate Directors in the USA.

Leeanne is a regional judge for the Churchill Trust Fellowships and has been a regional and national judge for Ernst & Young's Entrepreneur of the Year awards, the Australian Engineering Excellence Awards and the Engineering Hall of Fame in Queensland.

Leeanne received the Shedden Uhde Medal for services to the profession of chemical engineering at the World Congress of Chemical Engineering in 2001 (jointly awarded by EA, IChemE and RACI) and was named Australian professional engineer of the year in 2007 by Engineers Australia. In 2010, she won an Australian Institute of Company Directors diversity scholarship and participated in the AICD ASX 200 Chairmen's mentoring program.

Leeanne brings broad international experience to the board of Engineers Australia.



Mrs Michelle Kennedy

BE(Hons) MBA FIEAust CPEng EngExec APEC
Engineer IntPE(Aus) MAICD

Michelle Kennedy is a Fellow of Engineers Australia, Chartered Professional Engineer and Engineering Executive who has a diverse background spanning a number of industries in both the public and private sectors. Michelle is a proud engineer who loves that what she does is directly linked with delivering benefit to our society.

Michelle started her career in the manufacturing industry, transitioning into the water industry shortly thereafter where she firstly worked as an engineer and then took on more senior roles managing projects and teams. After around eight years in water, she decided to make a change and worked as a management consultant, consulting predominantly to the infrastructure and government sectors in relation to strategy, business planning, team development, risk and governance. In 2013, she moved back to the public sector, taking on a senior leadership role in local government. Michelle has continued to enjoy working in local government ever since.

Michelle has been actively involved with Engineers Australia for a number of years – with roles on a number of College Boards, National and State Committees, and as a judge for the Engineering Excellence Awards at both state and national level.



Dr Nick Fleming

BE(Hons) PhD FIEAust CPEng EngExec NER APEC Engineer
IntPE(Aus) GAICD

To Engineers Australia, Nick brings 25 years of professional experience working with the private and public sectors. He has consulted across infrastructure, natural resources, water, mining, energy and defence sectors in Australia, New Zealand, south-east Asia, the UK and the Americas. During this time Nick has held local, international and industry leadership roles and received almost 20 awards for technical excellence, leadership and innovation. In particular, Nick brings a proven capability for strategy, innovation, complex problem solving and leadership of change. He has a strong social ethos and commitment to excellence and positive impact.

Nick has an Honours degree in civil and environmental engineering and a doctorate in sustainable infrastructure systems from the University of Adelaide, training in strategic foresight from Mt Eliza Business School, and an international corporate governance qualification from the Australian Institute of Company Directors (AICD).

Prior to establishing his own advisory firm, Nick was the Director of Business Innovation at Jacobs Group (Australia). He previously held global roles at SKM including Chief Sustainability Officer and Technology and Innovation Manager, also sitting on Board committees leading strategy and corporate social responsibility. Within the industry Nick contributed as a Director of the Infrastructure Sustainability Council of Australia (ISCA) and Chair of the Sustainability Taskforce for Infrastructure Partnerships Australia (IPA). Today Nick works locally and abroad providing business advisory, strategy and innovation services across multiple sectors, while also lecturing at the University of Melbourne on the integrated design of infrastructure.



Ron Watts

Thank you to Ron Watts from the Engineers Australia Board

We would like to thank Ron Watts for taking on the role of acting Chief Operating Officer while we recruited our next CEO.

His management and commitment ensured that Engineers Australia continued along its path of continuous improvement and maintained its focus on providing valuable services to our members and the wider profession.

Ron's energy and devotion is much appreciated by the Board and has provided a strong footing for our new CEO.

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THE INCOMING CEO'S PERSPECTIVE

Peter McIntyre

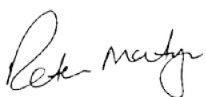
BSc BE (Hons) MBA FIEAust CPEng EngExec
NER APEC Engineer IntPE(Aus) FAIE FAICD

When I joined Engineers Australia in early July 2017, I was immediately struck by the enormous enthusiasm amongst volunteers, members and staff. It is obvious that everyone involved in Engineers Australia takes great pride in the benefits that the engineering profession delivers to society and I'm very keen to harness that passion to do even better.

Everything we do must deliver value to our members, the profession and to society as a whole. We need to recognise the different needs of members across different career stages and ensure that we offer valuable support to each of them in achieving their goals. In particular, we must demonstrate our relevance to the next generation of engineers and support them in being the very best engineers they can be. To do this we need to build an organisation that is focused on the most important issues, but can also adapt to meet the needs of a diverse range of stakeholders.

Having worked in the energy sector for many years I am looking forward to sharing best practices with the organisation. Perhaps the biggest thing I've learned from my time in the corporate world is that ultimately, you only achieve results in an organisation with the support of its people. High on my priority list is building strong relationships with Engineers Australia's staff and volunteers. Empowering them to do their very best is my most important objective.

Peter McIntyre



**EVERYTHING WE
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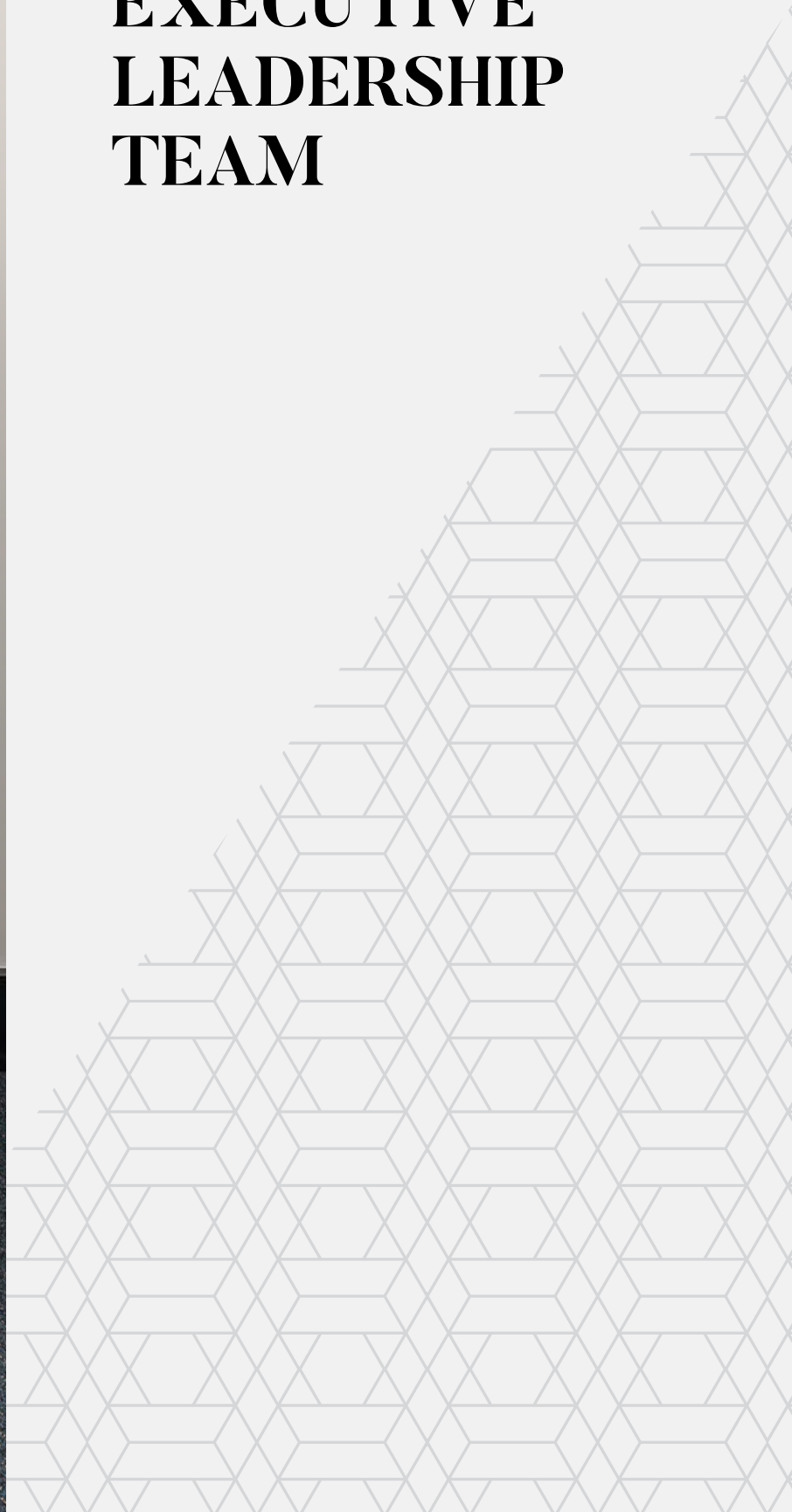




From left to right:
Ron Watts, Brent
Jackson, Heather
Foss, Michael Allen
(Not pictured:
Stephen Durkin,
Ben Leaver,
Caroline Argent).

