

ENGINEERS
AUSTRALIA

ANNUAL REPORT

2012-2013

HIGHLIGHTS

ENGINEERS AUSTRALIA

TO ADVANCE THE SCIENCE AND PRACTICE OF
ENGINEERING FOR THE BENEFIT OF THE COMMUNITY

engineersaustralia.org.au/annualreport

WHO WE ARE

ENGINEERS AUSTRALIA

The association for professional engineers, engineering technologists and engineering associates.

The Institution of Engineers Australia (Engineers Australia) is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community by:

- ▶ educating our members and the community
- ▶ facilitating the exchange of ideas and information
- ▶ encouraging the development of knowledge and competency
- ▶ setting and maintaining high professional standards for our members
- ▶ informing community leaders and decision-makers

At 30 June 2013, we had nearly 107,000 members in nine geographic Divisions in Australia and in multiple locations overseas.

Our members all belong to one or more of our eight Colleges covering the different fields of engineering practice. We aim for the Colleges to be the reference point for technical excellence in engineering in Australia. Our members may also belong to any of our 28 Technical Societies which include non-engineer members and collaborate closely with industry.

Our Divisions, Colleges, Technical Societies and Special Interest Groups are led by elected committees of volunteer members who work with our staff to achieve our key objectives.

Engineers Australia has two wholly-owned subsidiaries – our publishing arm Engineers Media based in Sydney, and our education arm Engineering Education Australia based in Melbourne.

Annual Report – Communication Objectives



This summary of key outcomes for Engineers Australia for financial year 2012-2013 is extracted from the full version of the annual report, available online at

www.engineersaustralia.org.au/annualreport

It is presented by the Council for the business of the Annual General Meeting 2013, together with the audited financial statements, in accordance with By-law 20.2 of the 2011 Royal Charter and By-laws.

The most recent previous report was produced for the business of the AGM 2012.

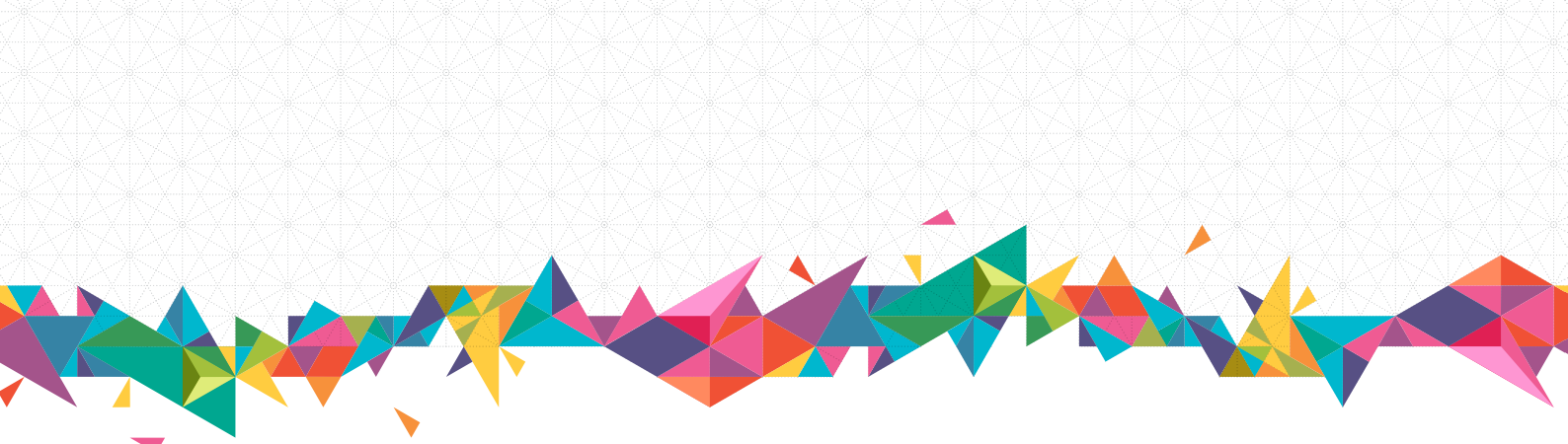
Our General Reporting Principles

1. Our reports should inform members of measurable progress toward our agreed annual and longer-term goals.
2. We should ensure transparency in reporting, informed by contemporary approaches to corporate responsibility reporting.
3. We should give due emphasis to the key organs of our Institution – the Divisions, Colleges and other interest groups – so that our members are able to relate directly to what is being reported.
4. We should use the one national annual report process to encompass our principal reporting obligations flowing from our Charter and By-laws – for Council, Congress, Divisions, Colleges and Technical Societies.
5. All members should be informed of our full report being available online, with a summary printed version available for the AGM and for promotional use with various stakeholders through the ensuing year.

CONTENTS

Engineers Australia – Who We Are	2
Annual Report – Communication Objectives	2
National President’s Report	4
CEO’s Review of Operations	5
Incoming President’s Statement	6
Our highest recognition awards	7
Council – our national governing body	8
Being Chartered	10
From our Division Presidents	12
From our College Chairs	13
Highlights	
Indicators of Change	14
Major Conferences and CPD events for members	15
Policy and advocacy	16
Accreditation and migrant skills assessments	17
Membership and member services	18
Five-year financial results	19





NATIONAL PRESIDENT'S REPORT

The past year has been a watershed as Engineers Australia becomes a pace setter for leadership and services to the engineering profession. My strategy as National President was two-fold: firstly to lay the foundations for a contemporary organisation via the first general member regulations and secondly to envision a new future while focusing on our core purpose and values.

An important milestone was the passage of the first general member regulations, laying the foundations for open, equitable and accountable governance, putting our member first and restating explicitly our commitment to leadership in engineering education and professional development.

Contemporary operations included a new organisation structure and information technology platform. Streamlined electronic communications, video teleconferencing and eChartered were widely adopted, serving all members from London to Launceston.

The **strENGth** campaign engaged leaders in engineering organisations to speak publicly on the benefits of membership and being Chartered, demonstrating our growing relevance to industry. We forged new alliances with related institutions in Australia and internationally.

We developed a higher media profile, a key member aspiration and part of our core purpose, via media interviews, position statements and increasing media inquiries. Our conferences enjoyed increasing success. We are poised for a successful National Convention 2014 and will be hosting the "Olympics of engineering" - the World Engineers Convention in 2019, our centenary year.

We created a new vision for the organisation that demands a greater public voice, career long support for our members and leadership internationally and commenced a refreshment of our strategic plan to align with this vision. I hope that the momentum of 2013 will be maintained and that Engineers Australia will soon be recognised as the global home of our engineering leaders who are making a difference in the world.

Marlene Kanga FIEAust CPEng
National President 2013



“ I hope that the momentum of 2013 will be maintained and that Engineers Australia will soon be recognised as the global home of our engineering leaders who are making a difference in the world.



CEO'S REVIEW OF OPERATIONS

The 2012-2013 year has been truly transformative for Engineers Australia with excellent progress on a number of fronts.

