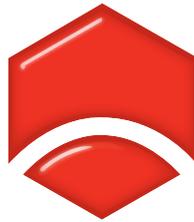




ENGINEERS AUSTRALIA  
THE NATIONAL FORUM  
FOR THE ADVANCEMENT  
OF ENGINEERING AND THE  
PROFESSIONAL DEVELOPMENT  
OF OUR MEMBERS



ENGINEERS  
AUSTRALIA

ENGINEERS AUSTRALIA:  

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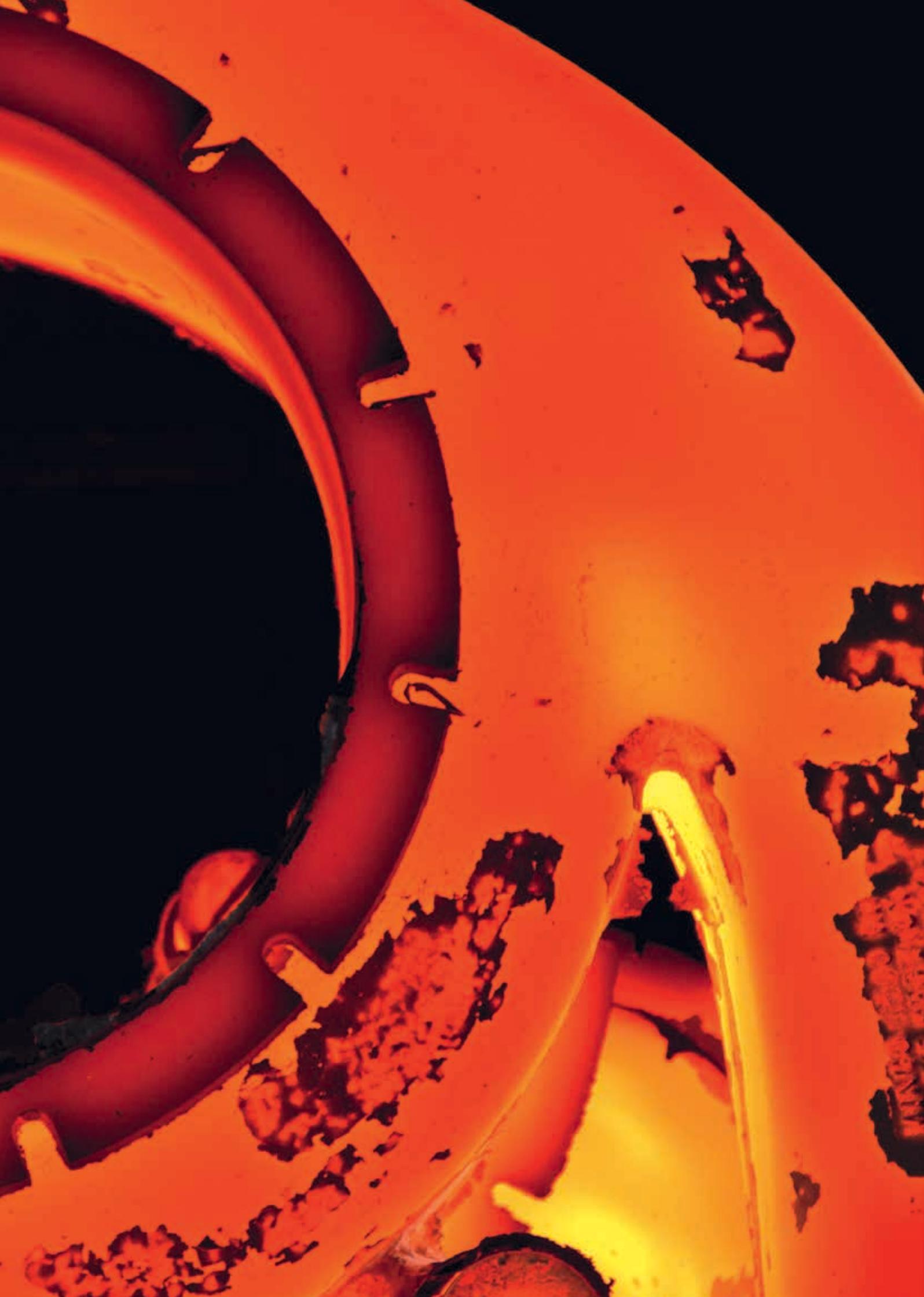
ANNUAL REPORT

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2011  
2012

[WWW.ENGINEERSAUSTRALIA.ORG.AU/ANNUALREPORT](http://WWW.ENGINEERSAUSTRALIA.ORG.AU/ANNUALREPORT)





## COMMUNICATION OBJECTIVES

This annual report of Engineers Australia for financial year 2011-2012 is presented by the Council for the business of the Annual General Meeting 2012, 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 2011.

### 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. In addition to our full report being available online, brief highlights should be provided in printed form to all of our financial members, rather than full printed reports, in a form intended to be of interest to them.

ISSN 1835-2537

**Engineers Australia Annual Report 2011-2012**

(incorporating the audited Annual Consolidated Concise Financial Report for the year ended 30 June 2012)

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

An online version is available at [www.engineersaustralia.org.au/annualreport](http://www.engineersaustralia.org.au/annualreport)

This report and the full Group Consolidated Financial Report can be accessed in PDF format at the website also.

Highlights from this report in a four-page printed summary will be distributed to members with the November 2012 edition of the Engineers Australia magazine.

Images courtesy of Engineers Media.

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

Contact: Manager Strategic Direction and Governance at Engineers Australia National Office 02 6270 6553



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**ENGINEERS  
AUSTRALIA**

# HIGHLIGHTS OF THE YEAR

**Our Report Card to Members**

**National President's Report**

**Chief Executive Officer's Review**

**Incoming President's Statement**

**Current Forward Plans**

**Our Reconciliation Action Plan**

**2012 – The Year of the Regional  
Engineering Team**

**From Our Division Presidents**

**From Our College Chairs**

**Honouring Service to the Profession**

## OUR REPORT CARD TO MEMBERS

### Specific priorities for 2011–12:

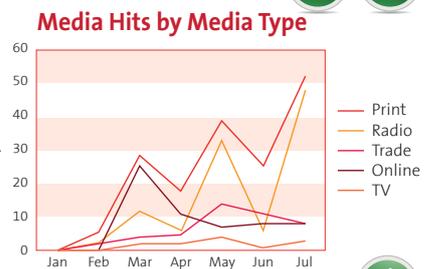
#### THE IMPORTANCE OF MEMBERS BEING CHARTERED

- > In 2012-13 we will complete our five-year program to ensure all Chartered members have been audited. At 30 June 2012 there were nearly 18,000 Chartered members whose CPD has been audited.
- > The net gain of 1,940 in current Chartered members included 230 granted Chartered through our mutual recognition agreements with 11 counterpart international bodies.
- > During 2012-13 we will convert to a much more accessible online Chartered assessment process. More than 6,000 Career Episode Reports were lodged this year, 27% more than last year.



#### ENGAGING WITH OUR MEMBERS, WITH GOVERNMENTS, AND WITH THE COMMUNITY

- > All significant national activities are now supported by media releases and active promotion to media outlets. Each peak on the 'media hits' chart corresponds with the release of a new Engineers Australia media campaign.
- > In addition to many meetings with governments through the year, Engineers Australia appeared before two Senate Inquiries – into skills shortages and into defence procurement.
- > On 28 June 2012 the Federal Minister for Industry and Innovation launched the report of the Engineers Australia Innovation Taskforce at Parliament House in Canberra.



#### 2011 AND 2012 THEME YEARS

- > Since last year's Annual Report, the *2011 Year of Humanitarian Engineering* theme continued with a successful national conference in November 2011 and at the international ASEAN conference in Sarawak, and further technical workshops in Divisions.
- > As a specific commitment as part of our Year of Humanitarian Engineering, we collaborated with members, other individuals, and groups including Reconciliation Australia to develop a *Reconciliation Action Plan*, launched on 9 August 2011, the UN's Day for World Indigenous Peoples. (A special report is included in our full Annual Report.)
- > Our Regional Special Interest Group launched a program of initiatives for *2012 Year of the Regional Engineering Team* across Divisions to improve collaboration and services for the more than 15% of Engineers Australia's members in regional and remote locations, and to promote understanding and awareness of the contributions and opportunities in regional engineering.

#### WORKING TOWARD NATIONAL REGULATION OF THE PROFESSION

- > We have been working to engage governments and the community on the benefits of nationally consistent legislation for regulation of the profession. Whilst there have been encouraging developments across some States and Territories, and support for our policy from the Senate Inquiry into engineering skills shortages, coordination and progress at a national level is challenging and will remain a longer-term goal for the profession.

#### EXTENDING OUR MAKE IT SO CAMPAIGN TO YOUNG AUSTRALIANS

- > During the year we continued a major review into how our Chartered brand should be part of a more relevant membership framework across the profession. Our plans to promote our Chartered credentials and to promote engineering as a career to young Australians will be progressed pending the outcomes from that review.
- > In its 10th year, our *EngQuest* online program for school children, with a humanitarian engineering theme, achieved 48,000 participants in 2011, the highest so far.

#### RENEWING OUR INFORMATION SYSTEMS FOR BETTER SERVICE TO MEMBERS

- > Our MIS Renewal Program is a major technology upgrade program of most of our current IT systems, with an overall budget of \$7 million. Major milestones in upgrading our website, our customer management system and our accounting system were achieved during 2011-12.
- > The launch of our first major integrated member application, our online Chartered assessment system *eChartered*, was scheduled for 1 July 2012 but will now be implemented in November 2012.

#### We strengthened further our financial position

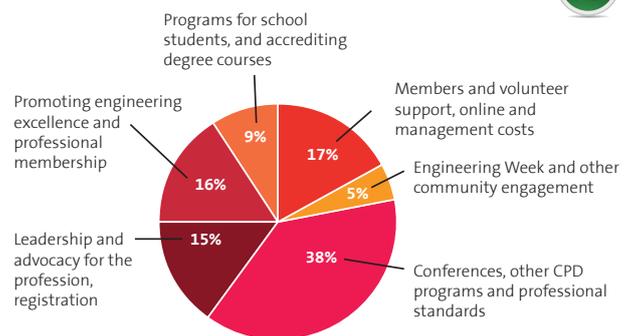
	2007-08	2008-09	2009-10	2010-11	2011-12*
Income	33.7	37.6	37.0	41.2	48.5
Expenses	33.5	36.9	39.4	41.8	47.6
<b>Operating surplus/deficit(-)</b>	<b>0.1</b>	<b>0.7</b>	<b>-2.4</b>	<b>-0.6</b>	<b>0.9</b>
Asset revaluation	3.3	-1.0	-0.5	0.5	1.9
Increase in members funds	3.5	-0.3	-2.9	-0.1	2.8
<b>Total Members' Funds</b>	<b>36.7</b>	<b>36.5</b>	<b>33.6</b>	<b>33.5</b>	<b>36.3</b>

\* Conference income and expenses now recognised separately, rather than net

**Key ongoing objectives:**

**SUPPORTING OUR MEMBERS IN ARRANGING EVENTS**

- Engineers Australia incurred \$38.0 million in expenses last year, including staff costs. This chart shows that 38% of these expenses went directly to support development and dissemination of our body of knowledge, the professional development of our members, and the maintenance of standards for professional practice.
- Nearly 1,200 technical events were arranged by our office bearers and members through our Divisions, in metropolitan and regional venues.
- We provided further support to our members by engaging with governments, briefing the media, and arranging awards events.



**DELIVERING SUCCESSFUL CONFERENCES AND OTHER EVENTS FOR MEMBERS**

- In March 2012 we introduced new practices for managing and supporting our major events which enable us to deliver a greater number of high quality events for members and the profession.
- 20 national and international conferences for our Colleges, Special Interest Groups and Technical Societies were supported during the year, attracting more than 4,000 delegates. Our biennial Engineering Leadership Conference, held in Adelaide from 30 May – 2 June 2012, was our flagship national event attracting 600 delegates.
- Over 4,000 members attended capacity events in many Divisions to hear 12 speakers during the year in our Eminent Speaker Program.

**SHOWCASING THE PROFESSION**

- We experienced record attendances during Australian Engineering Week in August 2011, with sell-out innovative events, technical presentations, and excellent media coverage across all Divisions.
- Over 4,000 members and their guests attended our Division and national annual Excellence Awards gala events. Some 320 outstanding projects were presented for Excellence Awards in Divisions, with 50 winning projects going on to our Australian Engineering Excellence Awards in Canberra in November 2011.

**MAINTAINING OUR INTERNATIONAL STANDING**

- Engineers Australia has forged close links with our counterparts in China, and we are giving support for China to achieve provisional Washington Accord status by 2013.
- We signed a bilateral agreement with IEEE in August 2011.
- Dr Peter Greenwood, a past National President of Engineers Australia, was elected as a Vice President of the World Federation of Engineering Organizations in September 2011.

**ENGAGING WITH MIGRANT ENGINEERS**

- Our priority is to provide more opportunities for engineers with qualifications gained overseas to enhance their own professional development. In various Divisions, such opportunities occurred through international engineers groups managing their own CPD programs and attending workshops including career skills, and through our engagement at State government level on strategies for employment of migrant engineers.
- The number of applications for assessment of qualifications – including overseas students studying in Australia – reduced by 18% this year. Our assessment service remains extremely highly regarded, and applicants are requesting additional services in increasing numbers.

**ENCOURAGING MEMBERSHIP GROWTH**

- Net growth in membership remains above 4% per annum, and we are developing strategies to aim for higher growth in future in order to be a more representative, credible and effective voice for the profession.

**... and with 4.4% growth in membership, we now represent over 100,000 members**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	14,549	14,357	14,222	14,130	14,166	0.3%
Members	33,710	35,360	37,184	38,683	40,502	4.7%
Fellows (and others)	5,487	5,463	5,548	5,619	5,588	-0.6%
<b>Sub-total</b>	<b>53,746</b>	<b>55,180</b>	<b>56,954</b>	<b>58,432</b>	<b>60,256</b>	<b>3.1%</b>
Student members	31,955	33,380	36,104	38,874	41,369	6.4%
<b>Total – at 30 June</b>	<b>85,701</b>	<b>88,560</b>	<b>93,058</b>	<b>97,306</b>	<b>101,625</b>	<b>4.4%</b>

## NATIONAL PRESIDENT'S REPORT

### Facing the big challenges

To say that 2012 has been a year of remarkable change for Engineers Australia would be somewhat of an understatement. We commenced the year with a new Royal Charter and By-laws. The significant efforts of recent Past Presidents in securing our new modern "constitution" has allowed us the freedom this year to focus on building an organisation ready and able to face the significant challenges ahead for engineering. Our engineering team must now take on the task of defining the requirements to both mitigate climate change to the greatest extent possible, and adapt to the unavoidable changes already locked in. Climate change is of course just one part of the much wider and very significant sustainability agenda.

This agenda, and the challenges it brings meant that a refocusing of Engineers Australia was necessary.

Our previous CEO Peter Taylor established a very solid base for Engineers Australia as a national organisation, and he left us in a very strong financial position.

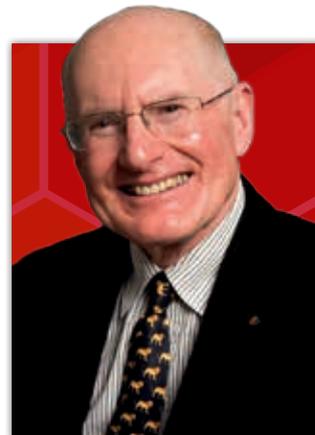
To build on Peter's legacy, we were extremely fortunate to find Stephen Durkin who commenced as our new CEO in January. Stephen quickly grasped the significance of the changes needed, and immediately set about refocusing the organisation. With Council support for a refocusing we listed member service, relevance and visibility, enhancing our learned society role, and the branding of "being chartered" and the associated need for national registration as the priorities, all underpinned by a staff culture of service to, and respect for members, and in delivering sustainability outcomes from all that we do.

Stephen has introduced a new operating model for the organisation, and the results in terms of member growth and satisfaction are already evident. I am excited and proud that Engineers Australia is embarking on a new era, and is travelling well to become a world-class professional association.

Flying well above the clouds at 40,000 feet, your Council has reoriented itself to perform more as a Board of Directors looking at the strategic issues of importance to the nation, the community, and to our profession while maintaining a strong fiduciary responsibility on behalf of our members.

It will be critical for our children's future that all engineering solutions enhance natural and social capital, and not be prioritised solely on economic benefit. It is becoming accepted by society that continued economic growth on our finite planet is impossible. We need to rethink our economic construct so that steady state economic security is assured while we build back and restore societal wellbeing, and the ecosystem services essential for life. Business as usual where we continue to accept negative impacts on the environment and society in order to assure continued "economic growth" is not an option for the future. I am confident that our engineering team, and Engineers Australia, are ready and able to assist in delivering the needed solutions.

I have been privileged to work with a remarkable group of National Councillors and I thank them all for their support and forbearance as we restructure and change for the future. I have also greatly enjoyed working with CEO Stephen Durkin. He has brought fun and laughter to what could have been an otherwise exhausting year. The enthusiasm with which all our staff have welcomed the new operating model and accepted their transformative role is refreshing, and bodes well for the coming years.



**Adj Prof David A Hood**  
FIEAust CPEng FIPENZ FISEAM MASCE  
National President 2012

The recent introduction of a new operating model at Engineers Australia will help us be more responsive and more member-focused. Our new structure comprises five inter-dependent business units, each to have a clear Business Plan articulating its purpose, strategy and objectives:

- > a National Office based *Member Engagement* function, responsible for the services we develop for members (incorporating our critical learned society activities);
- > a newly formed *Member Delivery* function leading the management of the member interface across the Divisions and the local delivery of member services;
- > a specialist *Education and Assessment* area focused on improving the professional recognition of our engineering teams;
- > a dedicated *Policy and Public Relations* team and
- > a more focused *Corporate Services* area.

We have made significant changes to a number of critical internal business practices, such as:

- > in the quality of management information to support Council's strategic focus and its move to operate more like a board;
- > a new more commercially-focused conference management team to support planning for the major national convention we will be running in November 2014; as well as
- > a new Member Service area to focus on member administration where we have introduced a case management process to improve our servicing of members.

These changes will all support the more modern and progressive leadership culture that we are putting in place at Engineers Australia.

## CEO'S REVIEW

### A very successful year – a good base for the future

2011-2012 has been a very successful year for Engineers Australia.

**For me personally, it was a great privilege to join the organisation in January 2012, with many critical projects underway and great opportunities ahead.**

In May 2012, we achieved a major milestone, welcoming our 100,000th member. Membership growth remains strong at over 4% including growth of our "Member" category at 4.7%. We also continue to see a healthy growth in Chartered with nearly 2,500 applications processed during the year.

We worked closely with our Colleges, Technical Societies and Special Interest Groups to deliver nearly 1,200 technical professional development events across the country, with many of these presentations available on-line.

Over the course of the year, we improved our engagement with university engineering faculties and enhanced our student programs, for example through revamped career forums. In addition, our schools program continued to increase in popularity, with 48,000 Australian primary school students participating in our EngQuest program in 2011 – another record.

In February this year, we introduced a new policy and media framework with the objective to increase and improve our external profile. I am pleased to report that we have received a positive response from all sides of politics, at both a Federal and State level and we have seen a five-fold increase in our media presence. We generated significant media coverage through our submission to the Senate Inquiry into Engineering Skills Shortages and through our views on the need for a national registration system for engineers.

Financially, we achieved positive results across the board: increased membership subscriptions, operating surpluses in the parent and both subsidiaries, and improved property valuations. Members' funds are up 8% to \$33.6 million.

In terms of our major projects, of particular note is our MIS (Management Information System) Renewal Project. We are now halfway through the implementation of this major transformational project. This complete renewal of our information systems will provide Engineers Australia with dramatically enhanced capability in the way that we communicate and provide services to members. One example is the new streamlined *eChartered* process – albeit its implementation has been delayed until November this year. Being Chartered is fundamental to our future and our new online assessment process will make it easier for members to become Chartered.

Engineers Australia has performed well over the past year through the efforts of our wonderful and dedicated volunteer office-bearers and staff. I thank you all for your important contributions.

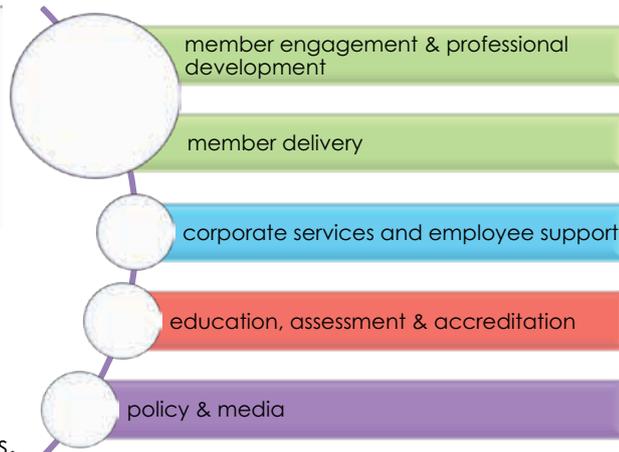


**Stephen Durkin**  
FIEAust  
Chief Executive Officer

**We are organising ourselves into critical organisational functions, orientated around our key stakeholders.**



Organising ourselves around these critical functions will allow us to unify our direction for the good of all members.