5
—

EXECUTIVE LEADERSHIP TEAM



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COLLEGES

Engineers Australia's nine Colleges set professional standards and provide continuing professional development (CPD) for members through regular conferences, publications and visiting speakers. The Colleges broadly cover all areas of practice in engineering.

COLLEGE OF BIOMEDICAL ENGINEERS

Chair: Paul Junor
FIEAust CPEng NER



Accompanying the annual Australian Biomedical Engineering Conference (ABEC 2016, Brisbane), the Clinical Development Workshop of the National Committee for Clinical Engineering (NCCE) mentored 10 early-career biomedical engineers. Professor Karen Reynolds received the David Dewhurst

Award, and Stephanie Miles the Women in Biomedical Engineering Scholarship. During 2016-17, NCCE contributed to live webinars (Global Day of Clinical Engineering, and Canadian Engineering Standards of Practice). The National Committee Rehabilitation Engineering (NCRE) conducted a roundtable discussion on the NDIS and continued developing its position paper suite.

CHEMICAL COLLEGE

Chair: Daniel Edge
FIEAust CPEng NER



The Chemical College Board's three-year plan is focused on increasing the profile of the college, increasing membership value and growing our membership. Subcommittees are progressing each key focus. The college is actively engaging with the local divisions to enhance the relationship between the board,

divisions and membership. The college is working to increase its profile through CPD and the annual Chemeca conference, this year in Melbourne. The College Board is working to scope a future-orientated vision for chemical engineering.

Colleges are an important part of Engineers Australia, composed of professionals who are dedicated to their occupation and the industries it serves.



IMAGE: create Magazine

CIVIL COLLEGE

Chair: Paul Collier
FIEAust CPEng EngExec NER



The new Civil College Board, integrating related Technical Societies and National Committees, has been implemented to focus on providing guidance, coordination and better communication. The new structure is intended to enable better services for civil engineers through the coordination of quality

CPD events, increased technical input to policy debate, and improved recognition of civil engineers through increasing the prestige of the relevant awards. The Sir John Holland Civil Engineer of the Year for 2017 was awarded to Mr Mark Babister.

ELECTRICAL COLLEGE

Chair: Mark Lendich
FIEAust CPEng NER



The College had a successful year focusing on being the trusted voice of the electrical engineering profession, supporting Engineers Australia's advocacy. Member recognition has been a highlight of the year. The MA Sargent Medal went to Professor Hugh Durrant-Whyte HonFIEAust FIEEEE FTSE and

the winner of National Professional Electrical Engineer of the Year was Vinod Gupta FIEAust CPEng NER. We have been active in developing and promoting policy papers including the launch of 'The Future of Australian Electricity Generation' report.

COLLEGE OF LEADERSHIP AND MANAGEMENT



Chair: Craig Laslett
FIEAust CPEng EngExec APEC
Engineer IntPE(Aus)

College membership is over 5400 with strong growth in senior members attaining EngExec and the College has developed a program to champion members' leadership

journey. An engagement process has been implemented with CLM chapters and technical societies. The College continues to engage with leaders both within the profession and EA, but also seeking external insights as we focus on increasing the profile and influence of engineering leadership. The College Board is engaged in developing the leadership program in Engineers Australia's flagship conference AusEngCon2018.

ENVIRONMENTAL COLLEGE



Chair: Adrian Piani
FIEAust CPEng NER

The College supports the professional standards of environmental engineering and supports engineers to deliver sustainable outcomes for society.

We continue to be active in policy and advocacy in areas such as energy, sustainability and climate change. The college supported the creation of resilience fact sheets through the Australian Sustainable Built Environment Council (ASBEC), and participated in the handover of a climate change petition to Parliament House. This year we are leading a strategic initiative to provide a home for life for ESD engineers.

MECHANICAL COLLEGE

Chair: Dr Jonathan Couldrick
FIEAust CPEng NER



The College recognises excellence through awarding the Sir George Julius Medal, the AGM Michell Medal and the Young Mechanical Engineer Award. In 2017 the annual Warman Design and Build Competition will reach its 30th year and university teams from across the Asia Pacific region will compete for the title.

The College Board continues to work with the Australian Journal of Mechanical Engineering as well as providing strategic leadership and guidance in relation to policy positions, CPD expectations and accreditation standards.

INFORMATION, TELECOMMUNICATIONS AND ELECTRONICS ENGINEERING (ITEE) COLLEGE



Chair: EmProf Ljubo Vlacic
FIEAust CPEng NER

The ITEE College Board continued its commitment and dedication to meet the career development needs of ITEE professionals, enhance the growth of the ITEE College membership, enhance the body

of knowledge, and position the College as the trusted voice of the ITEE profession. The introduction of the 'Internet of Things' (IoT) Webinar series under the skilful leadership of Geoff Sizer, and thoughtful development of the 'Define Your Discipline' concept by College Board member Walter Green, are the Board's salient achievements during the reporting period.

STRUCTURAL COLLEGE



Chair: Karlie Collis
FIEAust CPEng NER

The Structural College is working to support the professional standards of structural engineers in Australia and is delivering meaningful CPD across the country. The college has implemented the communication

strategy between the College Board, membership and Divisions. The Australian Journal of Structural Engineering continues to be highly respected and a valuable member benefit. The College Board looks forward to the opportunity to recognise excellence in the field of structural engineering with both the RW Chapman Medal and the John Connell Medal.



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TECHNICAL SOCIETIES

The Engineers Australia Technical Societies provide national and regional expert advice based on specialist practice in support of Engineers Australia's advocacy work. They are committed to advancing the knowledge, professionalism and skills of members and the industries within which they work.

Australasian Association of Engineering Education	Thomas Goldfinch
Australasian Particle Technology Society	Cordelia Selomulya
Electric Energy Technology Society	Robert Barr
Electromagnetic Compatibility Society of Australia	Mark Mifsud
Society for Building Services Engineering	Terry Spiro
Society for Engineering in Agriculture	Glen Riethmuller
Australian Society for Bulk Solids Handling	Mark Jones
Australian Cost Engineering Society	Nolan Bear
Australian Composite Structures Society	Adrian Orifici
Australian Earthquake Engineering Society	Peter McBean
Australian Geomechanics Society	Hugo Acosta Martinez
Australian Society for Defence Engineering	Denton Bocking
Australasian Tunnelling Society	Ed Taylor
Australian Shotcrete Society	Stefan Bernard
Joint Board of Aerospace	Murray Scott

Technical Societies also contribute to the good of the community through raising funds for charitable causes.

ADVANCING KNOWLEDGE

Our Technical Societies contribute to advancing the knowledge of their practice area by educating members and the community through summer schools, technical conferences, educational workshops on specific areas of practice and working with government bodies to address industry concerns around specifications for particular industry practices.