During the year, we introduced a new operating model and enhanced governance framework in order to strengthen our organisational strategy and focus. This was part of a carefully considered plan to invest in the future of Engineers Australia.

As part of this investment, we implemented various programs of significant benefit to our members and to the engineering profession overall. These included:

- ▶ The launch of our improved engineering competencies, supported by new technology, eChartered, now being lauded by professional bodies around the world.
- ▶ The introduction of other new technologies such as video conferencing and eNewsletters that are driving productivity and improved member services.
- ▶ Our **strENGth** initiative, to grow our membership and organisational relevance, supported by leading executives from organisations across the profession.
- ▶ Our growing presence on the global stage, including signing of new international agreements and accords to improve international mobility for our members. In addition, our bid to host the 2019 World Engineers Convention was successful.

- ▶ A fundamental repositioning of our external policy and media strategy which has led to a marked increase in media coverage for Engineers Australia.
- ▶ Increased participation rates in our school education program, EngQuest, which has doubled to over 100,000 students, making it the largest schools outreach program in Australia.

Engineers Australia continues to be in a very strong financial position with net assets of \$35 million. Over the past financial year, membership numbers grew by 5.2% to over 106,000 members, with membership revenue increasing by 7.4%. Next year total membership will drop. Council has decided that members who remain non-financial more than three months will have their membership and access to services withdrawn.

Total expenses increased by 7.3% due primarily to investment in key programs. For example, the rollout of our new technology platform, now well underway, is the largest single financial investment in our history. Our new IT platform will deliver a suite of member benefits, the first of these being eChartered. Whilst the delay in the launch of eChartered had an impact on revenue this financial year, the new offering has been extremely successful with over 6,000 members enrolling in the first six months, far exceeding our expectations.

Our success in delivering a dynamic program of strategic, cultural and



organisational change has been skilfully guided by National Council and supported by our committed staff and our dedicated office bearer and volunteer community.

With the past financial year being marked by a significant investment, our attention now turns to building on these foundations to deliver increased value to members and to advance the engineering profession.

Thank you for the support of all members, as we continue to build on this success in the year ahead and deliver on Council's vision for Engineers Australia to become a world class organisation.

Stephen Durkin FIEAust
Chief Executive Officer



INCOMING PRESIDENT'S STATEMENT

I look forward to serving as National President in 2014 to continue the great work of my predecessors, and reaching out to our community as the definitive voice of engineering.

Engineers Australia is presently undergoing significant transformation: to have a member focused culture; to be accessible and relevant; to be seen as a productive and efficient organisation; to be commercially viable; and to improve the community perception of the critical role of engineering to the economy.

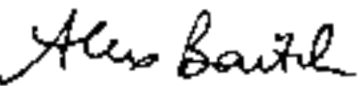
It is essential that being Chartered is the aspirational goal of all qualified members. Our young engineers are key to the future of the profession. I am delighted that leaders of our profession are participating in Engineers Australia's **streNGTH** campaign encouraging Chartered membership. We need to expand our network of Professional Development Program partners and strengthen our international relationships to improve global portability and recognition of Chartered members. My goal is to have 90% of eligible members to be Chartered by 2020.

We need to be loud and proud with our contribution to the world we live in. We need to provide a balanced view with input to government policy and media exposure on the impact of population growth, a sustainable future, nuclear energy, climate change, innovation and other matters of interest to the community.

Engagement with industry and academia is key, as is provision of opportunities for knowledge and professional development. Our inaugural National Convention being held in Melbourne from 23-29 November 2014 will be a major activity which brings a wide range of members together.

I look forward to the year ahead and am confident that working together we will make a positive contribution to the transformation that is underway.

Professor Alex Baitch
HonFIEAust CPEng FIPENZ
National President 2014





OUR HIGHEST RECOGNITION AWARDS

2013 PETER NICOL RUSSELL MEMORIAL MEDAL – CAREER ACHIEVEMENT AWARD IN ENGINEERING



This is the most prestigious award made by the Institution. First awarded in 1923, it perpetuates the memory of Sir Peter Nicol Russell, a Sydney industrialist during the latter half of the 19th century, who made major donations to the cause of engineering in Australia.

The award is presented annually to a Fellow of the Institution who has made a notable contribution to the science and/or practice of engineering in Australia. The recipient represents to both the engineering profession and to the engineering community the high technical, professional and community service standards of engineering.

Barry Joseph Grear AO HonFIEAust CPEng FIPENZ



Barry has been described as the ultimate engineer - one who is truly inspirational to others and who has had a huge influence on the profession both nationally and internationally.

Barry has made a significant and extensive contribution to the engineering profession in Australia through his active membership of many boards and committees, as President of South Australia Division and as National President of Engineers Australia.

He has made a significant contribution to engineering internationally through his activities at the Federation of Engineering Institutions in the Asia Pacific and as President of the World Federation of Engineering Organisations, the first Australian to hold this position.

HONORARY FELLOWS

An Honorary Fellow is, in the opinion of the Council, a person who has rendered conspicuous service to the profession of engineering or is eminent in engineering or an allied science, or is a distinguished person whom the Council desires to honour, either for having rendered conspicuous service to the Australian people or in recognition of outstanding achievement. By long-standing agreement, the total number of our Honorary Fellows is limited to 150 at any one time.

Council has resolved during 2013 that the following persons be designated as Honorary Fellows of Engineers Australia:

- ▶ **David Leslie Finch** HonFIEAust CPEng
- ▶ **Menno Henneveld** HonFIEAust CPEng
- ▶ **Adj Prof David Anthony Hood** AM HonFIEAust CPEng FIPENZ FISEAM
- ▶ **Hon William Richard Marmion** MLA HonFIEAust CPEng
- ▶ **Gregory Stuart Martin** PSM HonFIEAust CPEng
- ▶ **Susan Lee Murphy** HonFIEAust CPEng
- ▶ **Peter Brooke Scott** HonFIEAust
- ▶ **Ralph Graham Waters** HonFIEAust CPEng
- ▶ **Dr Alexander Zelinsky** HonFIEAust FTSE



Citations for each of these new Honorary Fellows can be found at www.engineersaustralia.org.au/annualreport

COUNCIL 2013



National Councillors are elected from among members of National Congress for two-year terms. Candidates for National Deputy President (President-elect) must be a current or former delegate to Congress.

From left: Carla Cher, Barry Tonkin, David Cruickshanks-Boyd, Alex Baitch, Greg Walters, Marlene Kanga, Simon Orton, Madeleine McManus, David Hood

National President

Dr Marlene Kanga

FIEAust CPEng FIPENZ



Dr Marlene Kanga was elected to Council in November 2007, and has served in several National Vice President portfolio roles including for Communications, Engineering Practice and Finance. She was Chair of the National Committee for Women in Engineering in 2008-2009, Chair of the Audit and Risk Committee for 2011 and Chair of the Taskforce on Innovation in Engineering in 2011-12. Internationally, Marlene represents Engineers Australia at the World Federation of Engineering Organisations (WFEO) and is a member of the Executive Council of WFEO and is a Board member of the International Network for Women Engineers and Scientists.