## INCOMING PRESIDENT'S STATEMENT

### **A vision to be relevant to every engineering professional and to promote engineering in the community**

I am looking forward to serving as National President in 2013 with great anticipation and enthusiasm. My goals will be closely linked with core values of Engineers Australia: to be highly relevant to the engineering profession, both members and non-members, and to make all Australians aware of the importance of engineering to the nation. I would like Engineers Australia to rediscover and build on these values over the coming 12 months.

### **Engineers Australia should be an indispensable part of the development and toolkit of every engineering professional in Australia, and that is my vision.**

The key challenge for Engineers Australia is to be equally valuable to all members of the engineering team and to be relevant to their professional aspirations for development and achievement.

It is vital that every member is supported in their professional development and has an opportunity to contribute effectively to the profession and to the vibrancy of the organisation. Appropriate structures, robust governance processes and the best technology are required to support member aspirations, whether located in remote areas of Australia or in the busiest cities of Asia and Europe.

I want to take the opportunity to advance the image of the engineering profession in 2013, and to show Australians – especially young people – that it is a dynamic, creative, innovative and exciting profession. Engineers have incredibly diverse backgrounds and work in diverse and evolving areas of technology; it will be an honour to celebrate that diversity through my own experiences. I am a chemical engineer, an Asian-born engineer and a proud mother, characteristics that will be embodied in the National President for the first time. I am passionate about being part of a richly diverse profession, and I am also passionate about a work-life balance that leads to a sustainable and fulfilling career – a career that contributes significantly to engineering and to a modern Australia.

As engineers, we need to participate more widely in public debates about Australia's future, and not just in infrastructure, energy and resources, but also in innovation, smart manufacturing and emerging technologies. I will endeavour to bring engineers to the forefront of these discussions and to contribute to the policy discussions at the upper levels of government decision-making. In these ways we, as engineers, can communicate our knowledge and make our greatest contribution to a smarter Australia.

The engineering profession is essential to modern life in Australia and globally, and we must ensure that Australians understand this. We must ensure that engineering is a highly desired, respected and sought after profession in the community.

Central to this vision will be young engineers, who are vital to future-proofing our organisation. The majority of engineers are below the age of 35 and I will be actively engaging young engineers in the leadership of Engineers Australia.

Engineers shape the world. I want 2013 to be a watershed year for the engineering profession: a watershed for recognition and a watershed for supporting and engaging engineering professionals of all interests.

**Together we can change the face of engineering in Australia.**



**Dr Marlene Kanga**

FIEAust CPEng FIPENZ

National President 2013

## CURRENT FORWARD PLANS

Each year all groups within Engineers Australia prepare a new annual Operational Plan for the following financial year, taking into account progress against our key strategic objectives and future priorities. The agreed plan then provides the basis for the budget.

### Council reviewed our key priorities in February 2012 when considering our Operational Plan for 2012-13.

In recent years Engineers Australia has delivered strong results for the profession. We continue to achieve healthy membership growth and we enjoy an excellent financial position.

Nevertheless, we are conscious that our membership is representative of less than half the profession in Australia. Also, feedback from our members suggests that we could do much better, particularly in delivering technical products and services.

### From 2012, we will focus on service to our members and value for their membership:

- > We will aim to always exceed our members' expectations for the quality of service they receive.
- > We must strengthen our members' perceptions of the relevance and value of their membership.

## OUR PRIORITIES FOR 2012 AND BEYOND

- > **To engage directly with our major stakeholders** on issues of mutual interest
- > **To strengthen our focus on service to members** and value for their membership:
  - promote Chartered certification and make it more accessible
  - promote our program for 2012 as the Year of the Regional Engineering Team
  - tailor our contact to the individual needs of more members
  - transform how we deliver professional development opportunities to members
  - work more closely with our subsidiaries to establish sustainable ways to provide practice notes and training courses
  - roll out our world-first online ethics awareness program for members
  - deliver our major \$7m Management Information Systems Renewal Plan
  - upgrade to contemporary premises which are better aligned with member needs and sustainability
  - make membership relevant to many more members of the profession
- > **To enhance our reputation with decision-makers** for independent, high quality policy advice, and to contribute to public policy debates where it is most relevant to the profession, on at least four key issues:
  - sustainability
  - responsible progress with infrastructure strategies
  - skills shortages and overseas qualifications
  - the value of high-tech design capability for the manufacturing sector
- > **To ensure that sustainability principles pervade the profession,** in education, in practice, and in our culture
- > **To achieve nationally consistent regulation of the profession**

## ENGINEERS AUSTRALIA – RECONCILIATION ACTION PLAN

**In 2011, Engineers Australia worked collaboratively with a range of individuals and entities such as Reconciliation Australia and our wider membership to develop a Reconciliation Action Plan (RAP), which was launched on 9 August 2011.**

The development of the RAP was undertaken by a Special Committee of Council chaired by National Councillor Bronte Strout (then National Vice President Corporate Social Responsibility). Engineers Australia’s RAP is a document that details steps and priorities that our organisation can undertake to assist in helping to achieve indigenous equality and to help build positive relationships between indigenous and non-indigenous people. It is not only aligned with our own business and values but also is meaningful, actionable and consistent with Australia’s ‘Closing the Gap’ strategy.

We resolved to deliver our own RAP as a key element of the *Year of Humanitarian Engineering*. We launched the RAP on 9 August 2011 on the UN’s Day for World Indigenous Peoples. One of the key actions in the RAP is about encouraging other associations to develop their own RAP, and our launch invited a number of kindred organisations to join us for a boardroom luncheon and discussion on ways to address the issue of disadvantage amongst our Australian indigenous population.

The RAP is about expanding awareness and knowledge; taking actions that shape values and behaviours and change attitudes; gaining a better understanding between cultures and taking actions that support reconciliation.

Engineers Australia has put in place actions to build relationships through A Statement of Commitment to Indigenous Australians and recognition through:

- > Welcome to country and acknowledgement of traditional owners at major functions and events
- > Heritage recognition of the Budj Bim Aboriginal Hydraulic Works
- > Conference artwork commissioned as a legacy of the *15th International Conference for Women Engineers and Scientists* held in Adelaide from 19-22 July 2011. The conference was co-hosted by Engineers Australia’s *National Committee for Women in Engineering* and the *International Network for Women Engineers and Scientists (INWES)*.

*Shown here as backdrop for Engineers Australia’s first woman National President (2008) and new Honorary Fellow Julie Hammer, and our second woman National President Marlene Kanga (2013)*

Actions around informing and educating members and external groups include:

- > Articles in the national Magazine and divisional newsletters on our RAP
- > Information and links on our web page about closing the gap
- > Information sessions at Divisions for members on reconciliation
- > Engagement with related building, construction and engineering associations on the development of our RAP
- > Panel presentations and a corporate lunch in Engineering Week
- > Promoting local indigenous community partnerships with Engineers Without Borders
- > Engagement with the Strategic Intervention for Housing and Infrastructure Program in Aboriginal communities in the Northern Territory

We are also encouraging greater participation in education that will lead to more indigenous engineering practitioners through our existing schools outreach programs, support for Indigenous Australian Engineering Summer Schools programs, and provision of science and technology programs to remote aboriginal programs in the Northern Territory, supported by Shell Australia.



## 2012 – THE YEAR OF THE REGIONAL ENGINEERING TEAM

Engineers Australia designated 2012 as the *Year of the Regional Engineering Team (YoRET)* with the theme *Regional Engineering: The Heart of Australia*.

Launched at National Congress in November 2011 by then Deputy National President David Hood, the theme year is inwardly rather than outwardly focused.

The program and objectives for YoRET are being overseen by the Regional Special Interest Group National Committee, chaired by Greg Mashiah, and comprised of a cross-section of representatives from Divisional regional groups. The prime benefits and major focus of YoRET is on delivery of existing or new internal Divisional activities with a regional engineering theme through interaction with YoRET committee members.

Regional Engineering Team members comprise more than 15% of the Engineers Australia membership, and the YoRET provides an opportunity for Engineers Australia to recognise and celebrate the contribution of these members. Mainly due to the vast distances in rural Australia, Regional Engineering Team members have difficulty in accessing the full range of benefits available to city-based Engineers Australia members.

### Aims

The YoRET aims to:

- > Improve access to CPD for regionally based members,
- > Increase awareness of engineering opportunities in regional areas,
- > Promote equity for all members of Engineers Australia and;
- > Generate an understanding of the value of the regional engineering team.

### Activities

Activities undertaken as part of the YoRET are being promoted through the Engineers Australia website, which also features an interactive map identifying all currently active regional groups. Engineering Team members living in areas with Regional Groups are encouraged to participate in their local group's activities.

With the program of activities yet to be completed, YoRET has strengthened ties between Division regional groups through activities which have already taken place, such as:

- > Launch events across Divisions
- > A YoRET newsletter distributed to Divisions
- > Articles in the EA magazine together with follow-up profiles of regional members
- > A media consultant has been engaged to write regional specific engineering articles for distribution across regional media outlets
- > Regional presentations under the Eminent Speaker program
- > A regional focus included in the 2012 Engineering Leadership Conference, including organising committee members chairing sessions and 9 regional sponsorships offered across the Divisions for attendance at ELC2012
- > Technical presentations, site tours and networking events in WA, NSW, Northern and Queensland Divisions
- > Presentations on *eChartered*

Through the rest of calendar 2012, further activities are planned, including:

- > Excellence Awards and Engineering Week events themed on regional engineering
- > Regional Engineering On Show to be held in Geelong
- > Queensland Northern Regional Conference to be held in Mackay.

### Services for regional members

In addition to the above activities, the National Committee has been collaborating with Engineers Australia National Office on key issues for regional members such as CPD access, policy, advocacy, equity and career preferences in line with the four main aims and focus of YoRET. Specifically:

- > The new *eChartered* process – it is hoped that this will deliver a product that will make it much more convenient for regional applicants to apply to be chartered
- > Webcasting – updates have improved search functionality and work is being done in relation to linking these with online CPD

The intent is that the outcomes delivered during 2012 the YoRET will provide a legacy of improvement in services for our regional members.



## FROM OUR DIVISIONS



### CANBERRA DIVISION

#### Doug Mitchell

*President*

We continued to promote the professional development of our members and advance the practice of engineering, through:

- > meetings with ACT politicians leading up to the ACT Election to promote environmental, infrastructure and engineering public policy,
- > support for TAFE engineering courses, and
- > preparations for the recognition of engineering contributions to Canberra 100 in 2013, which has been progressing well.

Our CPD program has grown significantly in number of events and attendance but cost pressure will require innovative solutions in the future. Whilst the 4,000 hours each of volunteer and staff effort is significant and highly appreciated, further integration across our domains is needed to increase the numbers of secondary students choosing maths and science – that will increase demand for degree and diploma courses to sustain engineer numbers needed in the ACT, and to encourage and promote professional formation through national registration that protects the public and promotes sustainability.

Increasing membership and promoting member benefit of becoming Chartered to younger members in all categories remains the challenge in order to arrest the aging profile of Canberra Division.



### NEWCASTLE DIVISION

#### Dr Himanus (Ron) Banerjee

*President*

There were a number of initiatives I wanted to implement during my term in office. These included engagement with the academic community, local industry, local politicians, regional members and the broader community.

The Division is also keen to put into effect the following projects/programs:

- > We are proposing a travelling scholarship in partnership with the University of Newcastle to provide an opportunity for young engineers to gain exposure to current domestic or international projects. This is subject to approval.
- > Our Education Sub-committee is looking at engagement between the University, TAFE and Schools. This includes increasing our visibility at both campuses through the use of multimedia presentations and improving the uptake of student membership.
- > Engaging with local industry in an effort to increase our profile and our membership.
- > Engaging with the regional members of our Division as part of the YoRET activities, with plans in place for a number of Division Committee members to attend a regional presentation providing the opportunity for members to engage with the committee.
- > Engaging with local political leaders to initiate dialogues on matters of mutual interest.

Our Engineering Excellence Awards night was an unqualified success with a large number of high quality submissions. We hosted a successful Engineering Week in August 2011 celebrating the Year of Humanitarian Engineering.



### NORTHERN DIVISION

#### Louise McCormick

*President*

Our themes for 2011 and 2012 were especially relevant for Northern Division. We hosted the very successful conference to conclude *2011 the Year of Humanitarian Engineering* – which notably included speakers from Timor Leste. *2012 the Year of the Regional Engineering Team* was significant since most of our members live and work in regional or remote areas – we conducted events in regional venues and National President David Hood with new CEO Steve Durkin visited Alice Springs to meet members. Eminent speaker Rob Heywood visited Gove.

The significance of engineering for Darwin is commemorated in the new Defence of Darwin Museum, for which Engineers Australia sponsored \$250,000 toward construction. The Museum was opened by our patron the Governor-General on 19 February, the 70th anniversary of the first bombing raid in 1942.

Our relationships with both sides of Parliament and with senior public servants remain strong, and many of them attend our events. We continue to press for legislation for registration of engineers.

The Gala Dinner and Engineering Excellence Awards were again highlights, with excellent attendance at both and a record number of entries. From the Administrator of the Northern Territory: "I am a connoisseur of awards nights and these were by far the best that I have attended!" Congratulations to CAT Projects with their Bushlight India project, awarded the *Sir William Hudson Award*, and member Jaswant Deo who was awarded Engineering Associate of the Year, at the national Excellence Awards.

Lastly, I would like to thank our sponsors, our management committee and other volunteers without whom we could not function, and our hard-working staff who keep Northern Division running smoothly.

## FROM OUR DIVISIONS

**QUEENSLAND DIVISION****Steven Goh***President*

Queensland has faced many challenges this year with the continued impact from the flood inquiry and a new government faced with major fiscal challenges.

We have achieved greater profile through the release of our response to the flood inquiry, which generated high coverage in all media, we continue to push for national registration through our political stakeholders, and we delivered a very successful Engineering Week program of more than 100 separate activities.

Engagement with member needs was strong, with over 600 Chartered applications, synchronous video-conferencing of technical meetings, and rollout of membership engagement using social media. Queensland Division membership grew by more than 1,500, the highest across all Divisions, to more than 22,000 for the first time.

We kept a strategic focus on new and existing schools and university programs, and supported the establishment of the Power of Engineering (Inc) which aims to double female enrolment and participation in engineering within the next five years.

These achievements would not have happened without the efforts of Engineers Australia's office bearers and staff who devote their time and efforts to lift the profile of the profession, and its role and relevance within the communities that we work and live in.

**SOUTH AUSTRALIA DIVISION****Gerry Doyle***President*

2011-12 was a successful and busy year for South Australia Division. The year started with the launch of the Engineering Wonders Publication, which recognises the amazing contribution that engineers in South Australia have made to improve infrastructure and wellbeing for our community. The publication was distributed to nearly 200,000 businesses and households across the State.

Our 2011 Engineering Excellence Awards Black Tie Ball was held on 16 September 2011, with 350 attendees. 25 submissions were judged, representing the high calibre of engineering in South Australia.

Our Sir Eric Neal Address brought together over 130 eminent guests to recognise and honour exceptional leadership in engineering. The Operations Manager of the Country Fire Authority Stewart Kreltzheim, delivered an inspirational keynote address about his experiences as Incident Controller on Black Saturday 2009. Stewart also shared stories about his six treks on the Kokoda Trail.

Adelaide was the venue for Engineers Australia's flagship biennial Engineering Leadership Conference from 30 May to 2 June 2012. South Australia Division in conjunction with CELM & YEA hosted four lead-in seminars, with themes drawn from the conference themes *Pathways to Leadership, Transitions in Leadership, Engineering a Better Society* and *Engineering Leadership in Industry*, to generate interest and discussion in preparation for the conference.

South Australia Division achieved 3.6% growth in membership and supported more than 320 CPD activities during the year.

**SYDNEY DIVISION****Brendyn Williams***President*

Sydney Division supports over 21,000 members in the Sydney basin and throughout much of regional NSW, who engage in nearly 50 technical, special interest and regional groups.

We have focused on stronger leadership of the profession through better collaboration – both externally and within the Division. Externally, we've again worked closely with IPWEA and Consult Australia, held joint events with the Safety Institute, the Environment Institute, and others with links to engineering, and we've strengthened engagement with the media and with government. We hosted seminars in Chatswood and Wollongong in support of the Warren Centre's PPIR Project, attracting great interest.

For the Division, we established committees for better coordination with Newcastle Division and for the Year of the Regional Engineering Team program, a Board of Engineering Practice for oversight of the CPD program within Sydney Metro, and a Regional Chairs Group for engagement activities throughout NSW.

Our regular showcase events for the profession during the year – Australian Engineering Week, the 600 seat Gala Dinner and Excellence Awards, two Fellows' Lunches at NSW Parliament House, and our Discover Engineering Days at strategic locations – were augmented with a CEO Breakfast with our new CEO Stephen Durkin in April, and the Steve Wozniak WOZ Live premier event in May.

Ongoing enthusiasm and support from staff, volunteer members and sponsors continue to deliver activities which have improved the profile of Engineers Australia in NSW and the professional development of members in their engineering careers.

FROM OUR DIVISIONS



**TASMANIA DIVISION**

**Keith Midson**  
*President*

2011-12 was a very successful year for Tasmania Division. A standout result was the selection of Dr Jane Sargison as National Professional Engineer of the Year last November. Her success has been an inspiration for many engineers throughout the State.

Our Parliamentary Support Program has been an ongoing success, with 13 State and Federal parliamentarians paired to two senior engineers. The degree of engagement to date has been varied, ranging from little contact to well established and trusted advisory roles.

Planning was set in place for a high profile advertising campaign for Australian Engineering Week, with television advertisements and a colour brochure planned for delivery to a large portion of the State's population. Our aim is to raise the profile of engineering in Tasmania with the community, as well as to inform on the education and career pathways into engineering.

Our Science and Engineering Challenge again achieved a high level of engagement and enthusiasm from High Schools and our annual 'Engineering Initiative' with Year 10 students again attracted more applicants than spaces available. This program provided students with group workshops at the University of Tasmania and other key engineering organisations, followed by a work placement under the supervision of an engineering mentor.



**VICTORIA DIVISION**

**John McIntosh**  
*President*

I am pleased to say that the Victoria Division Committee has moved their focus to the theme of *Get Relevant and Grow*. To *Get Relevant* we have two strategic themes: *Leadership in Urban Growth* and *Leadership in Innovation*. These are both important issues for engineering and the community at large. We have continued to engage the government on the importance of establishing Infrastructure Victoria to ensure long term planning and funding.

In order to *Grow* we have implemented the *strENGth* campaign to encourage our existing members to recruit new members. This is attracting new members and also new Fellows.

We continue to have gala events – Fellows Lunches, Thought Leader Breakfasts, Industry Forums – to support our strategic agenda and at every event encourage our members to become *Loud and Proud*, and promote the critical role that engineering plays wherever they go.

I have visited most of the Regional Groups to support the Year of the Regional Engineering Team and promote the excellent work done by engineers in our regional areas.

We continued our regular meetings with key Ministers in the State Government on issues including infrastructure spending, national registration, changes to planning regulations and opportunities and challenges for migrant engineers.



**WESTERN AUSTRALIA DIVISION**

**Barry Tonkin**  
*President*

We have a very active Division in WA and I am happy to have highlighted regional Australia as the heart of engineering in much of what we have been doing.

A highpoint was the WA CELM conference held in Bunbury, a regional town servicing the southwest of the State. The issue of mineral resources with its fly in/ fly out and drive in/ drive out engineers working in regional locations featured as a local topic, as did other contemporary issues.

Our activities have tried to provide support to our regional members that will allow them to become better engineers, and develop city and country engineering collaborations. Visiting regional groups gave me an opportunity to generate a better understanding of the value of the regional engineering team and taking the Science & Engineering Challenge to five regional centres in WA has heightened awareness of engineering to regional school children.

Australian Engineering Week publicity and activities helped spread the message about the vital role of engineering in bringing about a better quality of life for all.

## FROM OUR COLLEGES



### COLLEGE OF BIOMEDICAL ENGINEERS

#### Graeme Macaulay

##### Chair

As Chair of the Biomedical College the highlight of the year was the public release of *Crossroads – A Discussion Paper on Managing Medical Technology for an Assured Future*. This paper prompted significant discussion and feedback from our membership and governments across the country. With the benefit of this feedback, we have continued work and will soon release follow-on position papers.

Over the past 12 months the College has continued its work to provide the profession with CPD at a national level. The final joint conference between the Biomedical College and ACPSEM was held in Darwin in 2011, with the *Year of Humanitarian Engineering* as a strong theme throughout. Dedicated workshops enabled us to showcase the work of the Biomedical Engineering team. The first standalone Australian Biomedical Engineering Conference (ABEC) will be held in Brisbane in September 2012. Planning is all but complete with a great program being advertised.

The Board's links with the biomedical Technical Societies is a high priority for us. Engineers Australia is updating its policies on relations with Technical Societies, and the Board is keen that we develop good relationships and governance practices with them accordingly.

Finally, I would like to thank the Biomedical College Board for their support and hard work throughout the year. I am looking forward to assisting Karen Reynolds, our current Deputy Chair, in her new role as Chair following this year's National Congress.



### COLLEGE OF CHEMICAL ENGINEERS

#### Georgie Wright

##### Chair

It has been another successful year for the Chemical College Board with a number of highlights to report. The annual Chemeca conference held in Sydney was a major success which attracted almost 450 delegates and over 350 papers. The Awards for Excellence were announced at the conference dinner where Professor Max Lu from the University of Queensland was presented with the prestigious Chemeca medal. Organisation is well underway for the next Chemeca which will be held in Wellington in September 2012.