Joint Board of Naval Architecture	Jim Black
Mining Electrical and Mining Mechanical Engineering Society	Peter Whipp
Mine Subsidence Technological Society	Richard Walsh
Sustainable Engineering Society	Graham Davies
Systems Engineering Society of Australia	Ray Hentzschel
Society of Fire Safety	Jonathan Barnett
Risk Engineering Society	Geoff Hurst
Railway Technical Society of Australasia	Phillip Campbell
Transport Australia Society	Christian Griffith
Asset Management Council	Anne Gibbs
Institute of Industrial Engineers Australia	Sam Ghaith
Institute of Public Works Engineering Australasia	Robert Fuller
Materials Australia	Paul Plater
RedR Australia Ltd	Elizabeth Taylor
Australian Fluid and Thermal Engineering Society	Tilak Tissa Chandratilleke

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OUR DIVISIONS



CANBERRA DIVISION

Division President: Nick Clarke
MBE CSC TFIEAust CEngT EngExec NER

Division Manager: Keely Quinn

In a year of positive change, Canberra Division has developed and delivered strategic plans on gender diversity, advocacy and tomorrow's engineers. We successfully launched a mentoring program, with over 130 members taking part, while college branches and technical societies delivered quality CPD including online webinars. The Excellence Awards and Fellows Luncheons were notable successes. We continued to advance the business case for a Chief Engineer with Engineers Australia Canberra, taking a high-profile lead in conversations with ACT Government and kindred bodies.



NEWCASTLE DIVISION

Division President: David Sparkes
FIEAust CPEng NER

General Manager: Helen Link

Our new, contemporary office space includes an auditorium and members lounge where members and engineering professionals can have a coffee, meet clients and work remotely with free Wi-Fi on site. Enhanced webinars have enabled the Division to deliver CPD to Engineers Australia members locally, nationally and internationally, anywhere and at any time. We have increased our STEM activities with school, TAFE and university students including connecting them to industry. We have maintained our strong links to our regional areas and connected with government at all levels to ensure our voice is heard.



NORTHERN DIVISION

Division President: Chris Lugg
FIEAust CPEng NER

General Manager: Mark Monaghan

The Northern Division has continued to increase the profile of the engineering profession in what has been quite the year for change in the NT. We continue to build our position as a leading voice on the future direction of the NT, including the economic development framework released in June. This has built strong ties with our government and provides an informed voice in the energy and infrastructure sectors of the NT.

We operate nationwide, with locations in nine geographical areas called Divisions that act as the delivery arms for services to members.



IMAGE: Engineers Australia



QUEENSLAND DIVISION

Division President: Chris Nielsen
FIEAust CPEng NER

Division Manager: Stacey Rawlings

Advocacy builds year on year in Queensland. We launched 'The Future of Australian Electricity Generation' report in Brisbane and continued to grow our annual Engineers in Parliament event. We regularly make policy contributions via industry and government stakeholder advisory committees, and work with our technical groups and societies to seek their input into government submissions. The Queensland Groups Advisory Committee is enabling collaboration across our committees. Special mention goes to the Young Engineers and Women in Engineering committees, who continue to drive diversity and future growth within Engineers Australia.



SOUTH AUSTRALIA DIVISION

Division President: Niki Robinson
FIEAust CPEng

General Manager: Renae Leverenz

The South Australia Division has continued to increase the profile of the profession through significant engagement with government to highlight issues of energy, defence, education and registration of engineers. We are now part of a STEM Industry and Education Advisory Group providing strategic direction and leadership to the South Australian Department for Education and Child Development in this critical space. The launch of the #EverydayEngineerSA campaign was a highlight – profiling some of the less obvious ways engineers contribute in our community.



SYDNEY DIVISION

Division President: Julie Mikhail
MIEAust

General Manager: Greg Ewing

Sydney Division has adopted a strategic two-year model focusing on four policy areas: defence, energy, infrastructure and future workforce, with diversity and recognition being overlying themes. How we connect, innovate and grow are key values shaping Sydney Division's activities and engagement with our members, government, industry and academic partners. STEM engagement remains strong with the Honeywell and Cochlear Engineering Schools and Experience IT student conference the standout successes. Policy highlights include submissions to NSW Government on rail, building certification, environmental planning, regional development and defence.



TASMANIA DIVISION

Division President: Phil Gee
FIEAust CPEng NER

General Manager: Dr Vicki Gardiner
FRACI CChem ComplEAust

Building Tasmania's future workforce through stakeholder engagement has been a focus during 2016-17. The publication of the Tasmania Engineering Workforce Development Plan 2016-19 has brought the state's engineering community together. The research has provided an evidence-based document that has been used in discussions with government, industry and education providers. The implementation of the recommendations will ensure that Tasmania and the engineering profession are prepared for the challenges of a disruptive business environment. The implementation of the recommendations will ensure that Tasmania and the engineering profession are prepared for the challenges of a disruptive business environment.



VICTORIA DIVISION

Division President: Chris Stoltz
FIEAust CPEng EngExec NER

Division Manager: Herve Carlos

"You join Engineers Australia to become a better engineer" (Dave Zammit, a member since 2013) Victoria's commitment to supporting our members in fulfilling this ethos has manifested in 262 becoming Chartered, 45 recognised as an Engineering Executive and 95 elevated to the grade of Fellow of Engineers Australia. As engineers perform the critical task of reshaping our landscape, the Division, through its network of staff and Office bearers, continues to promote community wellbeing and economic prosperity as the catalyst for change.



WESTERN AUSTRALIA DIVISION

Division President: James Westcott
FIEAust EngExec CPEng NER

**General Manager: Susan Kreemer
Pickford** FIEAust EngExec CPEng NER

We have been active across several areas of importance to our members. A group of stakeholders came together in late 2016 to draft our Election Strategy prior to the WA state election. This positioned Engineers Australia to engage with the new government on a number of fronts. Areas of continuing focus include registration of engineers, establishment of an Infrastructure WA body, appointment of a Chief Engineer, and STEM futures, particularly to help undergraduates gain industry practice during tightened economic conditions.

KNOWLEDGE RECOGNITION VOICE

Engineers Australia is
the largest engineering
body in Australia.



Our Divisions are
the voice of the
profession through
our advocacy work
with key stakeholders
including the community,
government, media.



We drive knowledge
through access to face
to face and online
technical presentations,
networking, and other
resources.

Our Divisions also
ensure recognition
of individuals and
engineering outcomes
through an array
of awards and
recognition ceremonies.



IMAGES: Engineers Australia





Looking to
the future,
Australia's
ambitions
depend on
a strong,
diverse
engineering
profession.

– National President John McIntosh

9

PETER NICOL RUSSELL MEMORIAL MEDAL

Professor Mary O’Kane is the NSW Chief Scientist & Engineer and also a company director and Executive Chairman of O’Kane Associates, a Sydney-based consulting practice specialising in major reviews.

Her research was in the field of continuous speech recognition and she is a leading figure in Australian Artificial Intelligence, ICT and engineering more generally. Her work has been recognised by various awards including the ATERB Medal in 1990, the Centenary Medal in 2001, the Pearcey Medal for Lifetime Achievement in ICT in 2014, the inaugural Ada Lovelace Medal for an Outstanding Woman Engineer in 2016 and the Erna Hamburger Prize in 2017.

Professor O’Kane was Australia’s first female Engineering Dean, appointed in 1988 at the University of Canberra. She was Deputy Vice-Chancellor (Research) (1994-96) and then Vice-Chancellor of the University of Adelaide (1996-2001). In this period she was also the inaugural Chair of the Group of Eight. She is a former Chair of the board of the Australian Centre for Renewable Energy and the Board of the Development Gateway, a former member of the Commonwealth’s Review of the National Innovation System, Australian Research Council and the Co-operative Research Centres (CRC) Committee, the board of FH Faulding & Co Ltd and the board of CSIRO. She is a Fellow of the Academy of Technological Sciences and Engineering and an Honorary Fellow of Engineers Australia.

As NSW Chief Scientist & Engineer she provides the Government with advice on policy matters requiring research, science and engineering input. In September 2014, after extensive investigation and with intense public interest, she published her final report for the *Independent Review of Coal Seam Gas Activities in New South Wales*, an influential baseline for future government policy decision-making involving engineering and science.

**AS NSW CHIEF SCIENTIST
& ENGINEER SHE PROVIDES
THE GOVERNMENT WITH
ADVICE ON POLICY
MATTERS REQUIRING
RESEARCH, SCIENCE AND
ENGINEERING INPUT.**

In 2016 Professor O’Kane was made a Companion of the Order of Australia (AC) for ‘eminent service to science and engineering, as a contributor to national policy development and governance, to the promotion of technology research and future energy supply, to higher education, and as a role model for young scientists’.



IMAGE: Professor Mary O'Kane.