Marlene is a chemical engineer with extensive experience in the oil, gas and chemical industries with respect to risk and safety engineering, and an experienced business leader as Director of iOmniscient Pty Ltd which has developed patented software technology for advanced video analytics systems.

National Deputy President

Prof Alex Baitch

HonFIEAust CPEng



Prof Alex Baitch was elected to Council in 2009. He has been chair of Council's Special Committee on Being Chartered since 2011, chair of the Audit and Risk Committee for 2012, and chair of the 2012 Congress Liaison Committee.

Alex is an electrical engineer and principal of his own consulting practice and is an Honorary Professorial Fellow at the University of Wollongong. He has served Engineers Australia in many roles over the past 30 years. He has been an active member of a number of Standards Australia's national and international committees, and chaired the International Council on Large Electric Power Systems (CIGRE) committee on Demand Side Integration.

Immediate Past National President

Adjunct Prof David Hood AM

HonFIEAust CPEng FIPENZ FISEAM MASCE



Adjunct Prof David Hood AM was elected as national Deputy President for 2011 and served as National President and Chair of Council for 2012.

A civil and environmental engineer, David is Chairman of his own consulting practice, and led the sustainability program for the CRC for Infrastructure and Engineering Asset Management (CIEAM) based at QUT until mid-2013 when the CRC funding came to an end. David, an accredited Presenter with Al Gore's Climate Project, is the Founding Chairman of the Australian Green Infrastructure Council (AGIC now ISCA). David is a Past Chairman of Australia's College of Environmental Engineers, and has been twice listed in the ABC Carbon list of the top 100 Sustainability Leaders in the world. He was admitted as a Member of the Order of Australia on Australia Day 2013 in recognition of his enormous contribution to engineering and sustainability.

National Councillor

Ms Carla Cher

MIEAust



Carla Cher was elected to Council for 2013 and 2014. She is a Past Chair of the Young Engineers National Committee,

and was Young Engineers Australia's delegate to National Congress for 2011 and 2012.

Carla has combined degrees in electrical and electronic engineering and science (physics). She has Masters degrees in micro and nanotechnology, and in Intellectual Property Law. She is presently employed by Watermark Intellectual Asset Management where she is responsible for providing strategic business advice to her engineering and technology clients including identifying ways to strategically capitalise on their Intellectual Assets. She is a Fellow of the Institute of Patent and Trade Mark Attorneys.

National Councillor

Dr David Cruickshanks-Boyd

FIEAust EngExec



Dr David Cruickshanks-Boyd was elected to Council for 2013 and 2014. David has served in many capacities with

Engineers Australia – as a current member of the national board of the Centre for Engineering Leadership and Management, as President of South Australia Division in 2011, and as a member of several national committees.

He is currently the SA Regional Director for Parsons Brinckerhoff (PB), a global infrastructure professional services firm. David's current role with PB includes National Director of Sustainability, and he is responsible for developing and maintaining strategic client relationships for PB. David has a number of non-executive board and Ministerial-level advisory body appointments in South Australia.

National Councillor

Ms Madeleine McManus

FIEAust



Madeleine McManus was elected to Council for 2012 and 2013.

Madeleine is a Past President of Victoria

Division (the first woman elected to that role). She served two terms as a delegate to Congress (2007-2008 and 2010-2011), and has served as a member of the national board of the Centre for Engineering Leadership and Management.

Madeleine has combined degrees in Mechanical Engineering and Commerce, and has a professional background in engineering management, project management, consulting and executive search. She has served on a number of industry and community boards, including Monash Engineering Foundation Board, Victorian Government Supply Chain Consultative Committee, and Timberline Ski Lodge.

National Councillor

Mr Simon Orton

FIEAust CPEng EngExec RPEQ



Simon Orton was elected to Council for 2013 and 2014. He is a past chair of CELM-Queensland, and is the President

of Queensland Division (and chair of the Division Committee) for 2013, promoting improved member value programs for Engineers Australia.

Simon has a Degree and Masters in Mechanical Engineering, and has wide-ranging senior management experience in coal, automotive and extractive industries. He has served five years on an engineering services company board and various advisory boards, and currently serves on two Australian Coal Association Research Program committees. Simon leads a cross-function corporate team, across BMACoal, reporting to the Executive Leadership team.

National Councillor

Mr Barry Tonkin JP

FIEAust CPEng



Barry Tonkin served on Council from 2006 to 2010, and was re-elected to Council for 2013. He has held many roles

within Engineers Australia over 20 years, and served APESMA in similar capacities over 25 years. He was Chair of the College of Civil Engineers for 2009 and 2010, and President of WA Division for 2012. In 2010 Barry was instrumental in instigating Engineers Australia's Reconciliation Action Plan.

Barry is a Chartered Civil Engineer, with degrees in Civil Engineering and Public Administration, and higher qualifications in business administration and company law. He is a graduate of the AICD Company Director's Course. He has been a Justice of the Peace since 1988.

National Councillor and National Vice President (Finance)

Mr Greg Walters

FIEAust CPEng EngExec



Greg Walters was elected to Council for 2012 and 2013. He has held various roles within Engineers Australia

over the past 19 years including President of Canberra Division 1997, Deputy President of SA Division 2000 and President of Tasmania Division 2011. He led the inaugural Canberra Chapter of ASDE in 2003 and was the ASDE National President in 2004. He is currently a member of the SA Division Committee and is a graduate of the AICD Company Director's Course.

Greg is an electrical engineer with a specialty in Guided Weapon Systems. He is the SA State Manager for SKM.



Full biographical notes on the members of Council 2013 are available at

www.engineersaustralia.org.au/about-us/national-council

BEING CHARTERED

20,000 MEMBERS ARE CHARTERED ENGINEERS

During 2012-13, Engineers Australia achieved four major milestones in strengthening our program for Chartered engineers:

1. We launched eChartered online in November 2012
2. We introduced new Competency Standards for Stage 2
3. We reduced the cost of providing the Chartered program
4. We completed our five-year program of CPD practice reviews of 13,000 Chartered engineers.

1. eCHARTERED ONLINE

Our world-class online application and assessment system for becoming Chartered was launched on 20 November 2012.

It was the first major project launched from our organisation-wide Management Information Systems renewal program.

Our previous paper-based process for members to submit documentation progressively toward a professional interview for the Chartered award was redesigned and transferred to an integrated online web-based environment.

We took great care that the transition to the new system did not disadvantage those using the previous system, and at the same time provide encouragement for new applicants to sign up.