The National Committee on Fuels and Energy, led by Dr Mike Sargent fulfilled their objective on delivering an issues paper on Australia's future energy options and strategy. As I write this report, the paper had just been released to members for comment. This is an outstanding document and I commend the committee on leaving such an important legacy.

All of these achievements would not be possible without the unwavering dedication and drive of our volunteers, and I would like to express my appreciation to these individuals. A special thank you to a number of long-serving members who have recently concluded their time on the Board.



### COLLEGE OF CIVIL ENGINEERS

#### Matthew O'Hearn

##### Chair

The Civil College Board has been concentrating on governance over the last 12 months and has developed draft Terms of Reference for its National Committees and Roles and Responsibilities for Board Members.

The Governance Task Group has been consulting with our National Committees on their Terms of Reference and it is expected that these will be finalized prior to the drafting of new regulations by Engineers Australia.

I attended a College Chairs meeting in September 2011 and EPAC meeting in March 2012 at which, I am pleased to say, a much more consultative approach is being taken by Engineers Australia with its Colleges and Technical Societies. The Board elected another Deputy Chair in April 2012 in recognition of the large workload arising out of the College Chairs and EPAC meeting.

The Civil College Awards for 2011 were presented in Sydney in October in a joint event with the Structural College. The evening was a great success and I look forward to continuing this format with the Structural College.

Phil Blundy (Immediate Past Chair of the Structural College) and I developed and presented a paper to Council on the CROSS initiative. Council commended the initiative, however requested a business case be developed and tabled for further consideration. Both the Structural College and the Civil College Boards have been working with an independent analyst to develop the business case which is expected will be presented to Council in November 2012.

FROM OUR COLLEGES



**COLLEGE OF ELECTRICAL ENGINEERS**

**Mark Blundell**  
*Chair*

The Electrical College Board (ECB) initiated a number of initiatives during 2012, with two worthy of special mention:

- > The ECB has, for several years, believed that Australia will suffer in the future from lack of knowledge in nuclear engineering. To address this, a committee is being formed under the stewardship of Immediate Past Chairman Albert Koenig, with the aim of promoting the establishment of courses in nuclear engineering at tertiary level.
- > The Board has been concerned also about the lack of CPD opportunities for electrical engineers in building services and electricity utilisation areas. To address this, planning is well underway for a two-day National Building Services and Industrial Installation Conference and exhibition (NEBSII CON) in Sydney in April 2013. Congratulations to conference committee chair Mai Yeung for getting it to this stage.

This report provides an opportunity to recognise the achievements of the ECB's most prestigious annual awards winners. I would once again like to extend my congratulations to 2012 M A Sargent Medal winner Dr Trevor Bird, 2012 National Professional Electrical Engineer of the Year Dr Robert Barr, Graduate Electrical Power Engineer of the Year Alan Louis, and John Madsen Medal 2011 winner Prof Syed Islam.

I would like to take this opportunity to thank all the members of the ECB for their ongoing contributions and commitment to the operations of the Board.



**COLLEGE OF ENVIRONMENTAL ENGINEERS**

**David Gamble**  
*Chair*

I believe that the major priorities for the College of Environmental Engineers this year are to raise the profile of the College and to use this to re-engage with College members.

The good work done by members of the College on the DYD (Define your Discipline) Project has lifted the profile of the College, however most members do not realise what the College does, or how they could contribute to the work being carried out.

To this end, steps are being taken to introduce the College Board to members by putting their profiles on the EA website, to explain what the role of the College (and other Colleges) are, and what initiatives the College Board is working on. More direct communication and engagement with members is also planned. This will assist with future projects, such as updating the Stage 2 Competencies, and developing new Practice Notes.



**COLLEGE OF INFORMATION, TELECOMMUNICATIONS AND ELECTRONICS ENGINEERING**

**Peter Hitchiner**  
*Chair*

I have felt particularly challenged this year, by both members and non-members of the College, concerning the benefits of EA membership.

The extremely diverse ITEE areas of practice makes it very difficult to provide services, including CPD, tailored to all those occupational areas. The volunteer groups in the divisions do a great job, unfortunately the effort falls on relatively few.

Many of the benefits of membership derive from involvement by our many ITEE members in supporting and building the community of members which actually understands the importance of ITEE engineering. This is the best way to recognition and growth.

Engineers Media published a paper on bringing engineering back to software, which I co-authored and which received positive feedback. I encourage written feedback on my column in eMonitor, the College electronic newsletter. Social media offers much in building the ITEE community and we can offer more by increasing individual contributions. I have been working with the College Board to develop web-based portal services, but with a limited supply of volunteers and with many other activities, progress has been slow.

I wish to thank all the ITEE College Board members for their contributions over the past year. It is a great resource with only one of EA's divisions not yet represented. Four National Committees and a Technical Society contribute actively to the ITEE College activities. As the national significance of the digital economy grows, the ITEE College must become an ever stronger influence on developing national engineering resources: please help!



## COLLEGE OF MECHANICAL ENGINEERS

### Earl Heckman

#### Chair

Some of the more important responsibilities for the Mechanical College Board have been:

- > Provision of CPD by sharing each Division's program of CPD events, particularly in regard to interesting speakers.
- > Actively seeking quality speakers for the Eminent Speaker program.
- > Ensuring continuity of the Journal, particularly with the change of Editor this year. Well done Jonathan Couldrick!
- > Annual awards as recognition of achievement.

The AGM Michell Award was presented to John Hart-Smith at our presentation dinner in June 2012. The Sir George Julius Medal was awarded to Prof Adam Wittek and Prof Karol Miller, and the Young Mechanical Engineer Award was presented to Paula West, who is currently the Deputy Chair of the Mechanical College Board.

We realise that considerable work needs to be done to improve our working relationship with our four National Committees and Panels, and have delegated Board members to monitor, support and develop Terms of Reference for each of these groups.

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.

Finally, I thank all Mechanical College Board members for their support and voluntary work throughout the year.



## COLLEGE OF STRUCTURAL ENGINEERS

### Richard Eckhaus

#### Chair

This year the Structural College focused in two different directions. Firstly, in its principal learned society role, the Board concentrated on initiatives such as *Confidential Reporting on Structural Safety* (CROSS-Aust) and addressed different areas of the structural engineering discipline. The Board issued discussion papers on such topics as "Stage 2 Competency for Structural Engineers" and "Model Codes of Practice for Formwork & Scaffolding", and published two editions of the Australian Journal of Structural Engineering.

Secondly, the Board addressed its own governance to improve the running of the College, and published "Succession Planning for College Boards". We explored how we might increase services to and better communicate with members, and how the College can become more visible within EA and also with the general community.

I am pleased to report that our biennial conference (ASEC) held in Perth was a resounding success and I wish to thank Rob Rowbottom and the organising committee for their magnificent input. I would also like to thank Len Dalziel, who on behalf of the College presented a number of CPD lectures at regional centres in Queensland.

The College presented the John Connell Gold Medal to Prof Mark Bradford as the Eminent Structural Engineer for 2012 and the RW Chapman Award was conferred on S Sivanerupan, JL Wilson & EF Gad, for the best published technical paper in structural engineering in 2011 at the ASEC Conference in July.

I wish to thank all members of the Board and EA staff for their support and contributions during the past year.

## 2012 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 an Honorary 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.



### JOHN MICHAEL GRILL HonFIEAust CPEng EngExec FTSE

John Grill, chief executive and founder of WorleyParsons Ltd, has been one of the most successful engineering entrepreneurs of his generation. He helped found a small engineering consultancy in Sydney and in little more than three decades, built it into one of the great engineering firms of the world in the fields of oil and gas, infrastructure, minerals, metals and power, employing some 35,000 project services personnel.

John is an honours graduate in civil engineering from the University of Sydney, and holds a science degree from the same university.

John Grill's skill has been the ability to apply his civil engineering knowledge and experience to a sophisticated and competitive market sector. He has been able to integrate diverse and separate firms, maintain the key staff, create the culture which encourages individuals, and provide leadership which results in challenging opportunities for advancement.

An extraordinarily modest man, he supports a number of worthy causes with great generosity.

John Grill is cognizant of the role and needs of universities. His firm has been a notable sponsor of the University of Sydney and he was a major sponsor of a new Chair of Engineering Innovation. He has been an active supporter of The Warren Centre, the engineering think-tank within Sydney University.

The Academy of Technological Sciences & Engineering elected John Grill a Fellow in 2007 in recognition of his contribution to Australian engineering, and to draw upon his knowledge and experience which is always generously given.

John was recognized as an Honorary Fellow of the Institution of Engineers Australia in 2011 for his conspicuous service to the profession and his eminence in engineering practice.

Led by John, WorleyParsons contributes to the welfare of the nation by ensuring that leadership, skills, knowledge and experience are available and nurtured within Australia and acts as a beacon for another generation to aspire toward.

## HONORARY FELLOWS

**Council has resolved during 2012 that the following persons be designated as Honorary Fellows of Engineers Australia.**

**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.**

### **Dianne Boddy**

HonFIEAust CPEng (Ret)

Dianne Boddy always had a passion for innovative design. As a young high school graduate she went to work as a tracer for a large general engineering company in Melbourne that specialised in machinery for heavy mining, food processing and harvesting.

Unfazed by being a young woman with no technical training in an industrial workplace, she set about learning every aspect of design and manufacture. She would spend her meal breaks gleaning what she could from the fitters and turners on the factory floor.

Since her first major invention in the late 1950s of a new automatic peach feeding plant for canning, Dianne has enjoyed a long and distinguished career at home and internationally.

Her wide experience in engineering design ranges from R&D management and robotics, to specialised research equipment for materials testing and for geomechanics centrifuges. She has also developed equipment for environmental fluid dynamics research, sonar beacons for positioning deep-sea oil drilling rigs, as well as general automation devices.

A self-taught engineer who became Chartered in 1987, Dianne has approximately 2,000 documented designs, 40 patents, and 65 different types of conveying systems to her name. In 2010 she was awarded the A G Michell Award for Mechanical Engineering by the College of Mechanical Engineering.

Dianne is one of Australia's first women engineers, and has been an active mentor and role model for younger women joining the profession.

### **Prof Douglas John Hargreaves**

HonFIEAust CPEng EngExec RPEQ MAICD MSTLE

Doug Hargreaves commenced work in 1969 as an apprentice at Queensland Alumina (QAL), Gladstone and subsequently studied at Queensland Institute of Technology to qualify as BE (Mech) in 1975. He then returned to QAL as Project Mechanical Engineer.

Doug then studied at Leeds University UK, gaining his MSc and then PhD before returning to work as Research Engineer, initially at the Sugar Research Institute, Mackay and then at Ampol Refinery, Lytton.

In 1987, he commenced at QUT as Senior Lecturer in Mechanical Engineering, rapidly advancing through more senior positions to become Deputy Executive Dean, Faculty of Built Environment and Engineering in 2011.

Throughout his career he has demonstrated an untiring passion and extraordinary skills for teaching, research, leadership and management.

Doug has ensured ongoing benefits to the community through commitments to many organisations and especially to both Engineers Australia and the Salvation Army where he has demonstrated his untiring talents in a diverse range of activities.

Doug Hargreaves served as Engineers Australia's National President for 2010. He has made a remarkable contribution to the engineering profession and to its image in the community.

## HONORARY FELLOWS

### Douglas Graham Jones

HonFIEAust CPEng (Ret) JP

Throughout his career, Doug Jones has made a number of significant contributions, and in a variety of ways.

As an engineer, Doug was involved in determining the technical aspects of capital equipment projects. These included the design, manufacture and operation of capital equipment for the underground coal mining industry, designing roof bolting equipment to increase safety for miners, and managing the maintenance and major overhauls of long wall shearing equipment.

He was also involved in the design of large construction cranes. These included custom-built offshore platform cranes and barge-mounted logging cranes for the Canadian logging industry.

As well as providing leadership and management in the senior positions he held professionally, Doug made a major contribution to his profession during a continuous 17-year period as a volunteer office-bearer with Engineers Australia.

Doug rose from Branch Chairman to become President of the Sydney Division in 1994. At the national level, he served on the National Council for 12 years before serving as National President for 2004.

Doug has committed a lot of time to his community. In particular, he and his wife looked after young children from dysfunctional homes. The couple were acknowledged for their efforts with the program's annual award, presented by the then Governor of NSW RADM Peter Sinclair.

### Dr Douglas Bruce McInnes

HonFIEAust CPEng MICE

Dr Doug McInnes is a leader in geotechnical engineering in Western Australia as well as nationally.

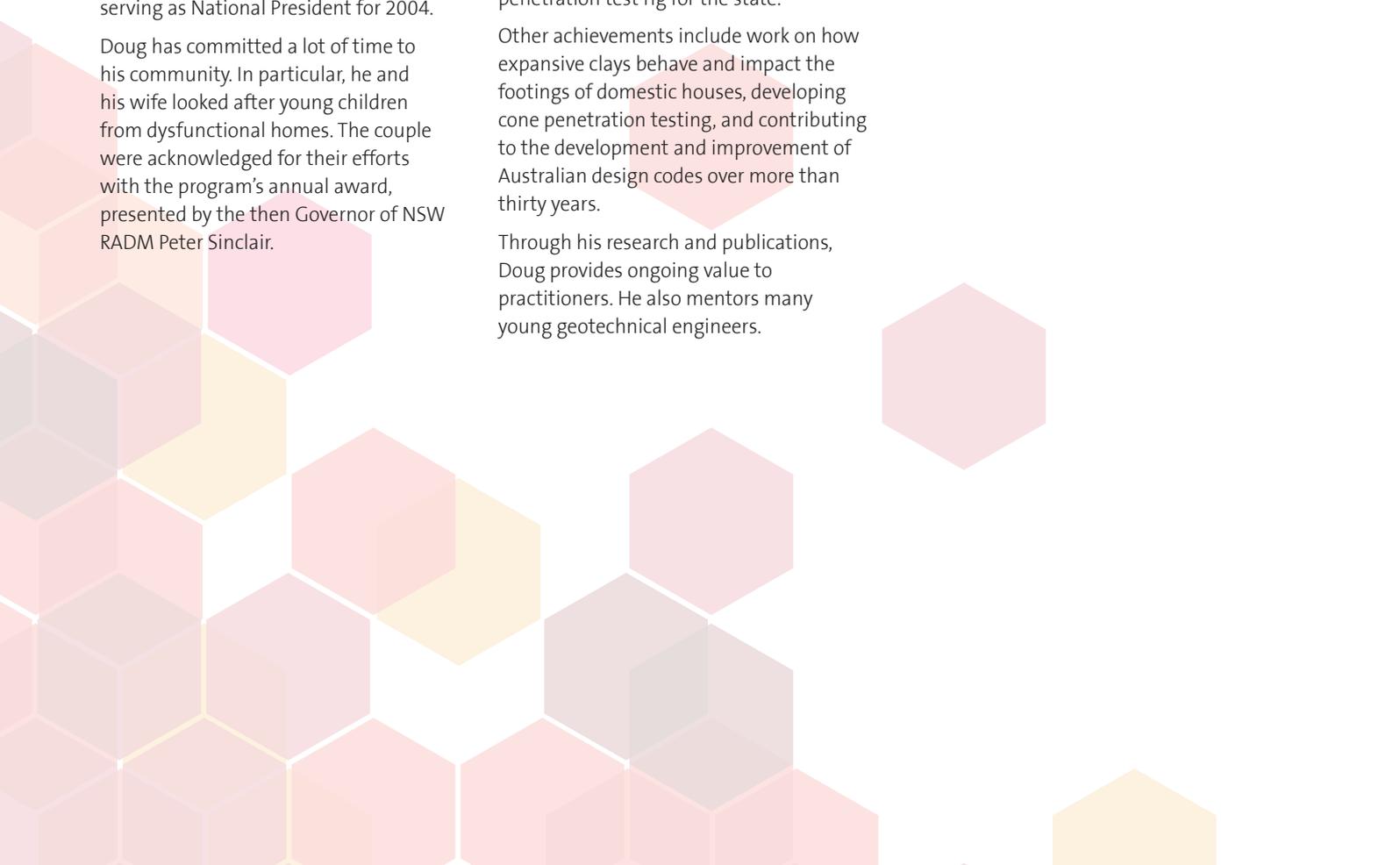
He is seen as the 'go-to-person' for pavement issues in WA by local government, thanks to his particular interest and expertise in the design and construction of roads and pavements. His commitment to using naturally occurring gravels has had an extremely significant impact on reducing the cost of rural roads in the state.

But it's not just roads and pavements Doug is known for. He has practised at the highest level across his discipline, for example, on dams, high rise buildings, embankments on weak soils, bridges, piled footings, mine, road, rail and processing infrastructure, harbours, houses on expansive soils, warehouses and industrial developments.

Joining the Public Works Department of Western Australia in 1974, Doug quickly set about creating a ground engineering service within the organisation. While there he achieved a number of firsts, such as creating a geotechnical drilling group and the first electric friction cone penetration test rig for the state.

Other achievements include work on how expansive clays behave and impact the footings of domestic houses, developing cone penetration testing, and contributing to the development and improvement of Australian design codes over more than thirty years.

Through his research and publications, Doug provides ongoing value to practitioners. He also mentors many young geotechnical engineers.



## COLLEGE AWARDS 2011-2012

There are many awards made each year across the many groups associated with Engineers Australia. The details of the awards and the recipients will in most cases be accessible in the respective pages of Engineers Australia's website.

The following list acknowledges the pre-eminent College awards made during financial year 2011-2012.

<b>Biomedical College</b>	<p><i>2011 David Dewhurst Award</i></p> <p>&gt; awarded annually to a professional biomedical engineer who has made a significant contribution to the discipline.</p>	<b>Dr Graham Cameron Grant</b>
<b>Chemical College</b>	<p><i>2011 Chemeca Medal</i></p> <p>&gt; awarded to a prominent Australian or New Zealand chemical engineer who has made an outstanding contribution to the practice of Chemical Engineering and who continues to serve the profession.</p>	<b>Prof Max Lu</b>
<b>Civil College</b>	<p><i>2011 Sir John Holland Civil Engineer of the Year Award</i></p> <p>&gt; provides a high profile focus on engineering achievement and serves as both a showcase for civil engineering and a focus for young people interested in pursuing a career in engineering.</p>	<b>Andrew Leventhal</b>
<b>Electrical College</b>	<p><i>2012 MA Sargent Medal</i></p> <p>&gt; a long established and prestigious award made by the Colleges of Electrical Engineering and Information, Telecommunications and Electronic Engineering.</p>	<b>Dr Trevor Bird</b>
<b>ITEE College</b>	<p><i>2011 IREE Neville Thiele Award</i></p> <p>&gt; the College's most prestigious award, named in honor of an outstanding Australian electronics engineer; the award recalls also the Institution of Radio and Electronic Engineers (IREE) in Australia.</p>	(not awarded)
<b>Mechanical College</b>	<p><i>2012 AGM Michell Medal</i></p> <p>&gt; presented for outstanding service to mechanical engineering through technical innovation or long-standing eminence, and/or notable and sustained leadership in mechanical engineering.</p>	<b>Dr Leonard John Hart-Smith</b>
<b>Structural College</b>	<p><i>2011 John Connell Gold Medal</i></p> <p>&gt; presented to an eminent structural engineer who is considered to have made an outstanding contribution to the practice of structural engineering in Australia.</p>	<b>Dr Samia Guirguis</b>





ENGINEERS  
AUSTRALIA

## OUR GOVERNANCE

Profile of Engineers Australia

National Congress

Council 2012

Governance Framework

- > Charter
- > Strategic Plan
- > Stakeholders
- > Ethics and Discipline
- > Performance Management
- > Corporate Social Responsibility

## ENGINEERS AUSTRALIA

**the national forum for the advancement of engineering and the professional development of our members**

- > **Engineers Australia is a member-based not-for-profit professional association.**
- > **It is the largest and most diverse professional engineers body in Australia.**
- > **At 30 June 2012 there were over 101,000 members, of whom over 41,000 were student members.**
- > **Over 5,000 of these members are domiciled overseas, in over 100 different countries around the world.**

### Structure

The Institution of Engineers Australia (Engineers Australia) is a body corporate constituted by Royal Charter, most recently changed in September 2011.

It is governed according to By-laws, which may be amended only by membership ballot.

The governing body is a nine-person Council, which is elected by a National Congress.

The National Congress comprises some 50 representatives covering our nine geographic Divisions, eight engineering College Boards and our seven special interest groups.

The Division Committees deliver the strategic plan to members, advise Council on Division issues and are bound by new Division Regulations (2010).

The Colleges fulfil the learned society functions of Engineers Australia and are governed by College Boards, and are bound by new College Regulations (2010).

Engineers Australia has four overseas Chapters in Singapore, Malaysia, Hong Kong, and the United Kingdom, and three interest groups in Thailand, the USA and the Middle East.

Some 30 multi-disciplinary Technical Societies and other related groups are affiliated with Engineers Australia to varying degrees and provide direct links with other professions with common interests.

There was no major change in the organisation during 2011-2012.