10

THE TRUSTED VOICE OF THE PROFESSION

Engineers Australia advocates to help shape the government's actions on five public policy issues: future workforce, skilled migration, energy, infrastructure and the defence industry.

Our position statements outline our approach to these issues and are the foundation for political engagement with Commonwealth, state and territory members of parliament. In March, our 'Pitch for a Better Nation' campaign released three flagship thought leadership papers exploring the state of the engineering profession, the engineering skills pipeline and the future of electricity generation.

Engagement with politicians is strong, with a focus on frontbenchers responsible for portfolios relevant to the engineering profession. In 2016-17, Engineers Australia made 58 submissions to parliamentary inquiries and government policy reviews on a wide range of issues, including the Finkel review of the National Electricity Market, Tasmanian transport access, Western Sydney rail needs, registration for engineers in Victoria, skills needs in the Northern Territory, and local government sustainability in Queensland.

In November 2016, the Australian Engineering Conference brought together more than 1,200 delegates and positioned Engineers Australia as a key partner for

business and government and as the trusted voice of the profession. The Minister for Industry, Innovation and Science, The Hon. Greg Hunt MP, was a keynote speaker, along with Minister Karen Andrews who is one of just three federal politicians who are engineers.

Quality state, territory and national media coverage is essential to getting our message across to the wider community and raising the profile of engineering. The 2016-17 year has been outstanding with Engineers Australia commenting on issues such as STEM, energy, building safety (Grenfell), infrastructure, and state and national budgets. Indeed, for the first time in Engineers Australia's history, the organisation appeared on four television news channels when Chris Stoltz, Engineers Australia Victorian President, spoke on cladding safety concerns in Australia in the wake of the Grenfell Tower tragedy in the UK. As a result, recognition of our organisation has soared – a clear example was when ABC News Breakfast host Virginia Trioli commented on air that Engineers Australia should be called upon to conduct a safety audit of buildings in Australia.



DEFENCE ENGINEERING

Engineers Australia was interviewed across ABC radio news bulletins on the federal government's multi-billion-dollar naval shipping announcement. Engineers Australia emphasised the crucial role of engineers at both the start of production, in design, through delivery, and beyond.

IMAGE: DDG Hobart;
© Commonwealth of Australia 2017



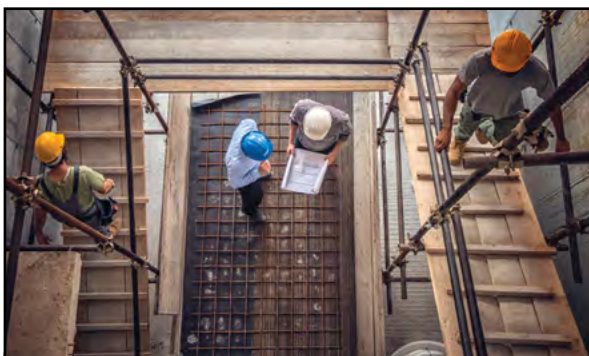
QLD INFRASTRUCTURE

Engineers Australia advocated in *The Courier Mail* for an integrated transport plan for the state to ensure the future of the Cross River Rail and Brisbane Metro projects.



ACT CHIEF ENGINEER

On ABC's *Canberra Breakfast* program, Engineers Australia called for the appointment of an ACT Chief Engineer, which was instrumental to the Chief Minister's commitment, the next day, to creating the position.



CASE STUDY: GRENFELL TOWER FIRE

Australian debate about how such a tragedy could occur and action needed to prevent it happening here continues, and Engineers Australia is at the forefront of taking action.

Our media commentary is educating the public, with national TV appearances on all commercial and ABC TV news bulletins, and an extensive interview for ABC's flagship current affairs program 7.30.

We made a written submission to government on the systemic issues involved and gave evidence at a hearing of the federal Senate inquiry.

Several states including Queensland, NSW and Victoria have asked Engineers Australia to provide much-needed professional and independent expertise for their audits of building safety.

PITCH FOR A BETTER NATION

Our 'Pitch for a Better Nation' reports earned significant media coverage in *The Canberra Times*, Melbourne's *Herald Sun*, Brisbane's *The Courier Mail* and ABC Radio.

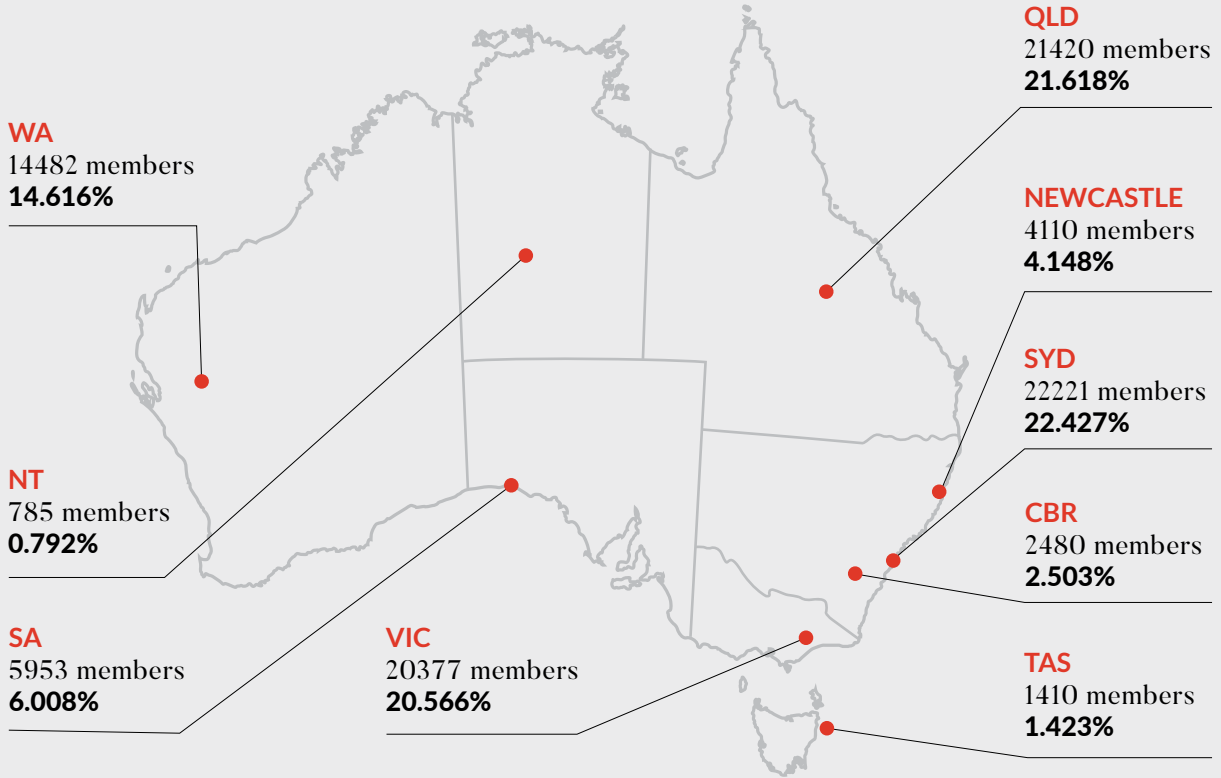


FOCUS ON JOBS

In a feature-length interview for *WA Today* ahead of the state election, Engineers Australia called for a government focus on infrastructure and jobs. Engineers Australia was also interviewed for a national ABC online, radio and television story on growing numbers of engineering job vacancies in the west.

MEMBERSHIP STATISTICS

MEMBERSHIP BY LOCATION



OVERSEAS CHAPTERS

5.897% 5843 Members





Engineers Australia's Chartered credential, which is benchmarked internationally, continues to be the confirmation of competency for independent professional practice.

11

PROFESSIONAL HOME FOR LIFE

For the student to practising engineer and beyond, we are the professional home for life for engineers. We provide members with ongoing support no matter where they are in their career journey and help members build on their experience and knowledge to progress their careers.

Engineers Australia strives to deliver a world-class customer experience to our members.

In 2016-17, we expanded our support for students and young engineers to help them kick-start their engineering careers. Our key activities included on-campus events and Careers Expos, live CPD and networking events, and an online Careers Webinar series, which had over 10,000 views.