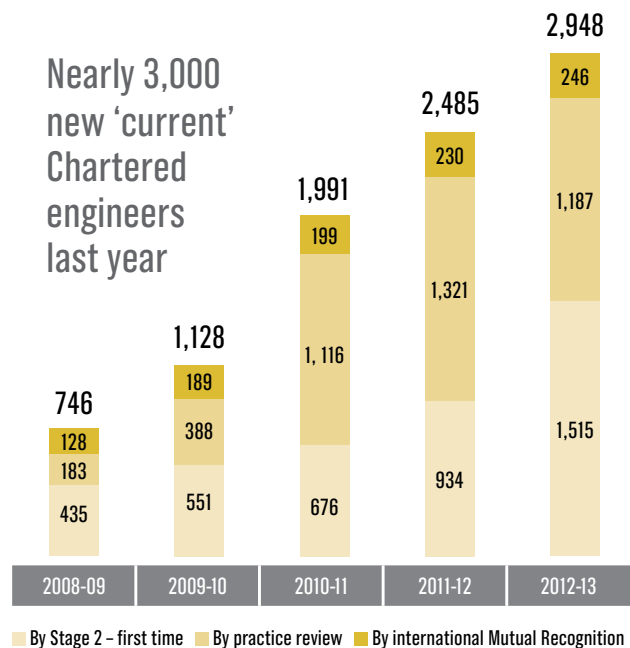
The uptake of the eChartered system was impressive:

- ▶ In the first week, over 1,000 members started using eChartered and commenced their enrolment
- ▶ Within the first month, 2,000 had started their enrolments and 1,200 had finalised this stage
- ▶ Six months after the system's launch we reached 5,000 enrolments, with over 250 PDP partner organisations signed up, necessitating many additional hours of assessor effort.

However, as we acknowledged in our Annual Report last year, the launch of eChartered was delayed by nearly 5 months. This resulted in a one-time shortfall of approximately \$1 million in Chartered assessment revenue against our original revenue estimates for the year.

So far, we have received a lot of positive feedback about the new eChartered system from members, for example

Nearly 3,000 new 'current' Chartered engineers last year



from Carey Ashby, the first participant to become Chartered via the eChartered system:

"As a Professional Development Program participant who started my Chartered application on the previous system, I found eChartered easier to use. In particular, I found the new verification process much simpler to complete online. Overall I found the new process to be fairly straightforward and the competency mapping worked well for me."

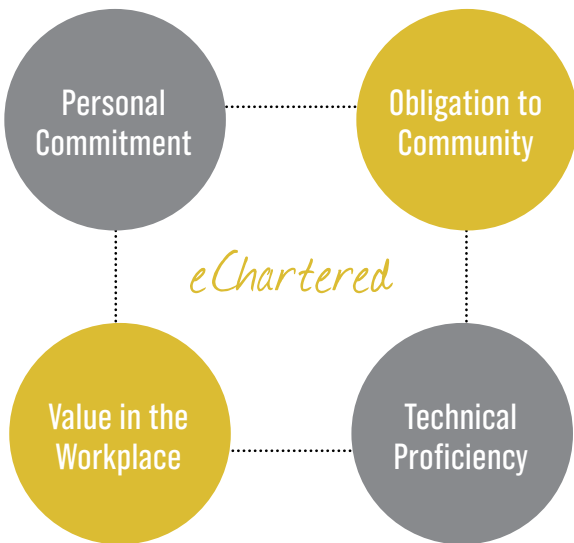
– Carey Ashby MIEAust CPEng, Victoria Division

IN THE FIRST WEEK, OVER 1,000 MEMBERS STARTED USING eCHARTERED AND COMMENCED THEIR ENROLMENT.

2. NEW STAGE 2 COMPETENCY STANDARDS

The revised 2012 Competency Standards Stage 2 were introduced in an online format as part of the eChartered launch, enabling members to review them online and prepare Engineering Competency Claims.

The revised framework comprises 16 Elements of Competency split into four groups:



3. REDUCING COSTS

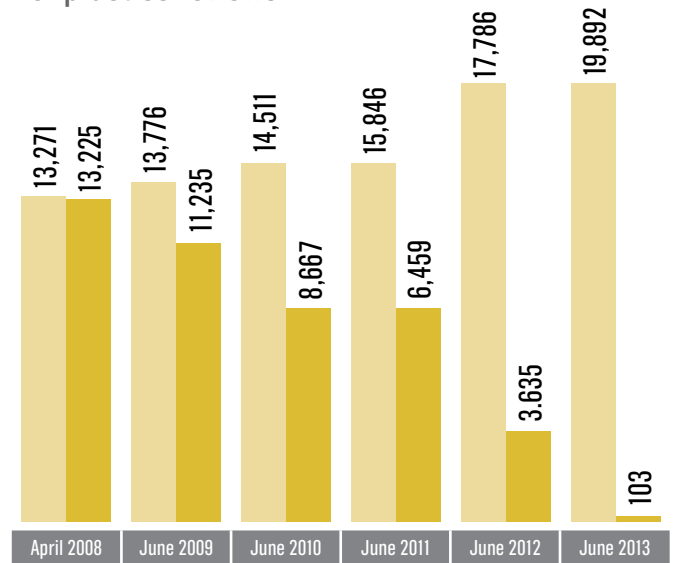
eChartered has allowed us to reduce what it costs to process a Chartered application from the first submission of an Engineering Competency Claim to the award of Chartered Status. At the same time we've changed to a 'pay as you go' pricing model, whereby the fee for providing the assessment service is now collected as candidates progress through the system.

The fee was increased from \$550 to \$1470, so it is much closer to covering the real cost to the membership, removing the need to draw heavily on membership subsidies.

4. PROGRAM OF CPD PRACTICE REVIEWS

- ▶ We completed a five-year program since our policy review in April 2008 to undertake CPD reviews of some 13,000 Chartered engineers who had not been subject to a Practice Review (previously an audit).
- ▶ Our policy is that all Chartered members should expect to undertake a practice review with us at least once every five years.
- ▶ As many members had not faced a practice review previously, there has been some reluctance to complete it. We have found that now that the reviews have been completed the members have become more comfortable with the process.

Chartered members – completion of practice reviews



■ Assessed 'current' members ■ To be reviewed

FROM OUR DIVISION PRESIDENTS



Canberra Division

Andrew Montgomery *President*

"Canberra Division has successfully engaged with local and federal government politicians. Our message that National Registration of engineers is an essential tool in providing a more sustainable and cost effective built environment is being well received."



Newcastle Division

Karlie Collis *President*

"We aimed to strengthen bonds with our regional groups and we have certainly achieved this. A very successful Regional Convention was attended by 70 delegates in Port Macquarie in May. We are in the planning stages of a roll out of our highly successful mentoring program."



Northern Division

Louise McCormick *President*

"National President Dr Marlene Kanga visited our Division in April and attended our Gala Dinner. Marlene spoke about "The Asian Century" which resonated with our members as Darwin is known as the Gateway to Asia. In February I visited our Indonesian members in Jakarta and Bali to discuss how we could better service their needs."



Queensland Division

Simon Orton *President*

"Queensland Division recorded over 8% membership growth, welcomed close to 1,000 new Chartered members, and implemented a new media strategy that has assisted in raising our profile and relevance to the community."



South Australia Division

John C Olson *President*

"Government engagement has been a key focus of the Division in 2013 and along with General Manager Caroline Argent, I have met with both the Premier and the Leader of the Opposition. The successful Parliamentary Fellows Program has also been re-launched."