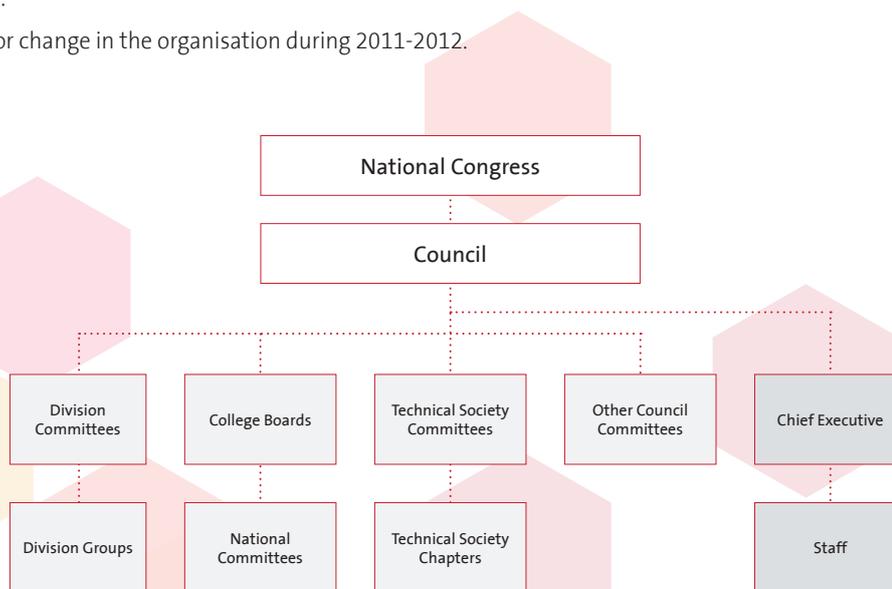
### Subsidiaries

Engineers Australia is supported by its two principal controlled entities – Engineers Australia Pty Ltd (trading as Engineers Media) and Engineering Education Pty Ltd – also not-for-profit companies with separate governing boards. Their results for 2011-2012 operations are summarised at pages 58-59.

### Annual General Meeting 2011

In accordance with By-law 20.1, the 91st AGM of the Institution of Engineers Australia was held in Canberra on 24 November 2011, including:

- > Presentation of the Annual Report and audited financial statements for 2010-2011, and election of auditors
- > Presentation of awards, Peter Nicol Russell Memorial Medal, and Honorary Fellow certificates
- > Presentational of aboriginal artwork commissioned at the International Conference for Women in Engineering and Science in July 2011
- > Retiring National President's address
- > Announcement of and welcome to the incoming National President
- > Reporting of the results of ballots for National Congress and Councillors for 2012.



### Simplified representation of lines of authority within Engineers Australia

Special interest groups are included under 'other Council committees'.  
The many support and liaison relationships that exist are not shown.

## NATIONAL CONGRESS

**National Congress is the peak representative body of Engineers Australia. It has specific powers and is comprised of some 50 delegates representing the various units and groups of Engineers Australia such as Divisions and Colleges.**

This Annual Report refers to the activities of National Congress during financial year 2011-2012. Under the 2011 Royal Charter and By-laws, delegates to Congress hold office for two years from 1 January in the year after they are elected.

### National Congress annual meeting November 2011

The 2011 National Congress held its annual meeting on 23-24 November 2011 and, among other things:

- > elected the 2012 National Deputy President, three Councillors for 2-year terms, and one Councillor for a 1-year casual vacancy;
- > noted the report from Council on Engineers Australia's performance and the actions of Council during 2010-2011;
- > noted the report on 2011 the Year of Humanitarian Engineering;
- > noted several status reports from various groups and activities;
- > approved post-nominal abbreviations for Engineering Associates;
- > noted the report of the Commissioner for Ethics and Discipline for the period 1 November 2010 to 31 October 2011;
- > commended the Civil and Structural College Boards for their initiative in regard to the introduction of structural safety reporting in Australia, and noted Council's action to request a business case; and
- > participated in workshop sessions on the themes of being Chartered, revised Stage 2 competencies, and national registration.

### The 2011 National Congress members were:

#### National President

Mr Merv Lindsay FIEAust CPEng

#### National Deputy President

Adj Prof David Hood FIEAust CPEng FIPENZ FISEAM MASCE

#### Immediate Past National President

Prof Doug Hargreaves FIEAust CPEng EngExec

#### Past National President

Mr Peter Godfrey FIEAust CPEng EngExec

### Councillors – not otherwise delegates to Congress

#### Councillor Responsible for Finance

Dr Marlene Kanga FIEAust CPEng

#### National Vice President International and National Policy

Mr David McHugh FIEAust CPEng

#### National Vice President Communication and Marketing

Mr Bruce Howard FIEAust CPEng

#### National Vice President Engineering Practice and CPD

Mr Douglas Gillott FIEAust CPEng

#### National Vice President Corporate Social Responsibility

Mr Bronte Strout FIEAust CPEng

### Delegate elected by members resident outside Australia

Mr Brian Gillon FIEAust CPEng



NATIONAL CONGRESS

**Delegates elected by members of the Divisions**

**Canberra Division**

Mr Tom Brimson FIEAust CPEng

**Newcastle Division**

Mr Barry Finlay FIEAust CPEng

**Northern Division**

Mr Peter Hagan FIEAust CPEng

**Queensland Division**

Mr Sam Fernando FIEAust CPEng

Mr Geoff Haigh FIEAust CPEng

**South Australia Division**

Mr Phillip Campbell FRAES CEng FIEAust CPEng

**Sydney Division**

Prof Alex Baitch HonFIEAust CPEng – Councillor and National Vice President Education and Assessment

Mr David Edwards FIEAust CPEng

Dr Michael Myers FIEAust CPEng EngExec OAM

**Tasmania Division**

Mr Greg Walters FIEAust CPEng EngExec

**Victoria Division**

Mr Geoff Hayes FIEAust CPEng

Mr David Eltringham FIEAust CPEng

Ms Madeleine McManus FIEAust

**Western Australia Division**

Prof Mark Bush FIEAust CPEng

Prof Tony Lucey FIEAust

**Delegates elected by Division Committees**

**Canberra Division**

Miss Jennifer Murray FIEAust CPEng

**Newcastle Division**

Mr Paul Reynolds MIEAust

**Northern Division**

Mr Len Chappell FIEAust CEngT

**Queensland Division**

Mr Andrew Chapman MIEAust

**South Australia Division**

Dr David Cruickshanks-Boyd FIEAust EngExec

**Sydney Division**

Mr Kevin Dixon FIEAust CPEng

**Tasmania Division**

Mr Keith Midson FIEAust CPEng

**Victoria Division**

Mr Norman Tickner FIEAust CPEng

**Western Australia Division**

Ms Lorie Jones FIEAust CPEng

**Delegates elected by College Boards**

**Biomedical**

Mr Graeme Macaulay MIEAust

**Chemical**

Adj Prof Brian O'Neill FIEAust CPEng

**Civil**

Mr Matthew O'Hearn FIEAust CPEng

**Electrical**

Mr Mark Blundell FIEAust CPEng

**Environmental**

Dr Julia Lamborn FIEAust CPEng

**ITEE**

Mr Peter Hitchiner FIEAust CPEng

**Mechanical**

Mr Graeme Field MIEAust CPEng

**Structural**

Mr Philip Blundy FIEAust CPEng

**Delegates elected by associated bodies**

**Committee of Society Chairs**

Mr Douglas Roser FIEAust CPEng

Mr Brian Truman CompIEAust

**Centre for Engineering Leadership and Management**

Dr Mark Toner FIEAust CPEng EngExec

**Engineering Technologists**

Mr Hari Krishnan FIEAust

**Engineering Associates**

WGCDR Ross Magno AFIEAust CEngA

**Women in Engineering**

Mrs Michelle Shi-Verdaasdonk MIEAust

**Young Engineers**

Ms Carla Cher GradIEAust



*Bronte Strout, Doug Gillott,  
Madeleine McManus, Bruce Howard, David Hood,  
Greg Walters, Marlene Kanga, Merv Lindsay, Alex Baitch*

## COUNCIL 2012



### **National President**

**Adjunct Prof David Hood** FIEAust CPEng FIPENZ FISEAM MASCE

Adj Prof David Hood, a civil and environmental engineer, is Chairman of his own consulting practice, and also leads the sustainability program for the CRC for Infrastructure and Engineering Asset Management (CIEAM) based at QUT. David, an accredited Presenter with Al Gore's Climate Project, is the Founding Chairman of the Australian Green Infrastructure Council (AGIC). David was a founding Director of both the Australian Council of Built Environment Design Professions (BEDP) and the Australian Construction Industry Forum (ACIF). He 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.



### **National Deputy President**

**Dr Marlene Kanga** FIEAust CPEng FIPENZ

Dr Marlene Kanga is a chemical engineer with long experience running her own businesses, mainly in risk engineering and electronic surveillance applications. She was Chair of Engineers Australia's Women in Engineering National Committee from 2007 to 2009, and took a major role in the 2007 Year of Women in Engineering campaign. She has served as Chair of Engineers Australia's Innovation Task Force and as Chair of the Audit and Risk Committee. Marlene has been a member of Congress since 2007, was elected to Council in 2007 and elected National Deputy President in November 2011.



### **Immediate Past National President**

**Mervyn Lindsay** FIEAust CPEng

Merv Lindsay is a civil and structural engineer and principal of Lindsay Dynan Consulting Engineers, a medium size consulting practice with offices in Sydney and Newcastle. He has served Engineers Australia in many roles over the past 30 years, including past President of Newcastle Division. Merv has been a member of Congress since 2002, he was elected to Council in 2006 and elected as National Deputy President in 2009.

COUNCIL 2012



**National Councillor**

**Prof Alex Baitch** HonFIEAust CPEng

Prof Alex Baitch is an electrical engineer and principal of his own consulting practice in electrical distribution, utilisation and energy management and is a Visiting Professorial Fellow at the University of Wollongong. He has served Engineers Australia in many roles over the past 30 years, including Chairman of the Electrical College, director of Engineering Education Australia, a director of RedR Australia and being a member of the Board of Management. Alex has been a member of Congress since 2009 and was elected to Council in 2009. He has chaired Council's Special Committee on Being Chartered since 2011 and the Audit and Risk Committee since 2011.



**National Councillor**

**Mr Doug Gillott** FIEAust CPEng

Doug Gillott is a mechanical engineer specialising in complex mechanical systems in defence, rail and energy sectors and their through life management. Doug is a Past President of South Australia Division and has been active as an office bearer since 1997. He was elected to Council in November 2010 after two terms as a member of Congress. His primary objective is to make sure that members' concerns are at the forefront of Engineers Australia's planning.



**National Councillor**

**Mr Bruce Howard** FIEAust CPEng

Bruce Howard is an electrical engineer and has built his career working with NSW power utilities. He is a past President of Sydney Division, and has been a member of National Congress since 2001. Bruce was elected to Council in 2002, and has held a number of portfolios including Public Policy, Communication and Marketing and was elected as Councillor Responsible for Finance (and Chair of Engineers Australia's Audit and Risk Committee) for a number of years.



**National Councillor**

**Ms Madeleine McManus** FIEAust

Madeleine has combined degrees in Mechanical Engineering and Commerce. She has a professional background in engineering management, project management, consulting and executive search, both in Australia and overseas, particularly France. She has served on a number of industry and community boards, including Monash Engineering Foundation Board, Victorian Government Supply Chain Consultative Committee, Timberline Ski Lodge and National CELM Board. Madeleine is a Past President of Victoria Division, and was the first women elected to that role. She has served a number of years on Congress (2007-2008 and again in 2010-2011) and was elected to Council in 2011.



**National Councillor**

**Mr Bronte Strout** FIEAust CPEng

Bronte Strout is a civil engineer with long experience in business and project management. He has a strong background in infrastructure development and contract documentation and is experienced in leading multidisciplinary teams in large engineering projects. He is a past member of the Civil College Board and a past President of South Australia Division. Bronte has been a member of Congress since 2006 and was elected to Council in 2007.

Since being on Council he has made significant commitments to Education and Assessment, Corporate Social Responsibility and he chaired a committee of Council that successfully delivered the Engineers Australia Reconciliation Action Plan.



**National Councillor and National Vice President (Finance)**

**Mr Greg Walters** FIEAust CPEng EngExec

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

COUNCIL 2012

**Council is the nine-person peak national policy-making and governing body of Engineers Australia, responsible for day-to-day leadership. It meets five times a year and interacts with senior management on a continuous basis. Councillors are elected from the National Congress.**

The Council determines the regulations and policies which are binding on members, office bearers and staff. The Council appoints and directs the Chief Executive Officer, who conducts the ordinary business of Engineers Australia through the staff in National Office in Canberra and in Division offices around Australia.

National Councillors are members of Engineers Australia, are bound by a Council Code of Practice, and participate in an annual Council self-evaluation. National Councillors are provided with a structured induction and governance training.

**Council Meetings 2011-12**

17 August 2011	Canberra
14 October 2011	Teleconference
21-22 November 2011	Canberra
28-29 February 2012	Canberra
30 May 2012	Adelaide

**Significant Council Actions of 2011-12**

- > Agreed arrangements and delegations in regard to recruitment of a new Chief Executive Officer;
- > Agreed recommendations from the final report of its Special Committee on Being Chartered;
- > Agreed to abolish 40-year free membership benefit from 1 July 2017;
- > Approved the 10-year financial plan, the operational plan for 2012-13 and key priorities, and the 2012-13 budget;
- > Approved revised Australian Engineering Competency Standards Stage 2 for Professional Engineers, Engineering Technologists and Engineering Associates;
- > Approved EA's Reconciliation Action Plan and requested the Steering Committee to include a report in the 2011-12 Annual Report on achievement of RAP goals, and to develop a refreshed RAP in July 2012;
- > Approved the six month review and revised budget for 2011-12;
- > Made a number of urgent transitional regulations in the wake of Vice-Regal assent to the 2011 Royal Charter and By-laws;
- > Confirmed by ballot the recipient of the Peter Nicol Russell Medal and conferring of Honorary Fellows for 2011;
- > Undertook an effectiveness review into its use of Special Committees;
- > Agreed to refer revised post-nominal abbreviations for Engineering Associates to Congress for approval;

*Engineers Australia's Council meeting at the South Australia Division offices in May 2012*



## COUNCIL 2012

- > Approved a corporate social responsibility policy, and revised travel, privacy, and risk management policies;
- > Approved a number of external appointments;
- > Approved revised Terms of Reference for the Centre for Engineering Leadership and Management;
- > Commended the Civil and Structural College Boards for their initiative in regard to the introduction of structural safety reporting in Australia, and requested the CEO to present a business case;
- > Requested its Honours and Awards Committee to implement a review and changes in some awards procedures;
- > Approved revised Terms of Reference and appointments to its International Committee;
- > Monitored progress on major initiatives including the revision of the Australian Rainfall and Runoff publication, and the Management Information Systems Renewal Program; and
- > Directed the CEO to develop a Safety Management System and an Emergency Management Plan.

### Committees of Council 2011

The 2011 Standing Committees of Council were:

- > **Audit and Risk Committee**
- > **Honours and Awards Committee**
- > **International Committee**
- > **Accreditation Board**
- > **Remuneration Committee**

The 2011 Special Committees of Council were:

- > The **Review Committee of Council on Members Being Chartered** continued its work from 2010, and submitted its final report to Council in May 2012, with a wide range of recommendations relevant to our ongoing membership value proposition.
- > The **CEO Succession Planning Committee** continued its work from 2010 to assist Council in the appointment of the new CEO, with the selection of Mr Stephen Durkin announced at National Congress in November 2011.
- > The **2011 Year of Humanitarian Engineering Committee** continued its work from 2010, and presented its final report on achievements during 2011 to Council in November 2011.
- > The Regional Special Interest Group National Committee continued in its role of Steering Committee for **2012 Year of the Regional Engineering Team**.
- > The **Post Ballot Committee** from 2010 ceased activity in May 2012 in accordance with the February 2012 revision to its Terms of Reference.
- > The **Disciplinary Process Review Steering Committee** from 2010 has been inactive pending redrafting of the new Engineers Australia Regulation and presentation to Council and National Congress.

### Committees of Council 2012

Members of the Standing Committees of Council for 2012 are:

#### Audit and Risk Committee:

Prof Alex Baitch HonFIEAust CPEng (Chair)  
Mr Greg Walters FIEAust CPEng EngExec  
Mr Bronte Strout FIEAust CPEng  
Mr Will Laurie (External member)

#### Honours and Awards Committee:

Mr Ian Pedersen HonFIEAust CPEng EngExec  
Dr Martin Cole FTSE HonFIEAust CPEng  
Dr Tom Connor AO FTSE MASCE HonFIEAust CPEng  
Maj Gen Bill Crews AO HonFIEAust CPEng

#### International Committee:

Mr Mervyn Lindsay FIEAust CPEng (Chair)  
Dr Marlene Kanga FIEAust CPEng  
Mr Bruce Howard FIEAust CPEng  
Dr Peter Greenwood FIEAust CPEng EngExec  
Emeritus Prof Robin King FIEAust CPEng  
Mr Paul Mitchell FIEAust CPEng

#### Accreditation Board:

Emeritus Prof Robin King FIEAust CPEng (Chair)  
Mr Richard Bevan FIEAust CPEng  
Dr John Yeaman FTSE FIEAust CPEng  
Mr Neville Power FIEAust CPEng EngExec  
Prof Alex Baitch HonFIEAust CPEng  
Ms Shireane McKinnie FIEAust EngExec  
Emeritus Prof Elizabeth Taylor HonFIEAust CPEng  
Dr David Robinson FIEAust CPEng  
Dr Peter Hoffmann FIEAust CPEng

#### Remuneration Committee:

Mr Mervyn Lindsay FIEAust CPEng (Chair)  
Adj Prof David Hood FIEAust CPEng  
Dr Marlene Kanga FIEAust CPEng

#### Special Committees

Council established no new Special Committees for 2012.



## GOVERNANCE FRAMEWORK

### Royal Charter and By-Laws

**The Institution of Engineers Australia (Engineers Australia) is a member-based not-for-profit professional association, constituted as a body corporate by Royal Charter.**

### New Charter and By-laws

Following a successful membership ballot in October 2010, the Governor-General of the Commonwealth of Australia, Her Excellency Ms Quentin Bryce AC granted a new 2011 Royal Charter and approved new By-laws, dated 26 September 2011. The original and all previous supplemental charters and by-laws were revoked. Transitional provisions in the new charter and by-laws validate actions taken under the previous charter and by-laws.

### Purpose

Under the Royal Charter, the purpose of Engineers Australia is to advance the science and practice of engineering for the benefit of the community.

Engineers Australia will achieve its purpose by:

- > educating its 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 its members; and
- > informing community leaders and decision-makers.

### Strategic Plan 2010-2015

This Annual Report is the second to be prepared against the backdrop of our five-year Strategic Plan 2010-2015. The plan is available at [www.engineersaustralia.org.au/strategicplan](http://www.engineersaustralia.org.au/strategicplan) in both online and downloadable forms.

The Strategic Plan includes our vision, mission and values, and sets out 21 broad strategies across six strategic domains. It identifies a number of key indicators for success relevant to each domain.

### Mission and Vision

Engineers Australia is the national forum for the advancement of engineering and the professional development of our members.

In our preferred future:

- > *our community will look to Engineers Australia's members to create engineering solutions for a sustainable future*
- > *Engineers Australia will ensure that the standards for engineering practice are world-class.*

### Values

The new Strategic Plan carried forward the values and guiding principles from the previous plan. Since then, the new Code of Ethics and its supporting Guidelines on Professional Conduct have been approved by Congress. Members of Engineers Australia commit that, in the course of their engineering practice, they will:

- > demonstrate integrity
- > practice competently
- > exercise leadership
- > promote sustainability.

Full detail of the Code of Ethics and the Guidelines on Professional Conduct can be found at [www.engineersaustralia.org.au/ethics](http://www.engineersaustralia.org.au/ethics)

Further, the Council of Engineers Australia adheres to a *Council Code of Practice*, office bearers are bound by our *Office Bearer Code of Conduct*, and staff are bound by our *Code of Conduct for Staff*.

### Key Strategic Goals

Our six Strategic Domains provide the framework for achieving our mission and vision over the 2010-2015 timeframe:

#### 1 Community Engagement

Provide a forum for members of the profession to engage more directly in partnership with our communities on issues of concern to them

#### 2 Body of Knowledge and Professional Development

Provide a forum to advance the science and practice of engineering to the highest standards

#### 3 Leadership and Influence

Provide a respected voice for the profession to influence leaders and decision-makers on public policy and wider community issues

#### 4 Recognition, Promotion and Membership

Inform our members and our stakeholders about the contribution of the profession in ways that promote its image and standing

#### 5 Education and Qualification

Promote engineering as an attractive career option for young Australians of all backgrounds, and for others seeking to practise as engineers

#### 6 Internal Structure and Administration

Ensure that our members and our staff have the best possible organisation, structures and support for them to work together to achieve our vision

## GOVERNANCE FRAMEWORK

### Stakeholders and Key Relationships

Our key stakeholders are our members, procuring through annual fees the benefits of membership, including personal and professional development services, and providing the voluntary effort necessary to achieve learned society outcomes, in return for professional interaction and networking opportunities.

Our other major stakeholders, with whom we need to engage directly, are:

- > Engineering leaders, CEOs
- > Employers of engineers
- > Policy makers, government Ministers
- > Engineering educators, academic Deans
- > Kindred organisations, NGOs
- > Other members of the engineering profession
- > The broader community

### Office Bearers

An office bearer is a member who has been elected or appointed to a committee of Engineers Australia, which may have a governance and/or operational role. All office bearer roles are honorary, and office bearers are bound by a code of conduct. There are regulations for the election and appointment of office bearers. Online support resources for office bearers and volunteers include role descriptions, inductions, governance information and operational guidelines.