We also launched our Elevation program to connect future engineers to employers of choice. We delivered Elevation events, including employer presentations, graduate panels and networking sessions, across seven divisions with over 835 students and graduates and 28 organisations attending.

Our efforts to support young engineers were recognised in October 2016 by the Australian Association of Graduate Employers when we were presented with the inaugural 'Award for Most Popular Professional Association'.

Student and first year Graduate members upgrading to Graduate year two are up 60% year on year and up 110% over two years.

Engineers Australia strives to deliver a world-class customer experience to our members. The member services team continue to deliver positive customer experiences in line with best practice for the contact centre industry. Our team has handled 231,758 interactions with customers in 2016-17, an increase of 16.5% from 2015-16. The 2017-18 renewals campaign has delivered some promising results as at 30 June 2017 with members re-committing to Engineers Australia membership and many opting to move to direct debit payment.

11,396

NEW MEMBERS

**BETWEEN 1 JULY 2016
AND 30 JUNE 2017**

Graduate	1,859
Companion	14
Student	5,737
Affiliate	34
Fellow	125
Member	3,627

**Engineers Australia
strives to deliver a
world-class customer
experience to our
members.**



12

PROFESSIONAL CREDENTIALS AND CURRENCY

Engineers Australia plays a vital role in upholding the technical and leadership standards of the engineering profession.

Our role in the accreditation of university programs across Australia is fundamental to the profession. Engineers Australia is the only Australian body accredited by the International Engineering Alliance (IEA), which provides an internationally recognised benchmark for engineering education across 16 countries. Engineers Australia's participation in the IEA and associated accords means that Australia has direct input into the maintenance and setting of standards for engineering education globally. Our status as a signatory of the accords also underpins numerous mutual recognition agreements and international mobility agreements, providing additional member benefits to engineers working in an increasingly global profession.

Engineers Australia's Engineering Executive (EngExec), Chartered and registration credentials provide a basis for recognition of competency and professional standing by the profession, government and the public.

The engineering profession has proved to be an ideal training ground for managers and leaders and engineers are highly sought after for senior leadership roles. Our 423 Engineering Executives (EngExecs) are recognised as the leaders of the engineering profession who have progressed through their technical career and now hold influential and strategic positions within the engineering profession.

Engineers Australia's Chartered credential, which is benchmarked internationally, continues to be the confirmation of competency for independent professional practice. Having credentialed more than 1,700 new Chartered members this year, we currently have almost 21,000 Chartered engineers.

Engineers Australia's National Engineering Register (NER) is a comprehensive directory of Australian engineers who have met the high standards of professionalism expected within the industry. The NER was built to service the needs of state

governments and provides pathways for engineers to enter any state-based registration system. It provides the community and governments with confidence that the engineers on the NER are technically competent to practise in the community in their area of expertise. The NER now includes more than 17,000 registrants and is publicly searchable via the Engineers Australia website.

We are the designated authority for assessing skills and competencies related to engineering occupations in Australia. As over 50% of engineers in Australia are born and educated overseas, Engineers Australia's migration skills assessment is of increasing importance to the Australian community and government in ensuring the credentials of those engineers. This year we assessed the credentials of over 15,000 foreign-born engineers wishing to migrate to Australia.

WHAT WE'VE ACHIEVED

OVER

100%

Increase in members using monthly direct debit payment method.

69,262

Calls received

29,493

more outbound calls in 2016-17 (47%)

75,959

emails responded to

89.62%

Membership retention rate



13

TOMORROW'S ENGINEERS

Engineers Australia, as the peak engineering body, is collaborating with several key stakeholders across science, technology, engineering and maths (STEM) disciplines to ensure that we are influencing and contributing to the national STEM agenda. Our strategic priority of 'create tomorrow's engineers' has kept us focused and seen our involvement in several activities and projects that support this priority.

In collaboration with the Office of the Chief Scientist, Engineers Australia led the creation of Australia's first national searchable online database of STEM activities.

The STARportal.edu.au was soft launched in June 2017. This portal is an important resource for parents, students and teachers from primary through to Year 12, providing a digital conduit to locate both local area and online activities in STEM-based learning. Engineers Australia worked closely with Australia's Chief Scientist, Dr Alan Finkel, to produce this important national resource alongside founding partners AMSI, BHP Billiton, Commonwealth Bank and Telstra, and in collaboration with Questacon, University of

Sydney and the Department of Education. The portal soft launched with 25% more activities than the printed version and is still growing.

Another Engineers Australia national program that continues to grow in popularity is our EngQuest online program, designed to help in the teaching of engineering-based problem solving. The site was redesigned in 2016 and included the introduction of six little 'Engimite' characters to better engage with our primary school audience. It also involved a redesign of the teachers' education packs, which now includes resources for the classroom and teachers' staffrooms. This redesign delivered a 38% increase in education pack requests in the six months to June, compared to the prior six months.

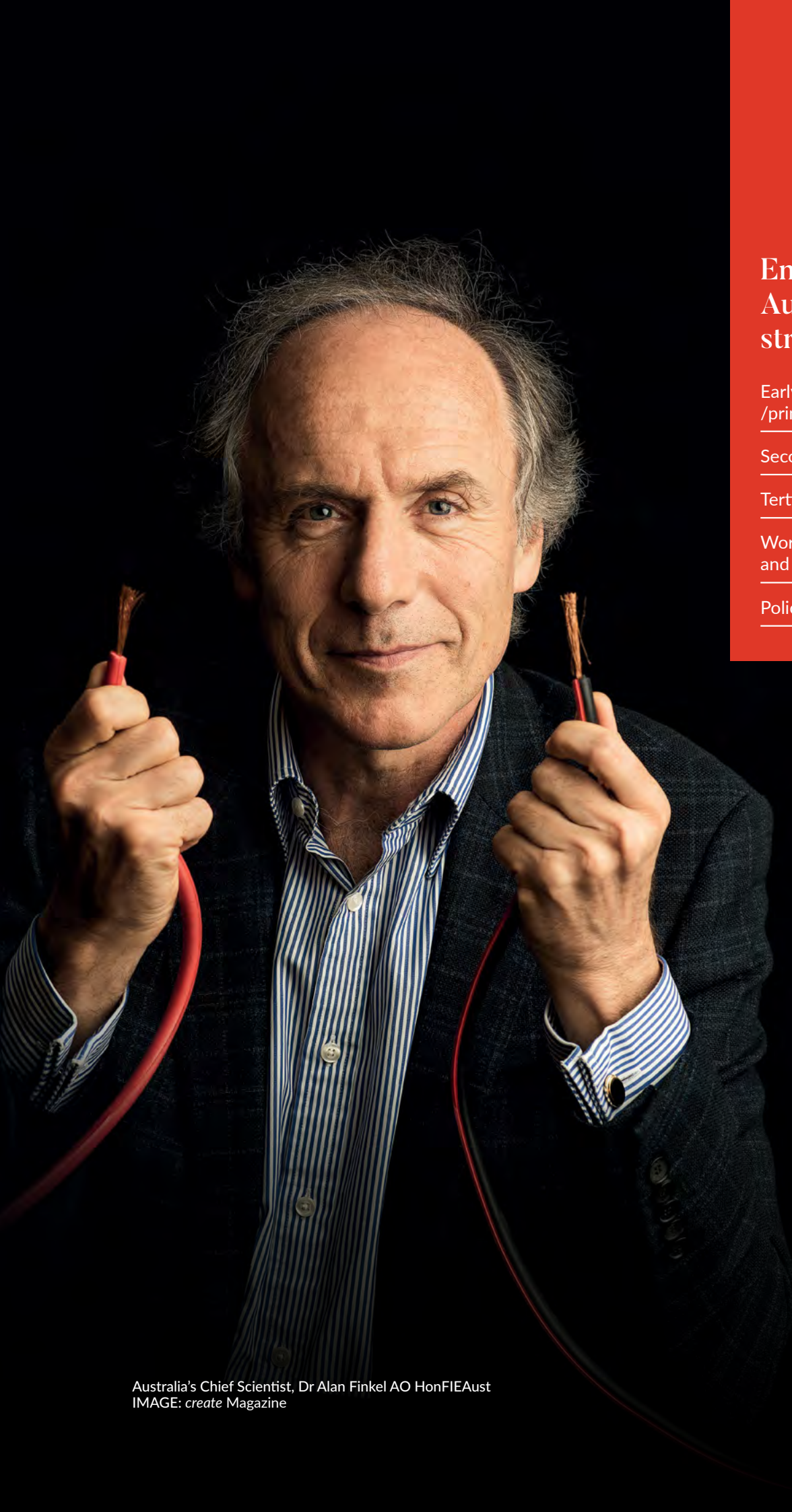
Beyond these national programs, almost 9,000 students took part in more than 70 STEM activities run through our divisions while we participated in more than 10 STEM forums/expos that reached close to 30,000 students. Some

of the larger initiatives include the Honeywell Engineering School, the Cochlear Autumn School in Sydney, and our work sponsoring awards and a number of secondary school programs.