Sydney Division

John Nichols *President*

"Our activities delivered value to our members with engaging CPD programs across each of our forty four technical and special interest groups, and we encouraged an inclusive profession with rewarding activities with Young Engineers, Women in Engineering, migrant engineers and our reconciliation program."



Tasmania Division

Tammy Chu *President*

"New members have joined the Division Committee, bringing with them a renewal of enthusiasm and direction. With the growing need for engineers in all areas of expertise, promoting our profession to young people as an exciting and challenging career opportunity is becoming increasingly important."



Victoria Division

John McIntosh *President*

"Victoria successfully piloted the strENGth campaign, which has now been rolled out nationally. The most exciting feature of this campaign has been the recording of video testimonials of over 30 Chartered CEOs, championing the cause for all engineers to attain Chartered status."



Western Australia Division

Helen Pedersen *President*

"2012 Division President Barry Tonkin was himself working fly-in fly-out and highlighted the issues around working in remote regions of our large state. We are supporting RUOK? Day for engineering workplaces to open hearts to colleagues, friends and relatives, "one conversation can change a life".



View the Division Presidents' full statements online at www.engineersaustralia.org.au/annualreport

FROM OUR COLLEGE CHAIRS



College of Biomedical Engineers **Karen Reynolds** *Chair*

“The highlight of the year was the success of our inaugural stand-alone Australian Biomedical Engineering Conference, held in Brisbane in September 2012. The theme of the conference was Health Through Engineering, and the conference brought together over 200 biomedical engineers working in a diverse range of settings.”



College of Chemical Engineers **Georgie Wright** *Chair*

“The National Committee on Fuels and Energy issues paper on Australia’s future energy options has now been widely disseminated via public forums and a revised document under the new Chair Mike Dureau is nearing completion for final approval and adoption by Engineers Australia. The quality and relevance of this paper is impressive.”



College of Civil Engineers **Robert Barker** *Chair*

“Eight members of the Civil College board completed their tenure at the end of 2012, and this provided the board the opportunity to revisit its succession planning strategies, take a fresh look at its role within the Learned Society structure of Engineers Australia, and establish Task Groups to implement its strategic agenda.”



College of Electrical Engineers **Alan Coote** *Chair*

“The release of Decision Regulation Impact Statements from the National Occupational Licensing Authority (NOLA) has confirmed the College’s concerns that the design, testing and commissioning of electrical installations will require an Electrical License. Submissions were made to each State Authority, and an Engineers Australia appointment made to the Occupational Licensing Advisory Committee.”



College of Environmental Engineers **David Gamble** *Chair*

“The main priorities for the College over the coming year are to achieve better recognition for the regulatory role of environmental engineers in signing off on engineering projects, and to work with other Colleges on common issues such as national registration of engineers and CPD requirements.”



College of Information, Telecommunications and Electronics Engineering **Peter Hitchiner** *Chair*

“In order to develop more focused communities of practice (especially online) the ITEE College is actively promoting the formation of several new Technical Societies. I look forward to this initiative being the foundation for delivering more and relevant CPD to an increasing number of disciplines in the ITEE practice area.”



College of Mechanical Engineers **Paula West** *Chair*

“We value our continued involvement with Engineers Australia Accreditation Panel. Mechanical College Board members have been engaged to assist with the Accreditation Panel this year, as and when required, reviewing Engineering Degree programs in Universities.”



College of Structural Engineers **Richard Eckhaus** *Chair*

“The Structural College Board has this year focused principally on its learned society function. It sees this function not only as producing the maximum benefits for its members but in doing so also invigorating and emphasising a central coherent foundation for Engineers Australia.”



View the College Chairs’ full statements online at
www.engineersaustralia.org.au/annualreport

INDICATORS OF CHANGE

On this and the following pages are highlights of our results in 2012-2013, as we move to a modern and progressive leadership culture and to be more responsive and member-focused.

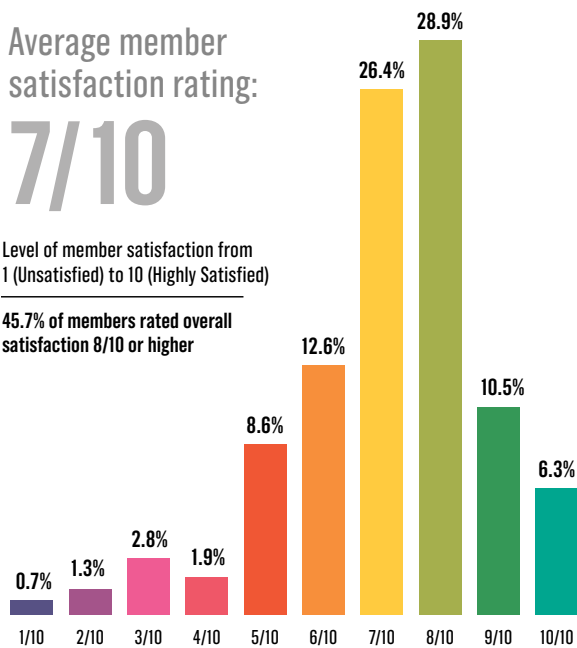
CULTURAL CHANGE

- ▶ During 2013, we established a set of core leadership behaviours to guide our staff.
- ▶ We carried out surveys of member satisfaction and staff engagement, firsts which will give us benchmarks for future measurement.

Average member satisfaction rating:
7/10

Level of member satisfaction from 1 (Unsatisfied) to 10 (Highly Satisfied)

45.7% of members rated overall satisfaction 8/10 or higher



OUTREACH TO YOUNG AUSTRALIANS

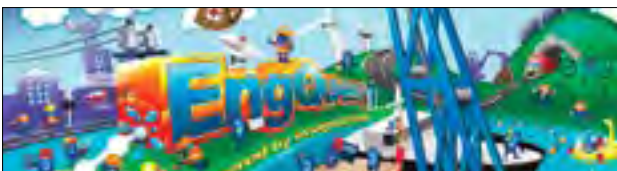
For the future of the profession in Australia, we're involved in an extensive schools outreach program.

- ▶ Our Divisions conduct a wide range of secondary schools programs.
- ▶ EngQuest is our flagship program for primary and middle year students.
- ▶ It is likely to reach 100,000 students online in 2013 (42,000 in 2012).

From teachers:

"they enjoyed the challenge, problem-solving and working as a team to achieve their goal"

"it was great to see other students coming to one of my boys in particular as the expert, something which isn't likely to happen in most of his other school work"



GROWING OUR INTERNATIONAL PRESENCE

- ▶ With 5,400 members based overseas, we have decided to place higher emphasis on our presence in what is a global profession.
- ▶ We have taken just early steps toward better service to our overseas Chapter members.
- ▶ **MRA with IPENZ:**
For enhanced mobility for our members, we are party to many agreements around the globe. In February 2013, we entered a new mutual recognition agreement with the Institution of Professional Engineers New Zealand (IPENZ).