### Membership

Standard membership of Engineers Australia is open to any person with an accredited tertiary qualification, who commits also to abide by Engineers Australia's Code of Ethics. Other forms of membership are available, including student membership for persons enrolled in accredited tertiary undergraduate studies. Subject to prescribed assessment processes, members can become Chartered, conferred by Engineers Australia to confirm competency and currency in engineering practice and to certify public accountability for quality and safety. It upholds the social contract between the practitioner and the client, the profession and the community.

Engineers Australia relies on the combined efforts of our network of active members – who volunteer their expertise, enthusiasm, and time – and our dedicated staff who support them to give effect to many of the initiatives necessary for us to sustain our relevance into the future.

### Ethics and Discipline

#### Revised Code of Ethics

Engineers Australia's By-laws give it the power to:

- > codify ethical standards to be met by members (a Code of Ethics)
- > enact Disciplinary Regulations to deal with members who breach the Code.

A revised Code of Ethics was approved by National Congress on 28 July 2010 following a major review led by the Commissioner for Ethics and Discipline.

Some key features of the 2010 Code are:

- > its simpler structure and style, making it more accessible to and easily understood by members, students, consumers and external stakeholders;
- > it better reflects contemporary engineering practice applicable to collective professional conduct, as well as to individual ethical decision-making;
- > it provides a more effective basis for disciplinary action.

### Ethics Awareness Program

Ethical issues are rarely easy or straight-forward. Ethical engineering practice requires judgement, interpretation and balanced decision-making in context.

We have developed a world-first online ethics awareness program, known as Values Exchange, which has been piloted successfully with 800 first year students at QUT and with fee paying courses. Corporate pilot sessions have been arranged. Uptake of the Code of Ethics July 2010 has been extremely positive with a number of accolades received from external parties, including a higher education textbook.

Engineers Australia's ethics awareness program is based on the premise that the Code of Ethics can never give us all the answers. Rather, it can only provide us with values and principles and give us a framework for analysis and decision making.

The Values Exchange program is aimed at not only educating our members and those aspiring to join the profession about their professional obligations but also developing case study material to illustrate how different ethical situations have been dealt with.

### Complaints against members

The Commissioner for Ethics and Discipline reports annually to National Congress. In his annual report in November 2011, the Commissioner reported that in the period 1 November 2010 to 31 October 2011, Engineers Australia:

- > Received 17 complaints against 20 members of Engineers Australia, of whom 8 are registered on the NPER. Three of the 17 complaints were member-against-member.
- > Received 3 complaints against non-members of Engineers Australia.
- > Received 2 complaints against engineering firms.

A full analysis of the nature of all complaints and the responses to them was provided in the Commissioner's Report.

### International contribution

During 2011, Engineers Australia took the lead role in the review of the WFEO Model Code of Ethics. Our Commissioner for Ethics and Discipline chaired a working group of the WFEO Anti-Corruption Standing Technical Committee which developed a new Model Code of Ethics and a 'step by step' guide to assist member organisations to develop their own Codes of Ethics and ethics support programs, based on the Model Code.

The new WFEO Model Code is based on the current Engineers Australia Code of Ethics and Guidelines for Professional Conduct adopted in 2010. Engineers Australia should be justifiably proud of the praise that our work received when the new Model Code and Guide were approved at the WFEO Biennial General Assembly meeting in Geneva in September 2011.



## GOVERNANCE FRAMEWORK

### Performance Management

2011-2012 was the second annual instalment toward the goals of our five-year Strategic Plan 2010-2015. Each year's Operational Plan is endorsed by Council, including key priorities for the year. Our key priorities looking ahead to 2012-2013 are listed under Highlights at the front of this report.

Each quarter during 2011-2012, all our managers report progress toward their key planned outcomes for the year. Their final progress reports for the year provide the basis for the detail in the 'Results' section of this report.

This system of comprehensive quarterly performance reporting and our 6-month budget review track performance against both budget and strategic objectives. Strategic risk changes are monitored and addressed through these processes.

### Risk Management and Internal Auditing

The objective of the Audit and Risk Committee is to provide independent oversight and advice to the Council and the CEO on Engineers Australia's risk, control and compliance framework, and its external accountability responsibilities.

Among other roles and responsibilities, the Committee recommends to Council the appointment of external auditors, reviews and recommends to Council the annual financial statements, and reviews and monitors progress with the annual internal audit work plans and findings of individual audits, and management responses.

The Committee produced an annual report on its activities to Council in November 2011.

### Staffing and Workplace Practices

The framework for work practices in Engineers Australia focuses on "People Development". We seek to provide a work environment where people can achieve their potential and deliver the desired outcomes for our members.

In addition to having attractive pay and conditions of service the organisation also offers an Employee Assistance Program to assist staff with work and personal issues.

All staff are engaged under common law contracts and there is a strong emphasis on offering more flexible and innovative working arrangements. This has meant the organisation has been quite successful in attracting and retaining quality staff.

Staff are employed on a full time, part time, or casual basis. Full-time staff equivalents for the last five years are tabulated below.

Staffing at 30 June (rounded)	2008	2009	2010	2011	2012
National Office					
– Canberra	74	78	80	86	90
– outposted in Divisions	10	14	18	17	20
Division staff	54	49	50	52	59
<b>Total</b>	<b>138</b>	<b>141</b>	<b>148</b>	<b>155</b>	<b>169</b>
% staff female	63%	64%	63%	64%	69%
% executives female	38%	44%	44%	40%	40%

## GOVERNANCE FRAMEWORK

At 30 June 2012, members of the National Executive Team of Engineers Australia staff were:

<b>Stephen Durkin</b>	Chief Executive Officer
<b>Rupert Grayston</b>	Deputy CEO
<b>John Anderson</b>	Director Engineering Practice
<b>Michael Allen</b>	Director Corporate Services
<b>Caroline Argent</b>	Director South Australia Division
<b>Steve Finlay</b>	Director Sydney Division
<b>Glenda Graham</b>	Director Victoria Division
<b>Leanne Hardwicke</b>	Director Western Australia Division
<b>Geoff Harper</b>	Director Tasmania Division
<b>Brent Jackson</b>	Director International and National Policy
<b>Ben Leaver</b>	Executive General Manager Member Delivery
<b>Helen Link</b>	Director Newcastle Division
<b>Ian McEwan</b>	Director Queensland Division
<b>Jamie Penrose</b>	Director Communication and Marketing
<b>Dr David Robinson</b>	Director Education and Assessment
<b>Bronwyn Russell</b>	Director Northern Division
<b>Vesna Strika</b>	Director Canberra Division

**Corporate Social Responsibility**

Since 2005-2006, our Annual Reports have been prepared so that members are able to judge the organisation's performance in accordance with the Global Reporting Initiative (GRI) Guidelines.

The principles of Corporate Social Responsibility are core to the operations of Engineers Australia as a not-for-profit occupational association and to the engineering profession itself as reflected in:

- > The Code of Ethics for members
- > Engineers Australia's Sustainability Charter
- > Sustainability guidelines for members of the engineering profession in their daily practice
- > Engineers Australia's international commitments e.g. the Taipei Declaration
- > The values and guiding principles of our Strategic Plan 2010-15
- > Engineers Australia's ongoing commitment to public policy development e.g. infrastructure, future energy options and national wellbeing.

Engineers Australia is a small-to-medium office based organisation. We have taken initiatives to improve further sustainability practices across our operations. In February 2012 our national office in Canberra achieved accreditation from the ACT Government for commitment to the ACT Smart Office Program in support of a 'wastewise' community.

Energy and paper use are reported at Strategic Domain 6 in 'Our Results' section of this Annual Report.





**ENGINEERS  
AUSTRALIA**

# OUR RESULTS 2011-2012

Strategic Domains

Our Subsidiary Companies

From Our Divisions

From Our Colleges

Special Interest Groups

Technical Societies

Joint Boards



## STRATEGIC DOMAINS

### FOR THE ADVANCEMENT OF ENGINEERING AND THE PROFESSIONAL DEVELOPMENT OF OUR MEMBERS

Our achievements during 2011-12 are reviewed in the following pages. They represent the second annual instalment against our Strategic Plan 2010-2015, covering six Strategic Domains.

**SD 1 Community Engagement**

Engineering Week and other community engagement

**SD 2 Body of Knowledge and Professional Development**

Conferences, other CPD programs and professional standards

**SD 3 Leadership and Influence**

Leadership and advocacy for the profession, and registration

**SD 4 Recognition, Promotion and Membership**

Promoting engineering excellence and professional membership

**SD 5 Education and Qualification**

Programs for school students, and accreditation of degree courses

**SD 6 Internal Structure and Administration**

Members and volunteer support, online and management costs

### Income and Expenses

The reports for each of our six Strategic Domains on the following pages include a summary table showing income derived and expenses incurred attributable to activities for each Domain for 2010-11 and 2011-12.

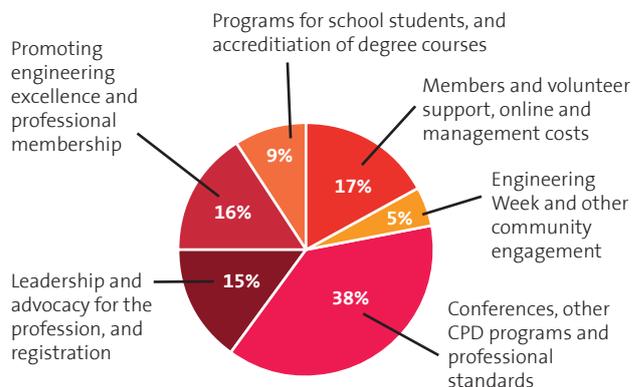
The table below shows the total of income and expenses across all six Domains, comparable with the Statement of Comprehensive Income and Note 9 Revenue in the Concise Financial Report for the parent entity Engineers Australia.

\$ million	2007-08	2008-09	2009-10	2010-11*	2011-12*
Expenses	27.223	29.619	31.859	32.998	38.026
Income	-11.613	-13.686	-12.228	-12.997	-18.218
Funded from member subs	15.610	15.933	19.631	20.001	19.808

\* Conference income and expenses are recognised separately, rather than net

The previous five-year Strategic Plan 2005-2010 covered eight Key Objectives. A translation of financial results into the new six Domain structure for comparison purposes is not available.

This pie chart shows how the \$38 million in expenses incurred by Engineers Australia on behalf of members, including staff costs, was attributed across the key activities in our six Strategic Domains.



## 1 COMMUNITY ENGAGEMENT

**Provide a forum for members of the profession to engage more directly in partnership with our communities on issues of concern to them.**

### Key Indicators

- > *Promulgation of a framework for engagement*
- > *Degree of community engagement*

### New ways to engage the community

- > *Make it so* – our campaign to increase community understanding and appreciation of the engineering profession – was launched in July 2009. The *2011 Year of Humanitarian Engineering* program was linked directly to the *Make it so* campaign in 2011.
- > The initial ‘community awareness’ phase of *Make it so* concluded during 2011-12, and Engineers Australia considers we have a legacy means for engaging with the community on engineering, with plans to continue with a further ‘careers preference’ campaign.
- > The research phase of *Make it so* confirmed that the engineering profession has very high respect as a career option, but a low level of appreciation in the community generally of what engineering involves and how it contributes to society.
- > The planned ‘credentials’ campaign phase has not proceeded to plan, pending the study by a Special Committee of Council into the role being Chartered plays in our broader member value proposition. That study is now completed.

### Engineering Week

- > With excellent support from our many sponsors, Australian Engineering Week in August 2011 comprised a diverse range of activities delivered mainly in Divisions, with national support through the functionality provided by our website.
- > Reporting by our Division staff suggests a highly successful result with a myriad of innovative events, technical presentations, and excellent media coverage. Our engagement with the community covered political leaders, kindred professional bodies, teachers, students, and parents.
- > Example reports included – “the field trip on natural energy sources was a sell-out”, “great presentations from volunteers, TAFEs and universities”, “good exposure of AEW to the general public”, “record attendances and positive post-event feedback”, “very high exposure through social media channels”.

### Public Forums

- > A range of public forums were conducted in our Divisions during Australian Engineering Week and at other times, covering topics as diverse as new frontiers in engineering technology, fire safety, road safety and transport-related issues, nanotechnology and Australia’s energy future, Sydney cycleways, and a (repeat) public seminar on sea-level rise.

### Reconciliation Action Plan

- > In collaboration with Reconciliation Australia, Engineers Australia developed its Reconciliation Action Plan during 2010-11, and formally launched the plan on 9 August 2011.
- > A special progress report is included in the highlights section of this Annual Report.

### Community partnerships

- > Engineers Australia groups have taken some local initiatives toward our strategic objective to engage more directly with our communities. Examples were:
  - Canberra Division has established a ‘Canberra 100 Sub-Committee’ to generate community participation in an engineering component of Canberra’s centenary program in 2013.
  - Northern Division worked to fund a project officer for Inspiring Australia events (approx 10 in the Northern Territory) to include Science Week and Science Fair.
  - In view of the high community impact, Engineers Australia Queensland Division submitted a response to the interim report of the Commission of Inquiry into the Brisbane Floods. A subsequent position paper was prepared in response to the Commission’s final report. Also, support for Engineers Without Borders has been provided to raise funds for a project to deliver an amenities block to the remote Kooma community.
  - Victoria Division has established an ongoing program of meetings with kindred bodies Consult Australia, IPWEA, the Committee for Melbourne, APESMA and ATSE, and hosted the inaugural Joint Presidents’ meeting.
  - As part of the program for *2012 Year of the Regional Engineering Team*, our Regional National Committee is developing links with the Institute of Public Works Engineering Australia and the Australian Water Association, particularly in NSW, to conduct joint public events and raise funds for regional charities.
  - Ten public ceremonies were held in our Heritage Recognition Program, with eight new sites recognised and two additional ceremonies for existing sites.

Our Results

44

### Income and Expenses

\$ million	2010-11	2011-12
Expenses	1.710	1.745
Income	-0.175	-0.162
Funded from member subs	1.534	1.583

## 2 BODY OF KNOWLEDGE AND PROFESSIONAL DEVELOPMENT

**Provide a forum to advance the science and practice of engineering to the highest standards.**

### Key Indicators

- > Reputation for relevance and quality of our engineering body of knowledge
- > Incidence of members making voluntary contributions
- > Perceived professional development value as indicated by quantum of take-up
- > Ease of access for metropolitan, non-metropolitan and overseas members
- > Higher acceptance of the value of being Chartered

### Developing and disseminating our body of knowledge

**CPD events cover a hugely diverse range of formats, from major international conferences, seminars and workshops, eminent speaker presentations, and individual technical meetings.**

**Events are delivered through a mix of formats, including nationally-coordinated programs, Division-based technical meetings, and can be offered through and in conjunction with Technical Societies and other like-minded professional bodies.**

### Major events and conferences

- > Our program of major events and conferences marks a major contribution by our College-based groups and Special Interest Groups to the advancement of engineering for the benefit of our members and the profession generally.
- > 20 national and international conferences were supported during the year attracting more than 4,000 delegates.
- > Development around an Engineers Australia National Convention began with a substantial feasibility study presented to National Council. The outcome of this will be decided in August 2012.
- > Significant review and redevelopment of the National Events program commenced and the implementation of new practices and procedures began in March 2012. Capacity to deliver a greater number of events internally was realised and a program to deliver numerous events for the learned groups commenced with many events delivered internally for 2013 coming on line.
- > Our 2012 Engineering Leadership Conference (ELC) was held in Adelaide from 30 May – 2 June. Attracting 600 delegates the event launched an exciting new event app, replacing printed programs and posters. The Conference provided leaders of industry and academia a fertile ground to get together for three days to explore the nature of leadership in engineering.
- > The Coast and Ports 2011 Conference was held in Perth on 28 – 30 September 2011 and was acknowledged as a tremendous success for the National Committee on Coastal and Ocean Engineering. 381 people attended with 17 countries represented.
- > Proceedings from all Conferences hosted by Engineers Australia are passed for inclusion on the InforMIT technical database.
- > The Eminent Speaker program toured 12 Eminent Speakers with over 4,000 members attending. A stand-out tour introduced Dr Kate White, of the US Army Corps of Engineers, in the early half of 2012. Capacity numbers for attendance were achieved in multiple states.
- > All speakers had their presentations video-streamed and made available on the Engineers Australia website.

### CPD Delivery through Divisions – 2011-12

Canberra	71 technical events, 2,405 hours takeup
Newcastle	73 technical events, 1,976 hours takeup
Northern	44 technical events, 2,174 hours takeup (incl AR&R sessions, and Humanitarian Forum)
Queensland	184 technical events, 11,400 hours takeup (est)
South Australia	173 technical events, 4,235 hours takeup (incl Transport Geotechnics)
Sydney	123 technical events, 12,458 hours takeup*
Tasmania	112 technical events, 3,241 hours takeup
Victoria	186 technical events, 11,413 hours takeup (incl RMIT Aerospace Industry night)
Western Australia	228 technical events, 15,786 hours takeup

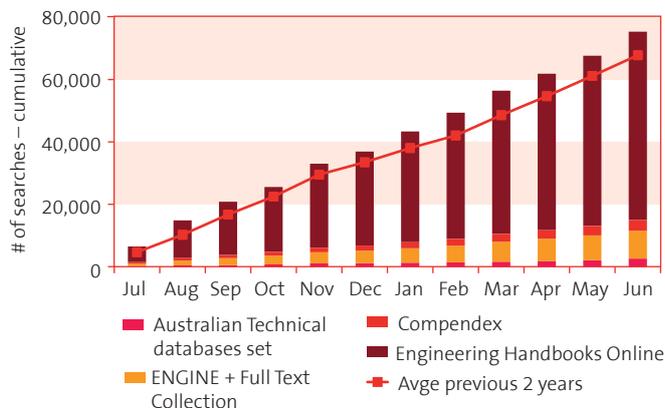
\* not complete data for all regional groups

## 2 BODY OF KNOWLEDGE AND PROFESSIONAL DEVELOPMENT

### Capturing intellectual value – technical publications

- > Our technical journals and conference proceedings are available to members as a member benefit via Resources and Library section of the website. The Library website was redesigned to improve the visibility of services prior to moving onto the new Drupal website content management system in November 2011.
- > Now we have access to usage for the highly popular Engineering Handbooks Online database, in the last 12 months Engineers Australia members conducted close to 75,000 searches across all databases.
- > There are currently 55,914 papers available in full-text on the database across 14 EA journals, 378 Conference proceedings and 58 reports. In addition, bibliographic database ENGINE now contains 43,829 papers; 1,271 articles were indexed in the first half of the year. RTSA's non-member free access to RTSA papers listed on the Engineering Collection was facilitated.

Usage of Technical Databases



### Encouraging members to pursue ongoing professional development

#### Divisions

- > Divisions reported ongoing general promotion of CPD benefit to members, and a wide range of successful member networking events, including Fellows lunches, Special Interest Group events, and regional events. For example, WA Division reports the establishment of a new regional group (Boddington) and the revitalisation of another (Northam).
- > One of our key ongoing priorities is to provide more opportunities for engineers with qualifications gained overseas to enhance their own professional development. In various Divisions, such opportunities occurred through international engineers groups managing their own CPD programs and attending workshops including career skills, and through our engagement at State government level on strategies for employment of migrant engineers.

#### Learned society and special interest groups

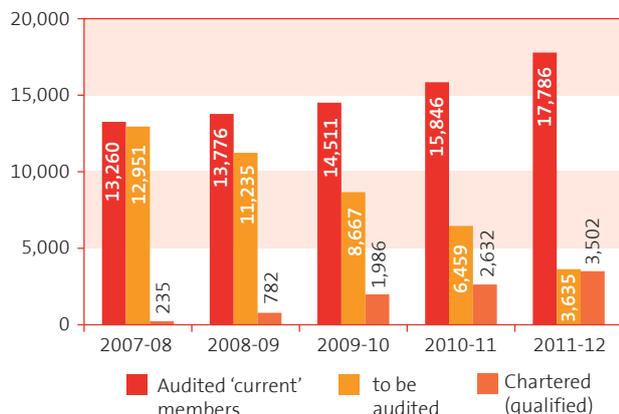
- > Comprehensive reports from all our College-based learned society groups and our Special Interest Groups can be found later in this Annual Report.
- > College Boards contributed in support of both the 2011 Year of Humanitarian Engineering, and the 2012 Year of the Regional Engineering Team (YoRET) via State-based joint committees. An example are the plans by the National Committee for Rehabilitation Engineering to host a YoRET event in Townsville focusing on air travel and wheelchairs in regional Australia.



## 2 BODY OF KNOWLEDGE AND PROFESSIONAL DEVELOPMENT

### Promoting PDP and members being Chartered

#### Chartered members



At 30 June 2012, 17,786 members were regarded as current Chartered. This represents 75% of all Chartered members.

#### Currency of competence and registration

- > Engineers Australia's policy on CPD is that Chartered members must keep records of their own professional development activities and submit to periodic audits. Any Chartered member should expect to be audited every five years.
- > The audit process is an important and effective method of maintaining the integrity of Chartered membership and registration on our National Engineering Registers. An online eCPD recording facility is available as a service for members and to help streamline CPD auditing.
- > It is now expected that the first cycle of audits for all Chartered members will be completed by the end of calendar 2012. 4,200 audit notices were issued during the year.