Engineers Australia lent communications and marketing support through *create* magazine and digital channels, featuring key initiatives such as F1 in schools and supporting the Engibear book series.

Engineers Australia has undertaken a STEM strategy workshop with key internal stakeholders and volunteers to form the basis of the organisation's broader STEM strategy into 2017-18 and beyond.

This strategy will serve to direct our activities and support in these critical areas over the next three years, to formulate an action plan to help 'create tomorrow's engineers' and articulate clearly to our members and industry what we see as our role in helping deliver to the broader national STEM agenda.



Engineers Australia STEM strategy pillars:

Early childhood
/primary education

Secondary education

Tertiary/gap year

Workplace collaboration
and engagement

Policy and public relations

14

CONNECTIVITY AND PARTNERSHIPS

Engineers Australia constantly works with other engineering stakeholders to deliver better outcomes for the engineering profession and the community.

This year, Engineers Australia has continued its strategy of proactively partnering with prominent local and global corporations, defence, government bodies and academia.

Through 28 national partnerships, we have provided a series of high-quality learning experiences, sharing industry best practice and providing tangible value to Engineers Australia members and engineers more broadly. Over 40 events reached more than 9,500 engineers.

Engineering employers remain eager to partner with us to support their staff in achieving Chartered Status and growing their workforce capability. Over the course of the year, our business development team held more than 2,000 industry meetings and presentations across Australia to better understand the challenges facing the profession and work with them to deliver solutions.

This included presentations on the value of membership and Chartered to over 300 companies, ultimately contributing to the thousands of new members and Chartered members welcomed by Engineers Australia during the year.

We have developed bespoke partnering solutions to support engineering employers in upskilling their teams. Examples include:

Working with clients to build and/or redesign tailored competency frameworks within their business.

Engineering Education Australia, our subsidiary arm, partnering with Transport for NSW to produce a qualification in rail track engineering (soon to be available to the wider market).

Another important part of our work with industry is recognising senior industry leaders who have made a significant contribution to the engineering profession. Engineers Australia worked with industry to identify over 130 senior leaders, mostly CEOs, managing directors or general managers, and support them in achieving Chartered Status. Eighty of these leaders were also recognised as Engineering Executives (EngExec).

Through 28 national partnerships, we have provided a series of high-quality learning experiences, sharing industry best practice and providing tangible value to Engineers Australia members and engineers more broadly.



15

INTERNATIONAL ORIENTATION

The Engineers Australia international strategy is delivered by a staff team based in Australia and Malaysia, in partnership with dedicated volunteers in Singapore, Malaysia, Hong Kong, the UK, UAE and Qatar.

The strategy includes professional development opportunities and support for overseas members. We have increased our membership numbers year on year and we are particularly pleased that over 70% of our international members would recommend Engineers Australia membership to their peers (International Member Survey, April 2017).

The Chartered credential is growing in international recognition as a global standard of competence. In October 2016, Qatar's Ministry of Municipality and Environment officially recognised the status of Engineers Australia Chartered members, exempting them from assessment requirements to become registered as a professional engineer in Qatar. Such acknowledgement from the Qatari Government is held by only a handful of engineering institutions and we are honoured to be part of this select group.

Engineers Australia continues to form solid relationships with organisations around the world. In November 2016, we renewed our Mutual Recognition Agreement with the Institution of Structural Engineers (UK) and also formed a strategic partnership with the Australian College of Kuwait to provide Chartered assessments and professional development for the institution's student body, faculty and alumni. We also welcomed Multiplex Global (UAE) as our first international Professional Development Partner.



HONG KONG CHAPTER

President
Norman Croker
FIEAust CPEng NER

We continue to be the largest overseas group of Engineers Australia, with our dedicated committee hosting numerous technical talks, site visits and networking events. We are committed to investing in the next generation of engineers and a highlight was the sponsorship of the Australian International School of HK School Fair to encourage students to study STEM.



MALAYSIA CHAPTER

President
Choon Kong Liew
FIEAust

The Malaysia Chapter continues to strengthen its relationship with the Institution of Engineers Malaysia by holding joint events for the development of the Malaysian engineering profession. Almost 50% of our membership is now made up of student members whom we are supporting with professional development and industry connections.

Engineers Australia continues to form solid relationships with organisations around the world.



MIDDLE EAST CHAPTER – QATAR

President
Mustafa Adra
FIEAust CPEng NER

The Qatar Ministry of Municipality and Environment's recognition of Engineers Australia Chartered members has been very welcomed by industry and members. The Chapter has seen an increase in membership numbers, testament to our dedicated committee's ongoing support. In 2016-17, we held numerous events in partnership with the engineering profession, including technical talks, joint conferences and Chartered workshops.



MIDDLE EAST CHAPTER – UAE

President
Harry Roberts
FIEAust CPEng NEW CMILTA

The Middle East Chapter – UAE is growing, with continued interest from members in attaining the Chartered credential. This year we strengthened our relationship with the University of Wollongong in Dubai, the business community and government. We also welcomed new committee members in both Dubai and Abu Dhabi to expand our support for members across the UAE.



SINGAPORE CHAPTER

President
Lawrence Lim
FIEAust CPEng NER APEC
Engineer

This year, we focused on supporting our next generation of engineers by building on our strong relationship with the University of Newcastle Singapore and hosting our first Graduate Connections event in February for young professional engineers. We look forward to continuing this work in partnership with industry.



UK CHAPTER:

President
Elizabeth Harrison
MIEAust

This year, we held several joint events with other engineering institutions in the UK, partnering to strengthen the global engineering profession. The Chartered credential continues to be an aspirational goal for many of our members with close to 70% of our members Chartered or working towards the credential.

16

BUSINESS SUSTAINABILITY

We are deliberate in growing the business sustainably – in a way that enables the business to adapt to changing requirements and to provide an environment in which all staff and volunteers can contribute and develop. Over the last year there have been four main areas of focus towards improving business sustainability: people, finances, technology and governance.

OUR PEOPLE

As at 30 June 2017, Engineers Australia (including Engineering Education Australia) had a workforce of 279 employees, a 15% increase on the previous year. This increase includes 14 employees of Engineers Australia's subsidiary organisation, Engineering Education Australia (EEA), now being included in the total workforce of Engineers Australia. In addition, a number of long-term independent contractors have accepted employment with the organisation.

STAFF ENGAGEMENT

We undertook the inaugural Engineers Australia staff engagement survey in May 2016. With a survey participation rate of 71%, and with an Engineers Australia staff engagement score of 57% (excluding Engineering Education Australia), the survey gave all employees the opportunity to give feedback into all aspects of their employment.

The survey identified areas for

improvement including systems and processes, communication and collaboration and professional development. Employees from all levels of the organisation formed project teams to address these areas. Their work will continue into 2017-18.

HEALTH AND SAFETY

Engineers Australia recognises that managing the health and safety of its workforce is absolutely paramount to achieving its business goals. Through 2016-2017, Engineers Australia revised and re-launched all of its health and safety policies and procedures to ensure these documents reflect a modern workplace, characterised by ensuring the health, safety and welfare of all employees and other people on our premises.

FINANCES

The business has exceeded its profitability targets for the year.

Specifically, in a deliberate strategy to reduce risk, the business sought to develop non-subscription revenue streams to reduce membership subscriptions to below 40% of total revenue. As a result of increasing revenues from assessment activities, events and sponsorship revenue, and the launch of the National Engineering Register (NER), membership subscriptions have fallen to 38% of overall revenue (45% in 2015-16).