A MORE BUSINESS-LIKE APPROACH

- ▶ We must better diversify our income streams to boost the quality of member service.
- ▶ We've introduced charging for non-member attendance at events, and higher charges for our nationally-organised Eminent Speaker program.
- ▶ We've brought our conference and event management capability in-house, with great success.
- ▶ We've redirected some Division and College funds to a central pool to invest in special projects.
- ▶ We've adopted explicit financial ratio indicators to help with our balance sheet structure and cashflow management.

EMBRACING NEW TECHNOLOGY

- ▶ We launched eChartered in November 2012, the first integrated member application from our Management Information Systems renewal project.
- ▶ The MIS renewal was 70% complete at 30 June. It is our largest ever single financial investment, to overhaul our membership database, our web presence, our business systems, and transform how members get access to services and benefits.
- ▶ We've replaced a patchwork of Division member communications with a more contemporary eNewsletter to contain both national and local content targeted to members in each Division (with ongoing budget savings).
- ▶ In the run-up to the Federal election, we developed our own first online EA Forum as a way for members to engage on election issues relevant to the profession.

MAJOR CONFERENCES AND CPD EVENTS FOR MEMBERS

CONFERENCES

Breaking News

- ▶ Engineers Australia has won the right to host the **World Engineers Convention** in Melbourne in 2019. Our original bid was lodged in Slovenia in September 2012 by Marlene Kanga and David Hood, and our successful bid announced in September 2013 in Singapore.

- ▶ **Another major international engineering event:**

International Conference on Telecommunications 2015, Sydney:

With stronger interaction between the ITEE College and the National Events team, the growth of events in the ICT space for Engineers Australia is stronger than ever. A successful collaboration between the College and National Events team, allowed us to secure the International Conference on Telecommunications in 2015.

We continue to work together on other bids, particularly in the robotics, software and web space and hope to continue the high level of international focused CPD.

– Peter Hitchener, Chair ITEE College

ICAS 2012

- ▶ The largest conference for the year was the 2012 Congress for the International Council of the Aeronautical Sciences in Brisbane, with over 800 delegates.
- ▶ Prof Murray Scott, Chair of our Joint Board for Aeronautical Engineering with the Royal Aeronautical Society, was announced as the incoming International President, one of the most eminent roles within the global aerospace sector.

CONFERENCE MANAGEMENT

- ▶ Engineers Australia hosted 17 major conferences (with three being international) with over 5,200 delegates. Six conferences were managed in-house.
- ▶ We continued to strengthen our in-house events management capability and achieved good results with better strategic event planning and financial management, and stronger collaboration with our Colleges and Technical Societies.
- ▶ For example, a partnership was formed between IChemE and our national events team to bring the Chemeca series in-house to deliver Chemeca 2014 (400 delegates) and Chemeca 2015, in conjunction with the Asia Pacific Confederation of Chemical Engineering and the International Conference on Coal Sciences and Technology. The event will bring approximately 1500 delegates to Melbourne in September 2015.

EMINENT SPEAKER TOURS

- ▶ In total 7 eminent speaker tours
- ▶ 2,700 delegates attended across all the tours
- ▶ Across all tours the speakers made 50 in person presentations and 4 presentations streamed to regional Queensland
- ▶ All delegates were national-based delegates

The most successful tour was Trevor Bird. We used streaming technology to reach the regional areas of Queensland. Although the numbers in the regions were not large, it was an important exercise that was valued by the members, especially as Queensland Division has such a large regional base.

SEMINARS/WORKSHOPS

- ▶ 10 national seminar/workshop series were run in the last financial year, with 780 attendees

We are proudest of the first time Bulk Material Handling Seminar, run in Perth in September 2012. Due to effective marketing and an excellent line up of speakers, we had over 100 registrations for a 1-day event and profit of \$20,000. It will definitely run again at Convention 2014.

AWARDS AND SPECIAL EVENTS

- ▶ 50 awards for colleges and technical societies were marketed for nominations and winners presented with prizes and certificates at various events around Australia
- ▶ The National Congress at Old Parliament House in May 2013 was the first to be organised by the National Events Team, with online registration and onsite reception as greatly-improved service for delegates
- ▶ The 2012 Warman Student Design and Build Competition was very successful, with our first team from Asia competing. The final awards dinner had a superb guest speaker, Professor Hugh Durrant-Whyte who presented his TED talk on robotics.

Once again, thanks a lot for the hard work and the passionate effort you put into organizing this large event up to every tiny detail. Your success in terms of the smooth run of the competition and all its surrounding activities is highly commendable.

– Feedback from the 2012 Warman Competition

TECHNICAL PUBLICATIONS

Our technical journals and conference proceedings are available to members as a member benefit via the Resources and Library section of the website.

In the last 12 months Engineers Australia members conducted over 73,000 searches across all databases.



Reports on CPD and other activities in each Division can be found at www.engineersaustralia.org.au/annualreport

POLICY AND ADVOCACY

POLICY ENGAGEMENT WITH GOVERNMENT

- ▶ A significant part of the value we provide to members arises from our ongoing advocacy activities. We are committed to ensuring that the interests of members are promoted to parliamentarians and government decision makers.
- ▶ We maintained our commitment to keeping government informed of our activities and policy positions during the year with a range of meetings with key departmental decision makers, and also supported this through 18 formal submissions to government inquiries and review processes, an increase from the previous year. During the year we held 24 formal meetings with senior government ministers and opposition shadow portfolio holders.

POLICY DEVELOPMENT AND INFORMATION

Engineers Australia regularly prepares formal reports, papers and policy notes on issues topical to engineering. These provide a valuable resource to members and policy makers alike, and examine a range of issues affecting the engineering profession. During the year, our research reports included:

- ▶ The Engineering Profession: A Statistical Overview (2012).
- ▶ 2012-13 Federal Budget briefing papers.
- ▶ Analysing Australia's Infrastructure Trends.
- ▶ Nine policy notes on the state and national engineering labour market.

SUSTAINABILITY ISSUES IN POLICY FORMULATION

- ▶ Engineers Australia continues to be mindful of the role of sustainability in engineering practice and sustainability was a central consideration in our formal submissions, policy and advocacy activities throughout the year.
- ▶ During the year Engineers Australia provided formal testimony to a Senate inquiry by the Committee on Environment and Communications into 'Recent Trends in and Preparedness for Extreme Weather Events.' Excerpts from Engineers Australia's submission were included in the Committee's final report.
- ▶ During 2012-13 Engineers Australia worked closely with the Sustainable Engineering Society to broker meetings with the Opposition environment spokesperson, the Hon Greg Hunt MP, to advocate for a greater role for Chartered Engineers in the Coalition's proposals for environmental assessment under the Environment Protection and Biodiversity Conservation Act 1999.
- ▶ In collaboration with the Sustainable Engineering Society, a formal submission was also made to the federal inquiry into the Regional Australia Renewables initiative conducted by the Australian Renewable Energy Agency.