#### eChartered

- > Engineers Australia is implementing a world-class online system to make our Stage 2 assessments more cost effective and less arduous for members, while retaining necessary standards. Originally expected to be launched in July 2012, this will now occur in November 2012.
- > The eChartered project will be one of the first to take advantage of the new capabilities being implemented with our complete MIS Renewal Program.

#### Chartered review

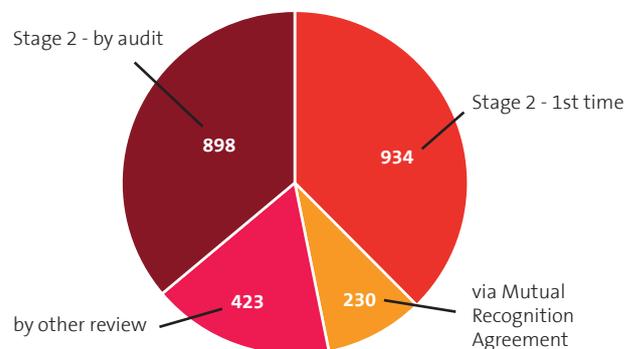
- > A Special Committee of Council has been assessing the structures and strategies we have been using to encourage members to become Chartered, with a view to redefining the value proposition for members. The Committee presented its final report in May 2012, and follow-on work will now be implemented.

#### Maintaining industry liaison

- > The National Industry Relationship Team comprises staff based in all Divisions who develop relationships and enhance collaboration with engineering employers.
- > Over 180 senior engineers came to Industry Round Table forums nationally to review the draft 2012 Competencies. A presentation was made to the AAEE National Conference on the draft Competencies.

- > 140 presentations were made to over 1,600 senior engineers promoting pathways to Chartered Status and how the PDP process can support young engineer development.

#### Nearly 2,500 members attained 'current' Chartered in 2011-12



This chart provides a breakdown of the methods through which members attained current Chartered during 2011-12.

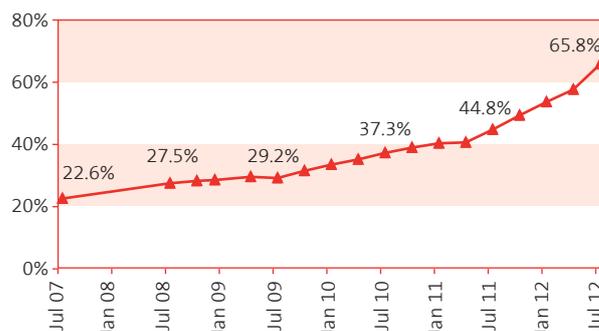
- > The number of members becoming Chartered following Stage 2 competency assessment increased by 25% over the previous year, to 2,485.
- > Applications for Chartered assessments in Queensland have continued to be very high due to RPEQ assessment requirements.

#### Professional Development Program

- > Engineers Australia offers a Professional Development Program (PDP) as a structured framework to support engineers towards becoming Chartered. Most participants are sponsored in their PDP by their employers who partner with Engineers Australia for this purpose including many of Australia's leading employers of engineers.
- > With the transition to eChartered (see opposite), many PDP employers took the opportunity to rationalize their programs, so that inactive and uninterested participants have been removed.
- > At 30 June 2012, there were 6,219 engineers registered in the PDP. With over 4,000 engineers having submitted at least one Career Episode Report (over 6,000 CERs this financial year), the participation rate climbed to 66% – see chart below.

#### Better engagement with our PDP participants

##### (% of current PDP participants lodging Career Episode Reports)



## 2 BODY OF KNOWLEDGE AND PROFESSIONAL DEVELOPMENT

### Working to keep ethical, competence, and practice standards up to date

#### Revised Stage 2 (Chartered) Competencies

- > Following agreement by Council, revised Australian Engineering Competency Standards Stage 2 were implemented, with clearer differentiation of the competence expected at each of the three occupational groups – professional engineer, engineering technologist, and engineering associate.

#### Standards Committees

- > Engineers Australia continued to provide a strong commitment to Standards Australia through its six Council nominations and two Board appointments, and through its direct representation on some 211 standards committees. We continue to be a leading contributor to Standards Australia’s committee processes.
- > During the year the major challenge has been to support our members and to identify new members for new or changing committees. A considerable effort was undertaken during the year to link representatives to relevant Colleges and establish processes in Colleges to review standards activities.
- > Arrangements were agreed with the Standards Australia management team to brief all Engineers Australia’s Standards Australia (SA) Councillors on the operational activities of SA. (This meeting occurred in July 2012 and was considered a great success by both SA and EA attendees.)
- > During 2012-13, our staff will be working with our National Councillors to establish a strategic engagement model with SA, to improve the effectiveness of the relationship between the two organisations.

#### Rainfall and Runoff Project

- > Considerable effort was put into project governance for the Australian Rainfall and Runoff (AR&R) project in 2011-12. Under the leadership of Sydney Division Director Mr S Finlay there has been a substantial improvement in the management of the project.
- > The Commonwealth Department of Geoscience has committed additional funding of \$5.1 million for Stage 3 contracts, which will finish the project. The project is planned to be completed during 2012-13.
- > The AR&R revision project has been a major undertaking for Engineers Australia and its volunteers involved in revising the document, and consequently deserves a major launch. Consideration is being given to promoting the revised AR&R at our first National Convention in 2014 by running a seminar stream for this purpose.

#### Ethics and Discipline

- > In 2011-12 we evaluated an Ethics Awareness initiative – a web-based interactive educational program which allows a user to explore ethical issues arising from commonplace engineering activities. The program was developed in New Zealand and has been trialled through engineering undergraduate course work at the Queensland University of Technology by past president Prof Doug Hargreaves. The program was well-received by students and strongly demonstrated its value in exploring complex ethical issues.
- > We are now evaluating the results of the assessment and considering how best to introduce Ethics Awareness Initiative into our suite of tools for our members.

#### Complaints against members

- > Details of complaints against members reported by the Commissioner for Ethics and Discipline to Congress in November 2011 are included in the Governance section of this report.

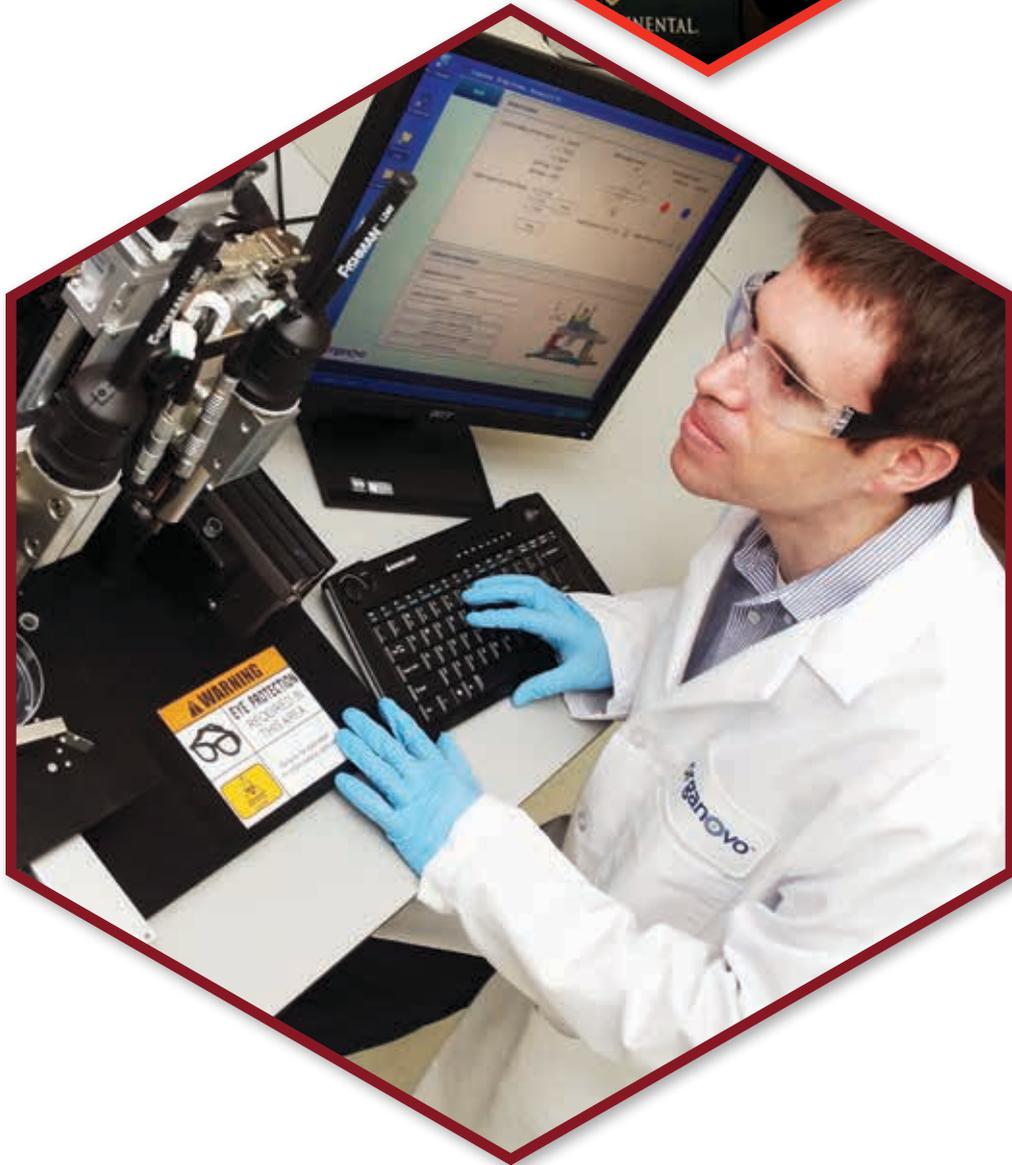
#### Warren Centre

- > During 2011-12 we increased its engagement with the Professional Performance, Innovation and Risk (PPIR) Protocol through the establishment of a special working party of Council to review the protocol and its potential impact on our members if we adopted the protocol. The PPIR Protocol seeks to develop a performance code for individual engineers. Such a code would sit beside our current chartered competency standards and our members’ Code of Ethics.
- > Following considered deliberations of the recommendations of the working party, Engineers Australia’s Council decided to maintain an active watching brief on the trial implementation of the Protocol by Warren Centre sponsor organisations, before making further decisions on adopting the PPIR Protocol, or an equivalent Code of Performance, for its members. The Warren Centre implementation project should begin to deliver results from sponsor activities during 2012-13.

#### Income and Expenses

\$ million	2010-11	2011-12
Expenses	9.843	14.595
Income	-4.399	-8.369
Funded from member subs	5.443	6.226

National President David Hood addressing Engineering Leadership Conference 2012 in Adelaide 30 May- 1 June 2012



Organovo: The World's First Commercial 3D Human Tissue Bioprinter (Engineering Excellence Award for Innovation: Nov 2011)

### 3 LEADERSHIP AND INFLUENCE

**Provide a respected voice for the profession to influence leaders and decision-makers on public policy and wider community issues.**

#### Key Indicators

- > Reputation for valued advice and engagement
- > Incorporation of proposals into government policies and legislation
- > Regulation of the profession in more Australian jurisdictions
- > Progress with international mutual recognition agreements



#### Contributing to public policy debate and industry decision-making

- > A significant part of the value we provide to members arises from our ongoing advocacy activities at both national level and in each Division. Some examples of issues covered in Divisions are included at pages 60-68.
- > 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 decision makers, and also supported this through a range of formal submissions to government inquiries and review processes. The views of Engineers Australia are held in high regard in the policy community, and we are often approached to provide formal comment on key policy issues before government.
- > During the year we held over 20 formal meetings with government representatives and lodged eight formal submissions to government inquiries. Senior representatives of Engineers Australia also appeared before hearings of two Australian Senate Inquiries. In August 2011 Engineers Australia was called to appear before the Senate Foreign Affairs, Defence and Trade Committee Inquiry into Defence Procurement, and in March 2012 Engineers Australia appeared before the Senate Education, Employment and Workplace Relations References Committee Inquiry into the Shortage of Engineering and Related Employment Skills.
- > 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 2011, our research reports included:
  - The Engineering Profession: A Statistical Overview (2011).
  - 2011-12 Federal Budget briefing papers.
  - The Role of Skilled Migration in the Engineering Workforce.
  - An International Engineering Education Comparison.
- > All public policy documents are freely available for download on the Engineers Australia website.
- > We used our high profile public events in Divisions as a forum for orations by leading eminent Australians to contribute to public discourse on significant current issues.
- > In June 2012, National Deputy President Dr Marlene Kanga launched the report of the Engineers Australia Innovation Taskforce at an event at Parliament House in Canberra. Dr Kanga was joined by Minister for Industry and Innovation, the Hon Greg Combet MP, and Shadow Minister for Industry, Innovation and Science, Sophie Mirabella MP, in launching the report. This event was well attended and attracted members of professional and industry associations, academia, members of industry, and government representatives.

#### 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 2012 Engineers Australia worked closely with United Nations representatives to undertake joint advocacy activities for the International Year of Sustainable Energy for All. The International Year of Sustainable Energy for All was created to raise awareness about the importance of increasing sustainable access to energy, energy efficiency, and renewable energy at the local, national, regional and international levels.

#### Member engagement with policy

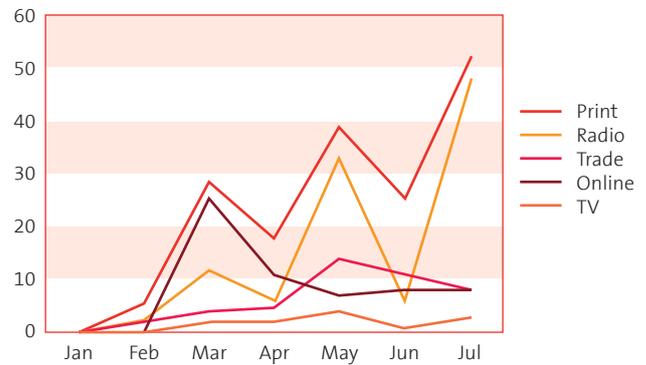
- > We ensure that members are kept informed of our activities through regular contributions to the Engineers Australia magazine, publication of web-based news items, and publishing items in subscriber electronic newsletters.
- > During 2011 we published articles on a wide range of topics including defence procurement, the effects of population growth, engineering skills shortages, and Australia's innovation policy framework.

### 3 LEADERSHIP AND INFLUENCE

#### Engaging with the general media

- > During 2011, Engineers Australia implemented a new media strategy to ensure that we continue to maintain a high public profile supporting our role in advancing the engineering profession. Our proactive approach to media engagement saw a steady increase in our media presence over the year, across national, regional and local media outlets.
- > A central component of this strategy is to ensure that major developments across the engineering profession and the organisation are publicised through our media statements. During the year we issued 28 formal media releases. While engineering skills shortages remained the most commonly reported topic across the media, we continued to attract a high number of media requests for expert commentary across a wide range of specialised engineering topics.
- > In November 2011, the Acting CEO awarded the Engineers Australia Excellence in Journalism award to Carlene Dowie of Australian Dairyfarmer Rural Press for her story 'Australia's first robotic dairy'. The award was presented at the Australian Engineering Excellence Awards at Parliament House, Canberra.

Media Hits by Media Type



#### Providing leadership and direction for the profession

- > The Governance section of this Annual Report provides a full accounting of the activities of the National Congress and the Council of Engineers Australia during 2011-12. Of particular note are steps taken by Council to improve its ability to focus on strategic issues of importance to the profession.
- > A new CEO Stephen Durkin was appointed by Council, and commenced 23 January 2012, following a recruitment process undertaken by a special 'Succession Committee' of Council. With support from Council, the CEO developed a new operating model for Engineers Australia to enable it to better meet expectations for improvements in services to members, among other things.
- > Our National President and Chief Executive Officer perform an important role in engagement with overseas organisations and supporting our overseas members. Our international members are serviced by chapters in Hong Kong, Malaysia, Singapore and the United Kingdom.
- > In July 2011, the National President was a keynote speaker at a successful international conference launched by our Malaysian Chapter in Sarawak – AAEC 2011. In March 2012 the National President and the CEO visited our three Asian Chapters.
- > The *Presidents' Forum*, convened twice yearly by the National President, is an opportunity for Division Presidents to discuss key strategic issues with the National President and to share best practice ideas. The Presidents' Forum met in September 2011 and March 2012.
- > In Divisions, senior office bearers undertake regular annual visits to their member groups and ensure appropriate support for their technical programs and networking events, both metropolitan and regional.
- > Efforts continue to be made to attract members into office bearer roles and to improve their experience and ability to contribute. Considerable effort has been put into higher quality processes for the conduct of elections for office-bearer roles in all Divisions.
- > Our Engineering Practice Directorate provides ongoing support for the efforts of all our College Boards and their national panels and committees, and is undertaking a major review to revitalise our learned society functions and how we relate with our Technical Societies.

### 3 LEADERSHIP AND INFLUENCE

#### Working toward a national regulatory framework

##### National Engineering Registration Board

- > Under the strategy to promote the case for nationally consistent legislation for the regulation of engineers, meetings were held during the year with representatives of all State and Territory jurisdictions, at the level of Premier/Ministers and senior departmental officials.
- > Support for the national registration of engineers is evident in all jurisdictions, except NSW and Victoria where the focus is on engineers in the building industry, and from construction unions.
- > The total number on the National Professional Engineers Register (NPER) stood at 10,858 at 30 June 2012. The audit program is in hand with 1,219 CPD audit notices issued to registered engineers during the year.

##### Other regulatory developments

- > Our Division offices continue to engage with advisory and similar groups in each jurisdiction on policy developments in the area of regulation – such as local development processes, coastal erosion policy and integrated transport planning.

##### RPEQ

- > The assessment of qualifications and competencies under the *Professional Engineers Act 2002* (QLD) has continued satisfactorily, and our assessment scheme was formally extended by the State Government to continue to run until 30 June 2016.
- > An area of practice for petroleum engineering was added to the assessment scheme.

#### Engaging with national and international counterparts on matters of mutual interest

##### National and international engagement

- > In July and August 2011 and in March 2012, Engineers Australia hosted visits by our counterparts from China pursuing matters of mutual interest and seeking information on our operations. We are giving support for China to achieve provisional status to the Washington Accord – for mutual recognition of qualifications in the category of professional engineer – by 2013.
- > Across our engineering practice disciplines, we are involved in ongoing engagement with a multiplicity of international counterpart bodies on matters of mutual interest, including conferences and other technical and policy interests.
- > Among our policy activities, Engineers Australia often participates in collaborative projects and forums to enhance our professional and industry links. This collaborative approach saw Engineers Australia participate in over 20 formal meetings, consultation activities and public forums over the year.
- > Engineers Australia continues to be an active member of the World Federation of Engineering Organizations (WFEO) and the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) and have nominated delegates to each of these forums.
- > In September 2011, past National President of Engineers Australia Dr Peter Greenwood was elected as a Vice President of WFEO.

##### Mutual recognition agreements

- > Engineers Australia supports the mobility of our members through recognition agreements with our overseas counterparts. In August 2011 we signed a bilateral agreement with IEEE.

##### International accords

- > Work on Australia's application for full signatory status of the Dublin Accord was commenced. A review visit by a team from three signatories of the Dublin Accord forms part of the application, and is being planned for October 2012, in time for the application to be considered at the June 2013 meetings of the International Engineering Alliance.
- > Australia hosted the International Engineering Alliance (IEA) Workshops in Sydney in June 2012.
- > Engineers Australia is also mentoring several countries which are seeking provisional membership of the Washington Accord: this activity will involve a visit to each country to observe their accreditation processes and will probably result in Australia nominating those countries for provisional membership.

##### Women in Engineering National Committee

- > Working with large engineering employers, WIENC developed a professional women's program 'industry blueprint' – a document for companies to refer to when setting up professional women's programs within their organisations.

#### Income and Expenses

\$ million	2010-11	2011-12
Expenses	6.045	5.712
Income	-0.856	-1.036
Funded from member subs	5.189	4.676

## 4 RECOGNITION, PROMOTION AND MEMBERSHIP

Inform our members and our stakeholders about the contribution of the profession in ways that promote its image and standing.

### Key Indicators

- > Enhanced perceptions and understanding of the profession in the wider community
- > Admissions and retention of our diversity of members

### Promoting the engineering profession

- > We use a range of strategies to promote the image and standing of the engineering profession.
- > Our *2011 Year of Humanitarian Engineering* and *2012 Year of the Regional Engineering Team* campaigns are featured in many of the Division and College reports, as well as those of our Special Interest Groups, later in this Annual Report.

### Promoting the contribution of engineering excellence

- > Our Australian Engineering Excellence Awards were held in November 2011, with 50 entries based on successful finalists in our Division-level awards events. 440 guests attended in the Great Hall of Parliament House., our income targets were exceeded, and media coverage was strong.
- > College and Division reports make reference to awards to individual members who are recognised for their contribution to the profession in many ways, both by Engineers Australia and in the community generally. Our most prestigious College awards are reported in the 'Honouring the Profession' section of this Annual Report, and further details on individual awards can be found on relevant pages of our website.