Combined with a deliberate focus on expenditure constraint the business has delivered a strong surplus, in excess of \$7 million for the year, resulting in a much-improved financial position.

WE MUST LEAD THE WAY IN PROMOTING A DIVERSE AND INCLUSIVE PROFESSION IF THOSE WHO CREATE SOLUTIONS ARE TO REFLECT THE PEOPLE WHO BENEFIT FROM THEM.

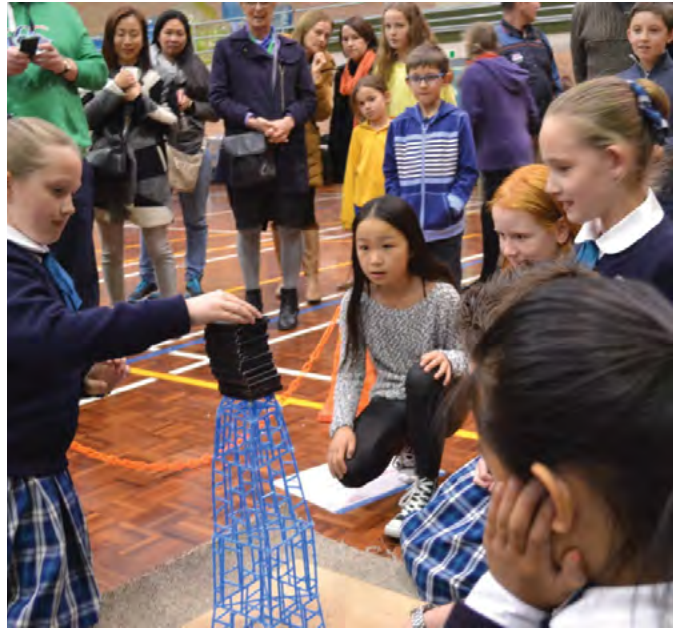


IMAGE: Engineering Games 2016

TECHNOLOGY

Engineers Australia has taken considerable steps to improve overall governance of ICT in the business. A significant decision was to move the business's core Oracle infrastructure to the cloud. This project, now underway, will deliver enhanced stability and security, and will enable the business to focus less on technology and more on business solutions.

A visible outcome of the year was the launch of the new Engineers Australia website that now reflects a more contemporary organisation with improved alignment of content to users' requirements.

GOVERNANCE

Sound governance underpins sustainability across the business.

SUBSIDIARIES

A key project for 2016-17 was the integration and system improvements of EEA with Engineers Australia. This work is now well progressed with the challenges in 2016 having been addressed.

APPOINTMENT OF INTERNAL AUDITORS

As part of ensuring that our business systems and processes are robust and an ongoing program of continuous improvement is maintained, we appointed new internal auditors, Bellchambers Barrett, for the next three years commencing July 2017. This appointment followed an RFP process with a total of seven internal audit services providers being invited to submit a proposal.

17

DIVERSITY AND INCLUSION

Engineers Australia is committed to leading the drive for a more diverse and inclusive engineering profession, and our Board leads this commitment.

While Engineers Australia will look at diversity and inclusion in a wide variety of ways, the organisation is focusing first on increasing the number of women engaged in the profession.

Women account for 50% of the population but only 12% of engineers.

We have introduced processes to ensure women are well represented in senior staff and office bearer roles across Engineers Australia. The Board is leading Engineers Australia's commitment and has set a minimum 30% target for women on the Board of Directors, College Boards and all other Engineers Australia committees by 2020. The Board has met this minimum target with 43% of Board Directors being female.

Female representation across Engineers Australia's groups is increasing – 26% of our Congress members, 25% of College Boards and 27% of Division Committee members are female engineers. In our College branches, technical societies and regional groups our committees on average have 13% female membership. We have strong support in place to help our groups increase female participation.

We are also constantly reviewing how we externally represent diversity in the profession. In *create* and across our social media channels, we have significantly increased the diversity of the engineers profiled. Over the next three years, through the leadership of the Colleges and technical societies, we will work with our groups to ensure greater diversity in our event panels and presenters.

This work is the start of a broader diversity and inclusion action plan that includes a call for employers in the profession to set achievable targets and programs to address the need for greater diversity in their workforce.

FEMALE REPRESENTATION ACROSS ENGINEERS AUSTRALIA

43%

of Board Directors are female

26%

of our Congress members

25%

of College Boards

27%

of Division Committee members

13%

female membership on average
in our College branches, technical
societies, regional groups and national
committees

While Engineers Australia will look at diversity and inclusion in a wide variety of ways, the organisation is focusing first on increasing the number of women engaged in the profession.



IMAGE: Julie Hammer, Engineers Australia's first female National President, featured in 2013 Top 100 list of Australia's most influential engineers in *create* magazine.

18

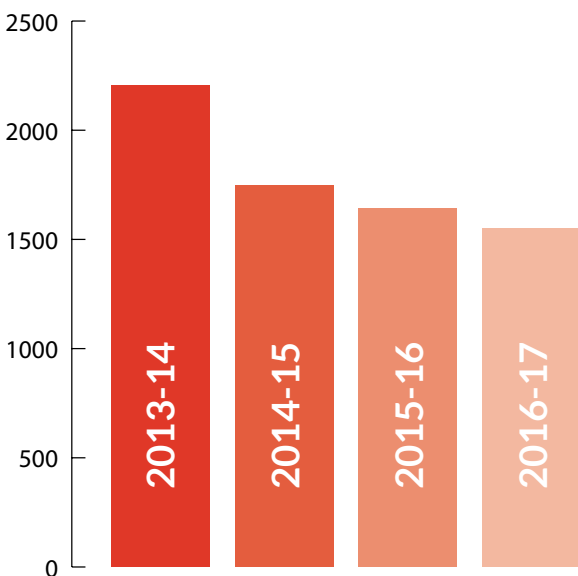
ENVIRONMENTAL SUSTAINABILITY

Engineers Australia is committed to incorporating principles of sustainability into our day-to-day operations and has developed a Sustainability Action Plan (SAP).

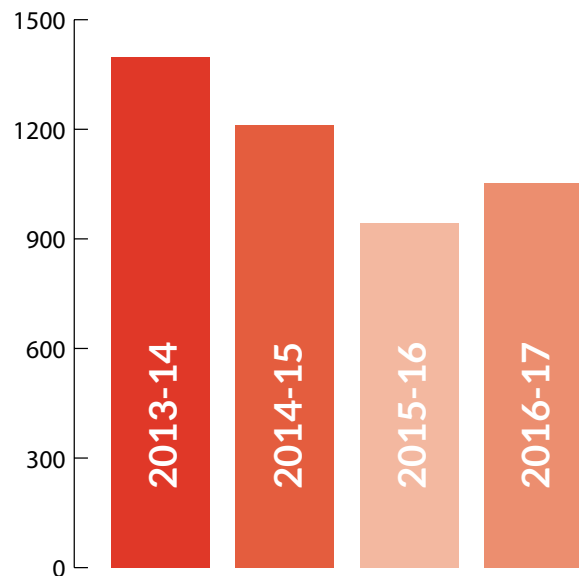
This plan outlines our environmental sustainability priorities including setting and monitoring short, medium and long-term actions and targets.

We estimate our carbon impact from our 2016-17 energy usage was 1,053 tonnes CO₂-e, a 12% increase on last year, driven by a substantial increase in the use of our Victorian premises.

PAPER USAGE - NUMBER OF REAMS



GHG EMISSIONS TONNES CO₂-E*

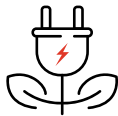


*Excludes emissions from staff travel or waste disposal.