All public policy documents are freely available for download on the Engineers Australia website.

www.engineersaustralia.org.au

MEMBER ENGAGEMENT WITH POLICY

- ▶ We ensure that members are kept informed of our activities through regular contributions to the Engineers Australia magazine, publication of web-based news items, and publishing items in subscriber electronic newsletters.
- ▶ During 2012-13 we published stories on a wide range of topics including the changing nature of the engineering labour force and various policy initiatives including the United Nations Year of Sustainable Energy for All.

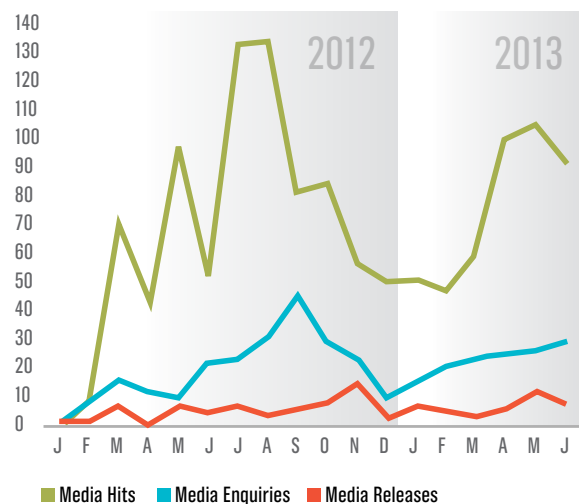
SPOKESPERSONS POLICY

- ▶ In May 2012, Council approved a new National Media and Communications Strategy, designed to increase the media profile of Engineers Australia through creating a more structured and responsive media engagement model.
- ▶ In November 2012, Council approved a new Spokespersons Policy 2012, designed to improve Engineers Australia's media engagement by making it more responsive, more consistent and more transparent and measurable. The changes put the onus of responsibility on individuals to ensure that their public positions are consistent with the organisation's agreed positions, and formalises a structure to ensure that all spokespersons have access to National Office support and resources to make media interaction as easy as possible.

MEDIA ENGAGEMENT

- ▶ During 2012-13, Engineers Australia's new media strategy continued to show progress. Our continued proactive approach to media engagement across the nation saw a marked increase in our media presence to a total of 984 dedicated stories over the year, spread across national (397 articles), regional (368 articles) and local (219) media outlets.
- ▶ A central component of this strategy is to ensure that major developments across the engineering profession and the organisation are publicised through formal media statements and interactions with journalists and media outlets. During the year we issued 66 formal media releases, more than twice the amount prepared in the previous financial year.
- ▶ Skills shortages and skills deployment across the engineering profession remained the most commonly reported topic across the media for the third year in a row. Nonetheless, we continued to attract a high number of media requests for expert commentary across a wide range of specialised engineering topics.

Media Overview 2012-2013



ACCREDITATION AND MIGRANT SKILLS ASSESSMENTS

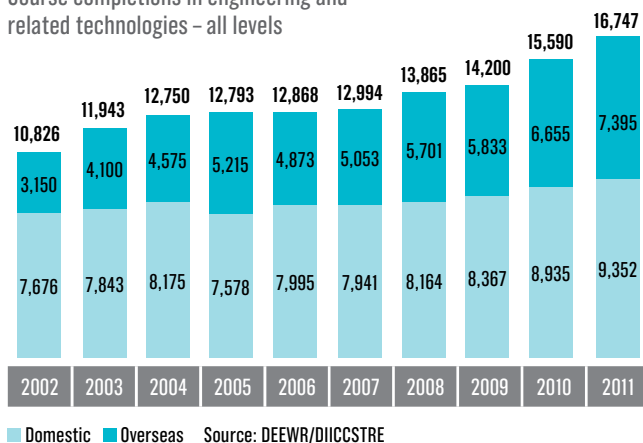
ACCREDITATION OF AUSTRALIAN ENGINEERING COURSES

- ▶ During the year, our Accreditation Centre in Melbourne considered the accreditation of over 160 programs at 18 providers: universities, TAFE institutes and offshore campuses.
- ▶ Reporting by providers clearly indicated the value of accreditation in the improvement of engineering qualification outcomes.
- ▶ Significant improvements in educational outcomes have resulted from the provision by the Accreditation Centre of arms-length educational consultants for providers who have experienced poor accreditation outcomes.
- ▶ The Accreditation Centre continues its close collaboration with the Australasian Association for Engineering Education. Joint workshops were provided nationally, with an emphasis on teaching for improved graduate outcomes and accreditation.
- ▶ The workshops are part of a drive by the Accreditation Centre to provide advice early in the accreditation process, to reduce workload for all stakeholders and improve accreditation outcomes.

STAGE 1 COMPETENCY STANDARDS

- ▶ The Engineers Australia Stage 1 competency standards are now considered fully compliant with the International Engineering Alliance Graduate Exemplar. In addition to ensuring compliance, some minor changes, approved by Council in February 2013, were made to emphasise the importance of sustainability in engineering education.
- ▶ Our policy objectives are to engage with academia to ensure engineering courses attract young Australians, and overseas students, into engineering careers.
- ▶ Growth in completions of engineering courses – undergraduate and higher levels – is dominated by overseas students.

Course completions in engineering and related technologies – all levels



- ▶ Australian engineering courses remain popular among overseas students enrolling at Australian institutions.

INTERNATIONALISING ENGINEERING QUALIFICATIONS

- ▶ Australia continues to be a leader in the international arena through its work with the International Engineering Alliance. A significant milestone was the re-election, for a further period of two years, of Professor Robin King FIEAust CPEng, former Chair of Engineers Australia's Accreditation Board.
- ▶ In the past year, Australia has mentored three countries seeking provisional membership of the Washington Accord: Sri Lanka, Philippines and China. Both Philippines and China were nominated by Australia, and granted provisional membership at the June 2013 meetings of the International Engineering Alliance. Australia will continue to support these countries as they move towards full signatory status.
- ▶ Australia is regularly invited to provide advice to the Accord executives: a sure indication of its leadership in international engineering education and accreditation.

DUBLIN ACCORD MEMBERSHIP – FOR ENGINEERING ASSOCIATES

- ▶ After receiving provisional signatory status of the Dublin Accord, Australia, through Engineers Australia, was granted full signatory status at the June 2013 meetings of the International Engineering Alliance, held in Seoul, Korea.
- ▶ The final step in this process of mutual recognition of qualifications for Engineering Associate was an evaluation by an international panel of our accreditation processes at several education providers. The outcome was a recommendation to a meeting of the Accord members in Seoul that Australia be granted full signatory status for the maximum period of six years. This was an excellent outcome to a process that ran for over three years.
- ▶ Intensive work continues to increase the number of programs accredited at the level of Engineering Associate in Australia.