### Excellence Awards – 2011-12

		Entries	Attendees
Northern	21 Jul 11	7	320
Tasmania	29 Jul 11	15	203
Canberra	28 Sep 11	17	216
South Australia	16 Sep 11	25	354
Sydney	16 Sep 11	91	550
Western Australia	17 Sep 11	48	650
Victoria	22 Sep 11	75	970
Queensland	7 Oct 11	44	500
<b>National</b>	<b>23 Nov 11</b>	<b>50</b>	<b>440</b>
<b>2011 Total</b>		<b>372</b>	<b>4203</b>
Newcastle	11 May 12	16	300

### Total Membership

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	14,549	14,357	14,222	14,130	14,166	0.3%
Members	33,710	35,360	37,184	38,683	40,502	4.7%
Fellows (and others)	5,487	5,463	5,548	5,619	5,588	-0.6%
<b>Sub-total</b>	<b>53,746</b>	<b>55,180</b>	<b>56,954</b>	<b>58,432</b>	<b>60,256</b>	<b>3.1%</b>
Student members	31,955	33,380	36,104	38,874	41,369	6.4%
<b>Total – at 30 June</b>	<b>85,701</b>	<b>88,560</b>	<b>93,058</b>	<b>97,306</b>	<b>101,625</b>	<b>4.4%</b>

### Female Membership

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	1,983	1,983	1,959	1,936	1,961	1.3%
Members	1,640	1,866	2,089	2,317	2,613	12.8%
Fellows (and others)	98	97	107	132	136	3.0%
<b>Sub-total</b>	<b>3,721</b>	<b>3,946</b>	<b>4,155</b>	<b>4,385</b>	<b>4,710</b>	<b>7.4%</b>
Students	5,023	5,200	5,745	6,256	6,748	7.9%
<b>Total</b>	<b>8,744</b>	<b>9,146</b>	<b>9,900</b>	<b>10,641</b>	<b>11,458</b>	<b>7.7%</b>

## 4 RECOGNITION, PROMOTION AND MEMBERSHIP

### Promoting the benefits of membership

- Through national promotions and Division-based membership strategies, we aim to convince non-member engineers of the benefits of membership, and to ensure we respond to the diverse interests of our existing members.
- Total membership grew 4.4% to 101,625 during 2011-12.
- In recent years, membership growth in non-student grades in Queensland and WA Divisions has sustained our overall growth (and to some extent Victoria Division), by large margins.
- Growth in female membership, albeit from a low base, continues to exceed growth in male membership, with the full Member grade growing an impressive 12.8% last year. Since 2007-08, full female Member numbers have grown at over three times male Member numbers.
- Technologist and Associate membership levels remain below 2% and 6% of total membership respectively.
- Admissions to Member grade rebounded to a new high level over 3,750.
- Admissions to Graduate grade reversed a slow decline of recent years to 2,650.
- Nevertheless, we estimate the percentage of non-student members aged 35 and under has now reached 30%.
- In 2010, a renewed focus on members in arrears secured in excess of \$1.2million in potentially lost revenue. This was bolstered in 2011 by an innovative membership renewals program with our affinity partner American Express, securing an estimated \$2million in subscription revenue by the end of the fiscal year.
- Over 1,000 queries were taken by our careers centre, including for job searching, resume checking, career discussions, and helping university students find industrial training opportunities. Our careers coaching session is becoming more popular as experienced members (7-10 years) consider other engineering career options.

### 40-year free membership benefit closed

- During the year, the Council of Engineers Australia decided to cease the 40 year free subscription concession introduced some years ago.
- Those members who currently receive the 40 year free membership concession, together with those who qualify for it up to and including 30 June 2017, will retain the benefit for as long as they wish to retain their membership.

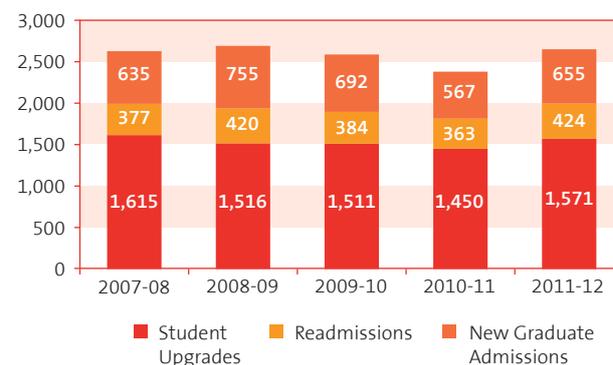
### Income and Expenses

\$ million	2010-11	2011-12
Expenses	5.650	6.214
Income	-2.068	-2.840
Funded from member subs	3.583	3.374

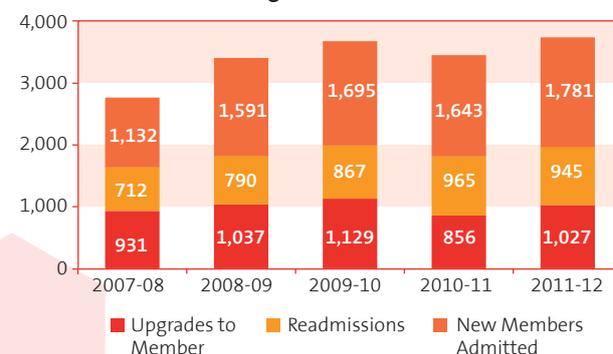
### Student Membership



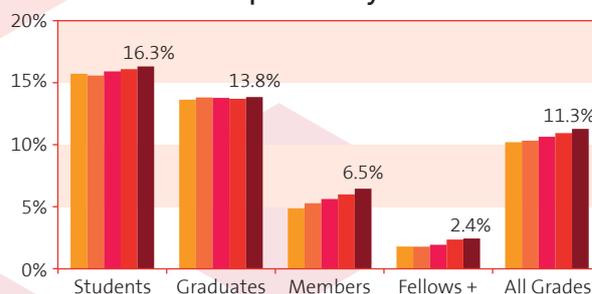
### Admissions of new Graduate members



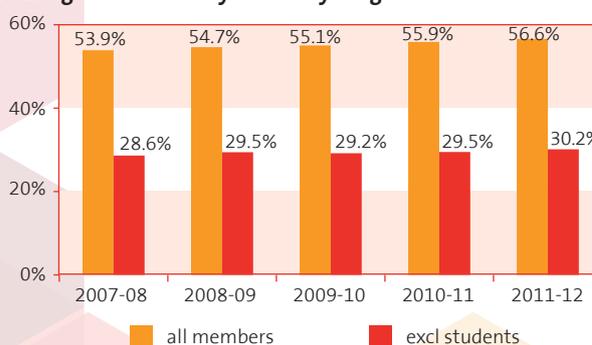
### Admissions to full Member grade



### Female share of Membership – last five years



### Percentage members 35 years and younger



## 5 EDUCATION AND QUALIFICATION

Promote engineering as an attractive career option for young Australians of all backgrounds, and for others seeking to practise as engineers.

### Key Indicators

- > Enrolments in tertiary engineering studies
- > Numbers seeking to practise engineering – through graduation, assessment, and articulation

### Increasing awareness of engineering as a career and influencing school students

Our Division members and staff support a wide range of successful outreach activities, both in terms of student competitions and information sessions for parents and teachers, to encourage interest among students to pursue enabling studies in science and mathematics.

#### Primary school students

- > 48,000 students participated in *EngQuest 2011*, beating the 2010 record. *EngQuest 2011* was the 10th iteration of this outreach program, and was based on a humanitarian theme. All activities in the program are linked to the national schools' curriculum.
- > *EngQuest 2012* is already shaping up to exceed 2011 participation levels.
- > Our members and staff in Divisions report success with a variety of primary school programs, including Engineering Games (Canberra) and Innovations Games (Newcastle).

### Encouraging education providers to offer relevant engineering courses

#### Attracting young Australians to enrol in engineering studies

- > Our policy objectives are to engage with academia to ensure engineering courses are attractive, relevant and of high quality to attract young Australians, and overseas students, into engineering careers.
- > In 2010, the last available consolidated statistics, there were record numbers of students enrolled in engineering courses.
- > University course commencements at all levels by domestic students (citizens and permanent residents) increased by 8% in 2010, continuing a rising trend that began in 2006.
- > Female numbers are increasing along with total enrolments, but have remained in the range 15-16% of enrolments for a decade!
- > With regard to course completions over the last decade, the 2nd chart shows that nearly 80% of the growth in completions of engineering courses – undergraduate and higher levels – is attributable to overseas students.

#### Upgrading undergraduate curricula

- > During 2011, nearly 50 volunteer members (including College-based support efforts) contributed over 2,000 hours to our annual university curriculum accreditation program. 12 accreditation visits were made to university and TAFE education providers. Revised accreditation procedures approved by the Accreditation Board resulted in immediate quicker turnaround for education providers as well as greater rigour and certainty in accreditation assessments.
- > The Australian Council of Engineering Deans (ACED), in conjunction with Engineers Australia, delivered eight national workshops on the revised 2011 Stage 1 Competency Standards

#### Secondary level programs

- > Our young engineer members assist Divisions with visits to schools to promote engineering careers. Divisions continue to rate highly results for the annual *Science and Engineering Challenge* which Engineers Australia supports, and other secondary-level programs, including provision of careers information.
- > Sydney Division reported 100% take-up of its summer engineering school, with 70% of participants from regional areas. The Autumn School in March 2012 was booked out, with a site visit to the Cotter Dam expansion project in Canberra possible with sponsorship from Abigroup.
- > 'GirlTalk' CDs made available by the Women in Engineering National Committee continue to prove popular in schools as a means of raising awareness among girls of career opportunities in engineering.

to support the launch of the revised standards to university engineering schools. Some 250 university academic staff and other interested parties attended the seminars.

### Bachelors Commencements – Domestic Students Engineering and related technologies



### Course completions in engineering and related technologies – all levels



## 5 EDUCATION AND QUALIFICATION

### Engaging with students to promote their professional commitment

- > College-based groups and our Divisions provide a range of competitions, awards and prizes for tertiary engineering students as a way of encouraging their interest in the profession and recognising academic excellence, practical skill, and teamwork in creating engineered solutions. Many of these activities are supported by industry in various ways.
- > Results for most such activities are available on the relevant pages of the Engineers Australia website.

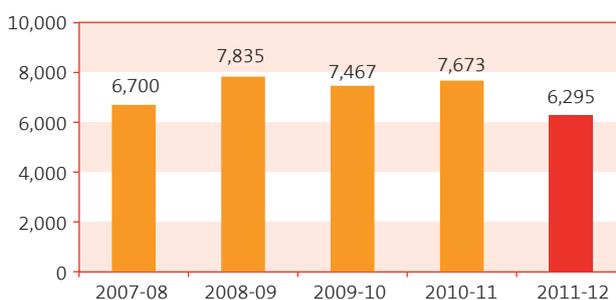
### Providing pathways for other qualified engineers to be recognised to practise

#### Our migration skills assessment service

- > During 2011-12, our Migration Skills Assessment unit received significantly lower than expected numbers of applications from persons with engineering qualifications wishing to enter Australia (see chart opposite). Once again, applications fell away in the latter quarter of the year to total 6,295, seen to be as a result of a continuation of the 'raising of the bar' by DIAC to would-be immigrants.
- > The assessment of applications now often includes additional services as requested – those of an opinion on the amount of relevant work experience and, less often, comparability of an overseas PhD with an Australian Doctorate. Satisfactory outcome levels allow the client to claim additional migration points in the subsequent DIAC application, but the extra tasks have slowed assessment times significantly with the result that despite the fall-off in numbers, longer than desired turnaround times for processing of assessment applications still persists – now around 15 weeks. Demonstrably urgent cases are still handled expeditiously. Fees for these services, as well as an increase in fees for the standard assessment have been agreed with Government.
- > Apart from international students undertaking Bachelor degree studies in Australia, the major source countries for applications for assessment from migrants continue to be India, Iran, UK, China and South Africa.
- > In anticipation of SkillSelect – DIAC's radically new online service that allows prospective migrants to lodge an Expression of Interest (EOI) – introduced on 1 July 2012, many applicants were very keen to be assessed well before this date. This new initiative, whereby visa invitations are offered to those with highest points on a monthly basis, is seen as more competitive and naturally this is expected to result in continuing low application numbers for assessment in the forthcoming year.
- > Several presentations were made to the Migration Institute of Australia – including at their Annual Conference – over the course of the year, and these always seem to be very popular and well-attended. The assessment service offered by Engineers Australia continues to be very well regarded amongst Migration Agents and their clients, and we maintain an extremely high reputation in all quarters.

- > The MSA unit continues to effectively engage with key stakeholders such as the Immigration Department and the Migration Institute of Australia. The usual annual performance assessment by Government was once again deferred as a result of a continuing high level of confidence in our unit's processes.
- > Our subsidiary Engineering Education Australia continued to deliver the Commonwealth Government's authorized 'Professional Year' program for skilled graduate-temporary visa migrants.
- > In all about 30 requests were received for a Preliminary (informal) Review of assessment outcomes, and only three of these proceeded to formal review – one of which was upheld and only then subject to the satisfactory resubmission of further documentation.

#### Applications for migration skills assessment



#### Support for overseas qualified engineers

- > Our priority is to provide more opportunities for engineers with qualifications gained overseas to enhance their own professional development. In various Divisions, such opportunities occurred through international engineers groups managing their own CPD programs and attending workshops including career skills, and through our engagement at State government level on strategies for employment of migrant engineers.

#### Eligibility for membership (Stage 1 competency)

- > Engineers Australia provides a process of assessment of eligibility for membership for applicants whose qualifications are not otherwise accredited or recognised. During the year our assessors received and processed 454 applications for Stage 1 Competency Assessment.

### Income and Expenses

\$ million	2010-11	2011-12
Expenses	2.926	3.523
Income	-3.512	-3.815
Surplus income	0.586	0.292

## 6 INTERNAL STRUCTURE AND ADMINISTRATION

Ensure that our members and our staff have the best possible organisation, structures and support for them to work together to achieve our vision.

### Key Indicators

- > Incidence of use of our online services
- > Increased interest among members to take up office bearer roles
- > Unity of purpose between members and staff

### Providing modern communication channels and knowledge management techniques

#### MIS Renewal Program

- > Our MIS Renewal Program is a major technology replacement program of most of our current IT systems, with an overall current budget of \$7 million. Major milestones in upgrading our website, our customer management system and our accounting system were achieved during 2011-12.
- > The launch of our first major integrated member application, our online Chartered assessment system *eChartered*, was scheduled for 1 July 2012 but will now be implemented in November 2012.

#### Providing online services for members

- > Our website was converted successfully to the new content management system Drupal in November 2011.
- > Growth in visitors to our website was 30% over 2010-11, to 732,000 unique visitors. Pages of content viewed increased by 37% to 5.15 million.
- > The importance of timely communication with members on forthcoming events was reinforced with a Canberra Division experience of late notice considered to have resulted in significantly lower attendance rates at Australian Engineering Week activities in 2011.

### Providing an effective governance framework

#### Keeping our governance up-to-date

- > Our new Royal Charter and By-laws came into effect on 26 September 2011. A new umbrella Regulation is being drafted in consultation with relevant stakeholders to update former Regulations in alignment with the new Charter and By-laws.
- > Among other reviews, we are responding to new national workplace safety legislation.
- > Governance workshops were conducted for our volunteer office bearers in all Divisions.

#### Improved support for office bearer elections

- > Division office bearer elections are held annually for vacant positions on National Congress, Division Committees and College Boards.
- > An external service provider was used successfully to conduct Division elections in 2011 for positions for National Congress, Division Committees, and College Boards in 2012.
- > Election results are announced at the Division annual meetings and published in the Division newsletters.

### Efficient, effective and responsible operations

#### Corporate management

- > Council has direct oversight of the regular processes for preparing our long-term financial plan, operational plan, risk oversight, and budget each year, and for monitoring progress.
- > Our Annual Report for 2010-2011 was presented at the AGM in November 2011. Engineers Australia group consolidated financial report was presented again without qualification by our auditors.

#### Sustainable office practices

- > The internal operations of Engineers Australia are typical of small-to-medium office-based organisations in Australia.
- > We estimate the carbon impact of our energy usage at 1,430t CO<sub>2</sub>-e, slightly lower than last year. National Office paper usage is estimated at 1,200 reams, 20% lower than last year. Including Division offices, our estimate of office-based paper usage is 2,200 reams.
- > During the year, our National Office became an accredited recycler under the ACT Government's Smart Office environmental management program.



Staffing at 30 June (rounded)	2008	2009	2010	2011	2012
National Office					
– Canberra	74	78	80	86	90
– outposted in Divisions	10	14	18	17	20
Division staff	54	49	50	52	59
<b>Total</b>	<b>138</b>	<b>141</b>	<b>148</b>	<b>155</b>	<b>169</b>
% staff female	63%	64%	63%	64%	69%
% executives female	38%	44%	44%	40%	40%

### Income and Expenses

\$ million	2010-11	2011-12
Expenses	6.824	6.237
Income	-1.987	-1.996
Funded from member subs	4.837	4.241

## OUR SUBSIDIARY COMPANIES

# Engineers M E D I A

### ENGINEERS MEDIA

[www.engineersmedia.com.au](http://www.engineersmedia.com.au)

**Our prime purpose is to advance the science and practice of engineering and promote the dissemination of scientific and engineering knowledge through the publication of material.**

#### Overall Business Outcome

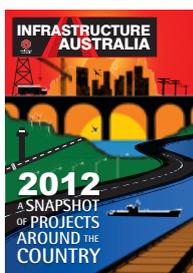
We continued to invest funds this year to enable us to expand our digital publishing capabilities to provide members with enhanced interactive editions of our publications, supporting Engineers Australia's strategic focus on member services.

To provide members with a publication on engineering in the mining industry we successfully launched *Mining 2012* in January.

#### Magazine Publishing

The annual circulation of our flagship magazine *Engineers Australia* magazine topped 660,000 copies, which was 1.5% higher than the previous year.

We also published issues of *Infrastructure Australia* magazine, our annual snapshot of projects around the country, and some eight other regular printed and online publications.



Our bimonthly online only publication *Sustainability Engineering Australia* was circulated via social media channels. We published 16 digital and print issues of Engineers Australia's Technical Journals and four issues of Concrete in Australia magazine for the Concrete Institute of Australia.

#### Engineers Australia Salary and Benefits Survey

We published the ninth annual *Engineers Australia Salary and Benefits Survey* in February. The survey completed by 429 engineering employees represented the salaries paid to more than 91,000 engineers.

#### Digital Publishing

Our focus this year was to develop our in-house digital publishing capacity across our magazine and book publishing operations. The highlights of the year were the launch in July of our tablet editions of *Engineers Australia* magazine and *Sustainable Engineering Australia*.

#### Contribution to the Year of Humanitarian Engineering

Partner Housing Australasia was awarded the inaugural \$10,000 Engineers Media Humanitarian Engineering Grant. The grant also provided in kind publishing support to RedR Australia and Engineers Without Borders.

#### Publishing Scholarship

The 2012 Engineers Media's Annual Publishing Scholarship was awarded to University of Technology Sydney (UTS) Communication student Theresa Tran. The scholarship included a work placement with our editorial department. The award continues to raise the profile of technical writing at UTS.

#### Governance

Engineers Australia's new CEO Stephen Durkin joined the Board in February 2012.

#### New Initiatives and Future Directions

We will be working closely with Engineers Australia over the next few months to deliver a range of editorial services for their websites and newsletters. The service will extend to supporting the development of practice bodies of knowledge for Engineers Australia's Colleges and Technical Societies.

The August issue of *Engineers Australia* magazine was the first with the new masthead and design. The redesign was aimed at aligning the magazine with Engineers Australia's focus on branding.

We also reentered the online engineering employment market place with the launch in July of the *EngSearch* job board website.

#### Financial Result

The reduced surplus in 2012 reflected the continuing flat advertising market due to a lack of business confidence in the economy.

	2011-12 \$m	2010-11 %m
Income	4.805	4.818
Expenses	4.750	4.719
<b>Operating surplus/deficit(-)</b>	<b>0.055</b>	<b>0.099</b>
<b>Total Members' Funds</b>	<b>2.299</b>	<b>2.244</b>

#### Bruce Roff

General Manager



#### Changing of the Guard

Dr Dietrich Georg, our long term managing editor, retired in April, after celebrating 25 years of service to *Engineers Australia* magazine. Dietrich's extensive engineering knowledge was retained by the company when he accepted a part time role coordinating our technical practice notes and guidelines operations. We were pleased to welcome back Dr Tim Kannegieter, a former journalist with the company, as our new managing editor.

OUR SUBSIDIARY COMPANIES



**ENGINEERING EDUCATION AUSTRALIA**

[www.eeaust.com.au](http://www.eeaust.com.au)

**Our primary object is to promote the science and practice of engineering through the education of individuals and the public in general.**

**Overall Business Outcome**

During 2011-12 EEA delivered courses to over 4,000 people from engineering organisations across Australia. This has been achieved through collaboration with individual facilitators, education institutions, professional associations including Divisions and Colleges within Engineers Australia, and engineering companies. Continued collaboration with the American Society of Mechanical Engineers and the American Society of Civil Engineers has seen successful technical programs delivered in these disciplines.

**Public courses**

These make up 35% of EEA's revenue. The most popular courses for the year were Project Management, Contract Management and Writing Technical Documents. The online Diploma of Project Management was also very popular. Lower numbers per course has meant that profitability is down for public courses and next year fewer courses will be scheduled in an effort to combat this.

**Courses delivered in-house**

Customised programs make up 10% of the business result. While the annual result was lower than forecast, this business began to increase towards the end of the year and for the coming year will be given an increased focus.

**Professional Year in Engineering**

This program made up 38% of EEA's business and finished the year well ahead of forecast. The program continues to attract international graduates in search of internship opportunities. We are seeking closer partnerships with our client organisations to increase our capability to broker internships.