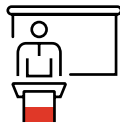
We've diverted
an estimated
1,129 kilos of
organic waste
from landfill



DURING 2016-17, OUR MAJOR ACHIEVEMENTS INCLUDE:



Maximising energy-efficient settings on office equipment, e.g. printers go into stand-by mode after 15 minutes of inactivity



Engineers Australia's events team selecting venues with positive environmental practices



No longer providing printed registration brochures or sponsorship and exhibition brochures



Timing the heating, cooling and air-conditioning systems in all our premises to limit usage out of office hours



Minimising waste (separate waste) as per the available recycling resource in each state and territory



Undertaking a review of waste and recycling practices across all locations



Achieving re-accreditation with ACT Government Smart Office business recycling program at our Canberra office



Devising a process to more accurately measure our waste streams

1,129kg



We've diverted an estimated 1,129 kilos of organic waste from landfill

Analysing and recording baseline data (consumption and cost) from electricity, gas and paper



Procuring 100% recycled Australian-made reams of paper for printers, sourced from a national supplier at a competitive cost

5% less paper

Using an estimated 1,551 reams of paper across our offices, a 5% decrease on last year

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ENGINEERING EDUCATION AUSTRALIA

The last year was a period of renewal, realignment and refocus at Engineering Education Australia (EEA).

Under new leadership and a renewed Board, EEA has moved closer to the Engineers Australia 'parent' to leverage each other's strengths in developing capability across the engineering profession. In December, the EEA Board set a new strategic direction and management is implementing the supporting operational plan. As part of the operational integration with Engineers Australia, EEA now benefits from shared services for human resources, marketing, legal, governance and finance.

SALES AND BRAND INTEGRATION DELIVERING GROWTH

We launched a new brand in early 2017, demonstrating the links with Engineers Australia and underlining EEA's service of the engineering profession. We've delivered significant growth in in-house training programs by renewing focus on the learner and working in partnership with the Engineers Australia business development team.

As relationships develop, repeat and multiple sales have grown this year with a 30% increase in the number of programs delivered,

generating an increase in revenue. Student numbers have also increased across our public and accredited programs by 25%. This will continue into the next year as we increase the scope of our accredited programs and link our public program offerings to the underpinning skills for Chartered Status.

NEW PROGRAMS LAUNCHED AND IN DEVELOPMENT

New education programs have been part of the success story for EEA this year. During the year we built an education team with experienced educators, learning designers and education technology specialists to deliver to industry needs. This capacity to build and customise programs and deliver these in blended formats enables us to meet the specific needs of each client. In some cases, programs have been co-delivered with the client's subject matter experts to ensure appropriate context. This resulted in a 40% increase in students in our accredited programs in 2016-17.

The successful launch of the Engineers Australia Graduate

Program has been a highlight for the year. The program delivers participants the underpinning skills to attain the experience necessary for Chartered Status and the opportunity to be assessed for a Graduate Certificate with a pathway to a Masters. The program was oversubscribed on launch and has also been sold as an in-house program for delivery later in 2017.

Our links with Engineers Australia and our education expertise also resulted in EEA being awarded a contract to work with Transport for NSW to develop an education program for rail track engineering. This program will be delivered to Transport for NSW and available to the wider market in 2018.

A SOLID FOUNDATION FOR GROWTH

Against this backdrop of growth in new products and existing income streams, EEA has reviewed and refreshed all finance and governance systems and processes. This was done with the support of Engineers Australia's governance, legal, HR and finance teams and provides a platform for continuing sustainable growth into future.

During the year we built an education team with experienced educators, learning designers and education technology specialists to deliver to industry needs.



IMAGE: Eva Hakansson by Kevin Smith for *create* magazine

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ENGINEASURE

In response to clear member feedback that Engineers Australia can provide increased services to the profession, and after almost two years developing the product, we launched our wholly owned subsidiary EngInsure Insurance and Risk Services in August 2016.

EngInsure maintains a steadfast commitment to developing robust business insurance and risk solutions that protect assets and manage exposures for engineers. EngInsure is the trusted adviser to engineers, enabling them to focus on building their business and growing into the future with certainty.

EngInsure also protects personal assets. We offer personal insurance solutions that give clients greater control over their financial position, preserving the lifestyle they've worked hard for should unexpected events arise.

EngInsure is backed by Engineers Australia, and Whitbread Insurance Brokers.

THE SERVICES OFFERED BY ENGINEASURE NOW INCLUDE:

BUSINESS

Professional Indemnity

Public Liability

Management Liability

Cyber Risk

Commercial Motor

Workers Compensation

PERSONAL

Home

Motor

Travel

Landlord

Boat

Life

EngInsure is backed
by Engineers Australia
and Whitbread
Insurance Brokers
– one of Australia's
largest privately owned
insurance brokers.



21

BOARD ATTENDANCE

		J McIntosh	G P Walters	N Fleming	S P Orton	Hon P L White	L K Bond	J Olson	M Kennedy	
Full meeting of directors	A	9	9	4	9	9	8	5	4	
	B	9	9	4	9	9	9	5	4	
Meeting of committees	Audit and Risk	A	4	1	2	4	7	1	3	0
		B	7	*	3	4	7	*	3	*
	Board Nomination	A	*	*	*	*	2	2	*	*
		B	*	*	*	*	2	2	*	*
	Remuneration	A	1	*	*1	1	*	*	*	*
		B	1	*	*1	1	*	*	*	*
	Board Governance	A	*	1	*	*	*	*	1	*
		B	*	1	*	*	*	*	1	*
	International	A	1	*	*	*	*	7	*	*
		B	*	*	*	*	*	7	*	*
	Professional Standards Committee	A	4	*	*	*	*	4	*	*
		B	5	*	*	*	*	4	*	*
	Honours and Awards	A	1	*	*	*	*	3	*	*
		B	4	*	*	*	*	4	*	*
	Major Conference Oversight Committee	A	*	*	*	1	*	*	1	*
		B	*	*	*	1	*	*	1	*
	Accreditation	A	*	*	*	3	*	*	*	*
		B	*	*	*	5	*	*	*	*

A = Number of meetings attended

B = Number of meetings held during the time the director held office or was a member of the committee during the year

* = Not a member of the relevant committee

Signed at Canberra this 10th October 2017, in accordance with a resolution of the Board.

John McIntosh
National President and Chair

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**ENGINEERS AUSTRALIA
OVERVIEW OF
FINANCIAL RESULTS***

FIVE YEARS 2012-13 TO 2016-17

	2012-13	2013-14	2014-15	2015-16	2016-17
	\$m	\$m	\$m	\$m	\$m
Income					
Net membership subscriptions	21.418	21.982	22.319	22.476	23.254
Courses, conferences/meetings and CPD	12.808	10.154	11.048	10.734	11.600
Assessment and registration fees	7.155	8.569	8.783	11.801	19.684
Sponsorships, grants and commissions	2.266	2.715	3.373	3.179	3.751
Publishing	2.315	2.177	2.101	0.970	1.207
Other Revenue	3.565	7.194	7.417	1.213	1.685
	49.527	52.791	55.041	50.373	61.181
Expense					
Employee and consultancy expenses	24.715	26.533	28.941	26.885	27.467
Administration, travel, publication and IT expenses	10.771	10.847	10.565	9.743	10.673
Premises expenses (excl depreciation)	2.119	2.057	2.077	3.275	3.410
Depreciation and amortisation	1.715	1.803	2.188	2.205	2.485
Courses and conferences/meetings	11.312	9.593	13.657	7.997	9.447
Other	0.490	0.432	1.582	0.187	0.429
	51.122	51.265	59.010	50.292	53.911
Operating Surplus/(deficit)	(1.595)	1.526	(3.969)	0.081	7.270
Asset Revaluation	0.293	(0.733)	0.108	0.037	3.982
Increase/(decrease) in members funds	(1.302)	0.793	(3.861)	0.118	11.252
Total Members Funds	34.998	35.791	31.930	32.048	43.300

* The consolidated entity incorporates Engineers Australia and its subsidiaries, Engineers Australia Pty Limited, Enginsure Pty Ltd and Engineering Education Australia Pty Limited and its subsidiary (The Moreland Group Pty Ltd). Audited full financial statements for the year ended 30 June 2017 will be presented at the AGM on 20 November 2017. They are available in PDF at www.engineersaustralia.org.au/annualreport.

Board Remuneration

The maximum annual aggregate Director's fee pool limit for the 2016-17 financial year is \$250,000 and was approved at Meeting #28 of the Engineers Australia National Congress held 19 & 20 November 2015. The total amount of fees paid to Non-Executive Directors during the financial year was \$217,000 (2016 \$102,000).



**WE ARE THE GLOBAL
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PROFESSIONALS RENOWNED
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