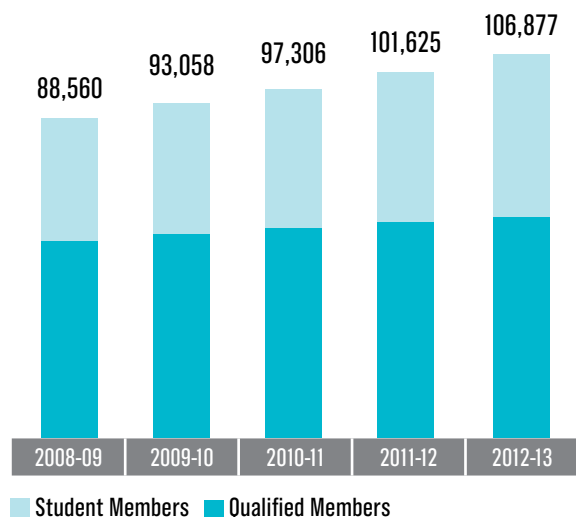
MIGRATION SKILLS ASSESSMENT

- ▶ During 2012-13, our Migration Skills Assessment unit received almost 6,900 applications from persons with engineering qualifications wishing to migrate permanently to Australia. At 30 June, turnaround time to process applications was some 19 weeks, and we continue to work to improve on this.
- ▶ Our assessment service remained very well regarded by Migration Agents and their clients, and with the Immigration Department and the Migration Institute of Australia.
- ▶ Engineering Education Australia continued to deliver the Commonwealth Government's authorized 'Professional Year' program for skilled graduate-temporary visa migrants.

MEMBERSHIP AND MEMBER SERVICES

- ▶ Total membership grew 5.2% to 106,877 during 2012-13. Next year, total membership will drop due to early removal of non-financial members.
- ▶ We've achieved strong growth in membership in Queensland and WA Divisions. Our **strENGth** campaign is intended to promote the value of membership, and particularly being Chartered, in all Divisions.
- ▶ We retain a healthy age profile for future membership. 58% of total membership is aged 35 and under. Excluding students, 30% are 35 and under.

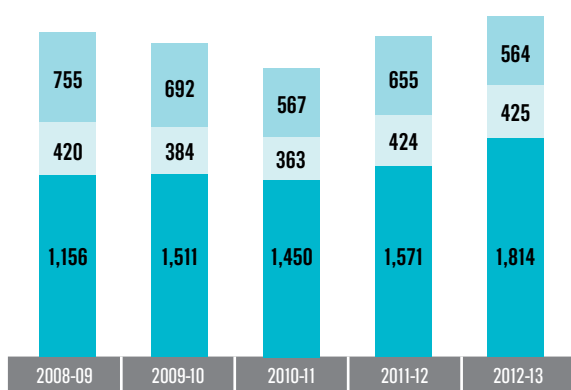
Continuing membership growth



Grade	2008-09	2009-10	2010-11	2011-12	2012-13	% incr last yr
Graduates	14,357	14,222	14,130	14,166	13,975	-1.3%
Members	35,360	37,184	38,683	40,502	41,933	3.5%
Fellows (and others)	5,463	5,548	5,619	5,588	5,690	1.8%
Qualified members	55,180	56,954	58,432	60,256	61,598	2.2%
Student members	33,380	36,104	38,874	41,369	45,279	9.5%
Total - at 30 June	88,560	93,058	97,306	101,625	106,877	5.2%

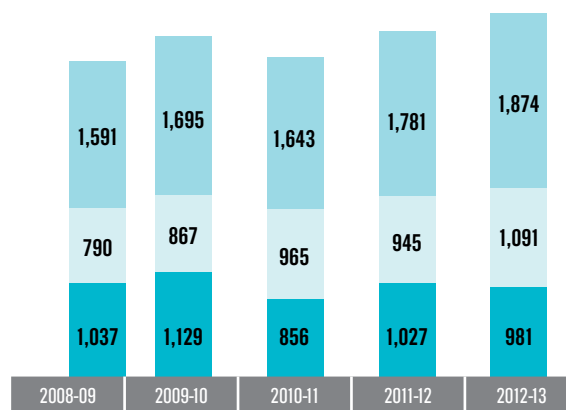
- ▶ Admissions to graduate grades continued to show an improvement, with student members who chose to upgrade to graduate membership reaching a five-year high of over 1,800, and total admissions of new graduate members reaching 2,800.
- ▶ A student and graduate strategy framework has been developed. A new business development role for engaging academia has been created. Student and graduate membership renewal communications have been improved and retention campaigns have been developed.
- ▶ New online technical products have been introduced targeting graduates. We have hosted workshops around Australia as part of an Australian Council of Engineering Deans project which is providing research to make membership more relevant for engineering students and graduates.
- ▶ Admissions to full member grades reached a five-year high of nearly 4,000.
- ▶ The proportion of members who are female continued to rise, to nearly 12,400 or 11.6% of total membership.

Admissions of new Graduate members



■ Student Upgrades ■ Readmissions ■ New Graduate Admissions

Admissions to full Member grade



■ Upgrades to Member ■ Readmissions ■ New Members Admitted

FIVE-YEAR FINANCIALS

ENGINEERS AUSTRALIA - OVERVIEW OF FINANCIAL RESULTS*

Five Years 2008-09 to 2012-13

	2008-09	2009-10	2010-11	2011-12	2012-13
	\$m	\$m	\$m	\$m	\$m
Income					
Net membership subscriptions	16.587	17.092	18.966	19.943	21.418
Sponsorships, grants and commissions	2.713	2.706	2.185	3.049	2.207
Events and publications	10.973	9.522	11.741	15.366	15.100
Subsidiary companies	7.361	7.644	8.319	10.111	10.802
	37.634	36.964	41.211	48.469	49.527
Expense					
Employee and consultancy expenses	14.737	18.171	19.238	20.964	24.715
Administration, travel, publication and IT expenses	11.337	10.366	10.501	10.281	10.771
Premises expenses (excl depreciation)	1.731	1.956	1.892	2.017	2.119
Depreciation and amortisation	1.175	1.099	1.188	1.259	1.715
Conference/meeting expenses	5.945	7.092	8.612	12.589	11.312
Other	1.983	0.680	0.383	0.492	0.453
	36.908	39.364	41.814	47.602	51.085
Income tax					0.003
Operating Surplus/(deficit)	0.726	(2.400)	(0.603)	0.867	(1.561)
Asset Revaluation	(1.009)	(0.451)	0.518	1.948	0.293
Increase in members funds	(0.283)	(2.851)	(0.085)	2.815	(1.268)
Total Members Funds	36.461	33.585	33.485	36.300	34.998

*Audited full and concise financial statements for the year ending 30 June 2013 will be presented at the AGM on 21 November 2013.

*They are available in PDF at www.engineersaustralia.org.au/annualreport.



ENGINEERS
AUSTRALIA

The summary and full versions of this report, as well as the full Group Consolidated Financial Report can be accessed online at:

www.engineersaustralia.org.au/annualreport

Comment on any aspect of this year's Annual Report is welcome.

Contact Member Services:

Phone: 1300 653 113

Email: memberservices@engineersaustralia.org.au

ISSN 1835-2537

Engineers Australia Annual Report 2012-2013

All rights reserved.

Printed copies of this summary report will be made available for our national and Divisional senior office bearers.

Ensure your membership details are current to stay up-to-date with Engineers Australia news and events.

Visit: www.engineersaustralia.org.au