**The Graduate Program**

While this program makes up just 7% of EEA's business, it also finished the year well ahead of forecast. It is an important program because it supports organisations in an area which they value greatly and many organisations opt to deliver this program in-house with a focus on their policies and practice. The graduate program, currently with 330 participants, has grown significantly in the past months and the repeat business from clients indicates it is going from strength to strength.

**The Engineering Leadership Residential**

This has been delivered for three years now and even though numbers this year were slightly disappointing, it continues to receive excellent feedback from participants.

It is seen as a flagship product which will ultimately grow in numbers as the alumni spread the word.

**Governance**

John Simmons retired from the Board in December 2011, and Stephen Durkin the new CEO for Engineers Australia joined the Board in February 2012.

**New Initiatives and Future Directions**

We were able to secure government funding to deliver Project Management qualifications for engineering organisations at a subsidised rate.

Plans were started for the purchase of the Registered Training Organisation "The Moreland Group" (completed in July 2012) and this will give us more qualification options to deliver.

Delivery of online and webinar programs has grown and new topics and methodologies will continue to be incorporated into offerings.

There was an increased interest in sector based programs such as the Construction Management Series. This will be a feature of future business and current projects are exploring programs for the Rail and Energy sectors.

**Financial Result**

Revenue grew by 34% from last year.

The business result for each area of business reflects the changing nature of the professional development sector and therefore our major initiatives for the coming year.

	2011-12 \$m	2010-11 %m
Revenue	7.824	5.843
Expenses	7.322	5.662
<b>Operating surplus/deficit(-)</b>	<b>0.502</b>	<b>0.181</b>
<b>Total Members' Funds</b>	<b>2.081</b>	<b>1.612</b>

**Ann Ellis**

*General Manager*

## DIVISIONS

STRATEGIC DOMAINS	CANBERRA DIVISION
<b>1 Community Engagement</b> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Good progress on initiatives for Canberra 100, including publication of a coffee table book titled "A Centenary of Canberra Engineering"; a concept for a radio broadcast of selected Engineering Heritage oral history program; planning for the 17th Engineering Heritage Conference; and the next phase of our partnership with the Pin Oak Forest in the National Arboretum Canberra.</li> <li>• Australian Engineering Week yet again a success with a diverse range of activities, including a field trip and site visits. Total numbers participating in events across the week was 467 (this number does not include the Engineering Games).</li> <li>• Two public forums held during Australian Engineering Week – one on "Fire Safety" and the other on "New Frontiers in Engineering Technology". Attendances at public forum events lower than last year.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Total technical events held 70 and total attendees 2,126 (equates to an average attendance of 30 per session (slight decrease to that of last financial year).</li> <li>• Division Committee has agreed to commence charging non-members to attend our technical presentations commencing on 1 July 2012 (a pilot program will be run and evaluated at the end of 6 months).</li> <li>• Young Engineers eXchange lunch very successful with 103 attendees. Young Engineer's once again successful in securing DMO sponsorship for this event.</li> <li>• Chartered interviews -18 held.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• Met with representatives of all three key political parties – Labor, Liberals and Greens, to discuss engineering issues, including chartered status and registration of engineers.</li> <li>• Held a very useful roundtable breakfast briefing on ACT infrastructure with government ministers, based around the ACT Infrastructure Report Card 2010.</li> <li>• Media hits – several stories on radio and newspaper on AEW, Excellence Awards, Heritage Main Outfall Sewer plaque, Young Engineers eXchange lunch and Young Professional Engineer of the Year.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Three new Fellows presented with certificates at annual Division meeting.</li> <li>• One Honorary Fellow presented with certificate at the AGM.</li> <li>• Contributed to Year of Humanitarian Engineering with a presentation on 'Army Engineers response to the Boxing Day Tsunami' during AEW.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• Engineering games were held in Australian Engineering Week with around 400 students participating. Outstanding success with a new game introduced.</li> <li>• Excellence Awards entries exceeded our target with 17 submitted; 216 guests at awards dinner, including 5 MLAs. One of the winning entries went on to successfully win an Excellence Award at the national Australian Engineering Excellence Awards.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• Governance workshop held in May 2012 for office bearers.</li> <li>• Produced four printed newsletters and two electronic versions. The AEW version was only sent out electronically.</li> <li>• Continued to refine the processes for sending out email notifications to members about technical and other events.</li> </ul>

### Membership – Canberra Division

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	462	445	453	444	447	0.7%
Members	1,033	1,087	1,120	1,126	1,142	1.4%
Fellows (and others)	208	211	213	214	210	-1.9%
<b>Sub-total</b>	<b>1,703</b>	<b>1,743</b>	<b>1,786</b>	<b>1,784</b>	<b>1,799</b>	<b>0.8%</b>
Students	560	584	594	675	759	12.4%
<b>Total – at 30 June</b>	<b>2,263</b>	<b>2,327</b>	<b>2,380</b>	<b>2,459</b>	<b>2,558</b>	<b>4.0%</b>

### Division Committee – at 30 June 2012

Doug Mitchell MIEAust CPEng – *President*

Andrew Montgomery FIEAust CPEng – *Deputy President, Congress Delegate*

Jennifer Murray MIEAust CPEng – *Past President, Congress Delegate*

Jega Janarthana FIEAust CPEng

Haley Jones MIEAust

Craig Kazakoff FIEAust CPEng

Andrew McLarty TMIEAust

Adrian Piani MIEAust CPEng

Christina West MIEAust CPEng

DIVISIONS

STRATEGIC DOMAINS	NEWCASTLE DIVISION
<p><b>1 Community Engagement</b></p> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Engineering Week was a great success with a career advisors' workshop and site tour. Discover Engineering was held both regionally and locally. Thank you to our three sponsors Aurecon, Ausgrid &amp; GHD.</li> <li>• Engineering Games which are part of Engineering Week were held in December with over 190 students participating in the Mini Pult of Doom.</li> </ul>
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• All branches and groups continue to host quality presentations. Our assessor continues to host PDP presentations, Chartered workshops and Professional Interviews.</li> <li>• A total of 75 presentations, 2172 attendees and 2086 CPD hours were recorded for the year.</li> <li>• We have seen an increase in the number of members becoming Chartered.</li> <li>• Eminent Speaker tours were arranged for the Regional Groups as part of YoRET</li> <li>• The Young Engineers Formal Dinner was another successful evening with 7 sponsors and approximately 130 guests attending.</li> <li>• The 2011 Regional Convention held in Armidale in Sep 2011 was a resounding success and provided a great opportunity for our regional members to network and gain valuable CPD points.</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• Media relations remained strong throughout the year with good coverage through supplements for Engineering Week and the Excellence Awards</li> <li>• National President and Division Executive toured Regional Groups in early July</li> <li>• Major stakeholders lunch was held to coincide with the visit from the new CEO</li> <li>• The CELM CEO Breakfast series sponsored by Aecom continued</li> <li>• Comments provided by members in regard to the Senate Inquiry on the Engineering Skills Shortage &amp; the NSW Long Term Master Transport Plan</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• The Engineering Excellence Awards were an outstanding success with 16 finalists and 9 sponsors.</li> <li>• The Engineers Australia Medal was presented to one of our very worthy members at the Engineering Excellence Awards.</li> <li>• An increase in nominations for individual awards – 9 Young Engineer nominations and 2 Professional Engineer nominations.</li> <li>• A number of members have been welcomed as Fellows.</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• School student activities continued throughout the Division with Discover Engineering, the Innovations Games, Engineering Games, Engquest and the Science &amp; Engineering Challenge.</li> <li>• The Division has been working closely with the University of Newcastle to increase student membership through online enrolment tasks.</li> <li>• University prizes continue to be funded through the Division.</li> <li>• The Division continues to publish the Engineering Vocation Handbook which is a great support to students.</li> <li>• The Division has set up a sub-committee to look at education issues in collaboration with the Universities, TAFE and Department of Education.</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• Sponsorship levels remain strong.</li> <li>• An excellent team of staff members who provide great support to the members and branches through exceptional service.</li> <li>• Growth in external room hire continues to assist income streams.</li> </ul>

**Membership – Newcastle Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	639	580	553	565	583	3.2%
Members	1,336	1,443	1,527	1,576	1,675	6.3%
Fellows (and others)	250	246	236	239	233	-2.5%
<b>Sub-total</b>	<b>2,225</b>	<b>2,269</b>	<b>2,316</b>	<b>2,380</b>	<b>2,491</b>	<b>4.7%</b>
Students	1,284	1,284	1,260	1,284	1,388	8.1%
<b>Total – at 30 June</b>	<b>3,509</b>	<b>3,553</b>	<b>3,576</b>	<b>3,664</b>	<b>3,879</b>	<b>5.9%</b>

**Division Committee – at 30 June 2012**

Dr Ron Banerjee FIEAust CPEng – *President*

Tim de Grauw MIEAust

Karlie Collis MIEAust CPEng – *Deputy President, Congress Delegate*

Michael van Koeverden MIEAust CPEng – *Congress Delegate*

Brian Marsden AMIEAust

Paul Reynolds MIEAust – *Past President*

Hugh Tait MIEAust CPEng, Chair YEN

Barry Finlay FIEAust CPEng – *Congress Delegate*

Murray Thompson MIEAust

Mervyn Lindsay FIEAust CPEng – *Immediate Past National President*

Mark Tildsley FIEAust

Chris Turnbull FIEAust

DIVISIONS

STRATEGIC DOMAINS	NORTHERN DIVISION
<b>1 Community Engagement</b> <ul style="list-style-type: none"> <li>Seeking new forms of engagement</li> <li>Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>The Minister for Construction and Infrastructure hosted the launch of Australian Engineering Week 2011 activities at Parliament House.</li> <li>Banners were erected on major intersections and overpasses, with passing traffic estimated at over 250,000 vehicles. A notable AEW event was our second Heritage Bus tour to heritage sites and vintage vehicles at the old QANTAS hangar.</li> <li>A liftout in the <i>Northern Territory News</i> highlighted the Engineering Excellence Awards and profiled engineering as a career of choice.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>Promoting CPD and networking events</li> <li>Promoting the Professional Development Program</li> <li>Promoting being Chartered</li> <li>Supporting diverse member interests</li> <li>Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>The Division conducted regular CPD events in Darwin and three regional towns. The Young Engineers invited participation via SKYPE to one of their events.</li> <li>Funding was secured to host two CELM events with keynote speakers from the RAN and Shell Australia with very good attendance at both events.</li> <li>The appointment of a national assessor for the Division has enabled more Chartered information events and resulted in a 100% lift in successful professional interviews.</li> <li>The new Administrator of the Northern Territory the Honourable Sally Thomas was the guest speaker at our annual Gala Dinner.</li> <li>The Division President held preliminary meetings with Government with regard to introducing registration for Northern Territory engineers.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>Engagement with Governments and the media</li> <li>Professional and industry links</li> <li>Regulatory framework</li> <li>Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>Our links with Ministers and Government Departments remained strong, particularly through industry advisory boards. We continue as the Secretariat for the NT Business Council and BEDP thus strengthening links to government.</li> <li>National President David Hood visited Alice Springs to attend our Engineering Excellence Awards Presentations, make site visits and meet regional members.</li> <li>The Division supports diverse membership on our management committee including young members and regional representation, and gained sponsorship for YEA, GENX, WIE and CELM events.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>Public recognition of achievements</li> <li>Members promoting the profession</li> <li>Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>CEO Stephen Durkin attended the opening of the Defence of Darwin Museum during the 70th commemoration of the bombing of Darwin.</li> <li>Eight Fellows and a new Companion were welcomed to the Division in 2011-12.</li> <li>The Division promoted "2011 The Year of Humanitarian Engineering" at all our events, and hosted the year's highly successful concluding conference in November 2011. The Year of the Regional Engineering Team was launched in both Alice Springs and Darwin and became the theme for 2012 events.</li> <li>Northern Division project "Bushlight India" achieved the Sir William Hudson award at the 2011 Australian Engineering Excellence Awards – an enormous achievement for a small indigenous owned organisation from Alice Springs. Also, the national Engineering Associate of the Year was Jaswant Deo.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>Engineering competitions</li> <li>Promoting engineering on campus</li> <li>Engaging with academia</li> <li>Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>Over 1800 NT students participated in EngQuest, and we increased involvement in Science Week in 2011 with over 53 events held across NT.</li> <li>Over 2,000 students participated in the SMART programs for regional and remote areas, thanks to the major grant secured from Shell Australia last year.</li> <li>The Science and Engineering Challenge was again hosted in 2012.</li> <li>Alice Springs and Darwin hosted Sunchase, the model solar car competition for schools.</li> <li>Strong support was provided to Charles Darwin University through the Industry Engagement Group sponsorship of various student prizes.</li> <li>Overseas qualified engineers seeking advice from the Division increased in 2011-12.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>Keeping members informed</li> <li>Good management</li> </ul>	<ul style="list-style-type: none"> <li>6 newsletters were produced (including a Division annual report in Dec 2011).</li> <li>Governance training was provided for office-bearers and staff in Mar 2012.</li> <li>Regional representation increased on Management Committee with 5 members from areas including Gove, Alice Springs and Jabiru.</li> <li>Sponsorship targets were exceeded with new 3 year contracts signed with large sponsors.</li> </ul>

Our Results

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**Membership – Northern Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	116	115	109	118	121	2.5%
Members	225	219	247	255	256	0.4%
Fellows (and others)	55	55	52	53	57	7.5%
<b>Sub-total</b>	<b>396</b>	<b>389</b>	<b>408</b>	<b>426</b>	<b>434</b>	<b>1.9%</b>
Students	179	193	212	212	247	16.5%
<b>Total – at 30 June</b>	<b>575</b>	<b>582</b>	<b>620</b>	<b>638</b>	<b>681</b>	<b>6.7%</b>

**Division Committee – at 30 June 2012**

Louise McCormick MIEAust – <i>President, Congress Delegate</i>	Peter Russell FIEAust CPEng – <i>Congress Delegate</i>	Len Chappell TFI EAust CEngT – <i>Past President</i>
Trevor Horman FIEAust CPEng	Colin Van Eck FIEAust CPEng	Adam James MIEAust CPEng
Abe Abdallah MIEAust	Amr Edrees MIEAust CPEng	David Lilley FIEAust CPEng FICE FStructE
Lakshmanam Alagappan MIEAust	Brian Forester FIEAust CPEng	Kirsty McInnes FIEAust CPEng
Nerida Beard GradIEAust	John-Paul Foster MIEAust CPEng	Lakshman Rajaratnam FIEAust CPEng
Sunny Bhatti GradIEAust	Lyndon Frearson MIEAust	Simon Turner MIEAust
Gary Boyle MIEAust	Tom Gooding MIEAust CPEng	Steven Walker FIEAust CPEng
Jaswant Deo AMIEAust CEngA	Ken Grattan MIEAust CPEng (Ret)	Felicity Wall GradIEAust
Sumesh Dhir MIEAust CPEng		Julie Woerner GradIEAust

DIVISIONS

STRATEGIC DOMAINS	QUEENSLAND DIVISION
<p><b>1 Community Engagement</b></p> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Australian Engineering Week provided positive outcomes. Over 90 separate events (against a target of 80) were held throughout Queensland, attracting over 1,000 participants.</li> <li>• Support to the Kooma Community project has achieved some positive outcomes. A visit to the Kooma Community was conducted by the National President, Division President, and Executive Director. Engineers Without Borders have obtained additional support for the Kooma Amenities Block project and we provided \$10k in funding to support this activity.</li> </ul>
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Technical presentations were above target (184 to end of June against an annual target of 150). Average attendance is on target at 40.</li> <li>• Considerable work was invested in securing volunteers for the Chartered Professional Interviews, with some 700 volunteers organised to date.</li> <li>• Over 600 Professional Interviews were held in the 12 months against an annual target of 350. Processing times are holding up well.</li> <li>• An Honorary Fellows luncheon was held in February.</li> <li>• Unit Chairs meeting was held in February with all but one group chair attending.</li> <li>• 2011 The Year of Humanitarian Engineer was well supported by Queensland Groups with over 20 activities held during the year across the State.</li> <li>• Our Overseas Qualified Engineers Support Group was well supported.</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• Preparation and distribution of the interim and final flood report has met the requirements for the development of a position paper on a topical issue impacting the community.</li> <li>• 8 meetings were held with Government and Opposition MPs, and Departmental heads, against our target of 10. Additional interaction occurred through a range of other activities.</li> <li>• We achieved a 100% response rate from Parties in the State Election, with regard to their policies which might concern members. Their policy positions were communicated to all Queensland members in advance of the election.</li> <li>• Zimi Meka gave an excellent Hawken Address, and we delivered our planned 3 Corporate Breakfast events.</li> <li>• All regional groups, with the exception of Roma, were visited in 2011. Planning has commenced for the 2012 schedule of visits.</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Fee paying membership grew at 8.6% against an annual target of 2%, with over 11% growth achieved for full Member grade.</li> <li>• Excellence Awards were held in Oct 2011, with positive feedback on the event. 44 entries were received against a target of 40.</li> <li>• 2 engineers were inducted into the Queensland Hall of Fame. Professional and Young Engineer of the Year awards were made.</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• Engineering Deans Luncheon was held in Nov 2011.</li> <li>• Support was provided to the Engineering Link Group and the Science and Engineering Challenges.</li> <li>• Careers Expo held with over 900 attendees.</li> <li>• Six Universities were visited with presentations to over 2,000 engineering students.</li> <li>• Stage 1 Assessors held a workshop in Sep 2011. Careers advisor presented to Overseas Qualified Engineers Group and at a break-out session at the Careers Expo.</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• Record number of nominations received for the Queensland Division Committee and Congress representatives.</li> <li>• Successful Annual Division Meeting held. 140 attendees against a target of 80.</li> <li>• Financial management at highest levels for some years.</li> <li>• Working parties established in key areas and they achieved positive outcomes to feed into future strategic planning.</li> </ul>

**Membership – Queensland Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	3,108	3,116	3,126	3,120	3,159	1.3%
Members	6,323	6,845	7,485	8,169	9,100	11.4%
Fellows (and others)	832	842	875	899	912	1.4%
<b>Sub-total</b>	<b>10,263</b>	<b>10,803</b>	<b>11,486</b>	<b>12,188</b>	<b>13,171</b>	<b>8.1%</b>
Students	7,679	7,315	7,823	8,322	8,920	7.2%
<b>Total – at 30 June</b>	<b>17,942</b>	<b>18,118</b>	<b>19,309</b>	<b>20,510</b>	<b>22,091</b>	<b>7.7%</b>

**Division Committee – at 30 June 2012**

Steven Goh MIEAust – *President*

Kelly Coverdale MIEAust

Simon Orton MIEAust CPEng EngExec – *Deputy President, Congress Delegate*

Bryony Elson GradIEAust

Dennis Wogan PSM FIEAust CPEng – *Immediate Past President*

Blake Harvey MIEAust CPEng

Ken Pearce FIEAust CPEng – *Congress Delegate*

Peter HO FIEAust CPEng

Matthew Taylor MIEAust CPEng EngExec – *Congress Delegate*

Hari Krishnan TFIEAust

Mike Brady FIEAust CPEng

Stuart Lister HonFIEAust

Chris Warnock FIEAust CPEng

DIVISIONS

STRATEGIC DOMAINS	SOUTH AUSTRALIA DIVISION
<b>1 Community Engagement</b> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Our Engineering Wonders publication was launched at a breakfast event held at <i>The Advertiser</i> on 2 Aug 2011. The publication highlights the wonders of South Australian engineering between 2000 – 2010, and was distributed as an insert to nearly 200,000 businesses and households across the State. Contributions were compiled from winners of Engineering Excellence Awards during 2000-2010 as well as other significant projects delivered in South Australia during this time.</li> <li>• The Division held 2 technical presentations, a breakfast event and 12 site visits and workshops during 2011 Australia Engineering Week. The Division had a booth at Science Alive! which had an estimated 24,000 attendees over three days.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• The Sir Eric Neal Address was held on 22 Feb 2012 at the Sebel Playford with over 130 guests. The keynote speaker was Operations Manager of Country Fire Authority, Stewart Kreltshheim. Stewart delivered an address about his experiences as Incident Controller on Black Saturday 2009. CEO Stephen Durkin and National President David Hood attended the event and provided a presentation to guests.</li> <li>• The SA Division supported four CELM/YEA events which were held to generate interest and discussion in preparation for the Engineering Leadership Conference in 2012. The event themes were in line with the conference themes 'Pathways to Leadership', 'Transitions in Leadership', 'Engineering a Better Society' and 'Engineering Leadership in Industry'.</li> <li>• The Division hosted a technical presentation with live web streaming with guest speaker WFEO President Maria Laffargue during ICWES15 in July 2011.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• An Engineering and Construction Networking cocktail event was held with the Civil Contractors Federation at their new premises on 8 Mar 2012. The event was an opportunity for attendees to try the state-of-the-art training facilities as well as network with members of the engineering and construction industries.</li> <li>• The Parliamentary Fellows Program continued this year with interest in the program received from other Divisions.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• The Engineering Excellence Awards dinner was held on 16 Sep 2012. There were a total of 25 submissions judged and over 350 attendees at the presentation dinner. The Division provided support for the 2012 Engineering Leadership Conference held in Adelaide in May-Jun 2012 attended by over 400 delegates.</li> <li>• Two members were inducted into the South Australian Hall of Fame.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• A Migrant Support Workshop was conducted in Aug 2011 for overseas qualified engineers living in South Australia. The Division continued the successful Campus Coordinator Program with the University of Adelaide and University of South Australia.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• The South Australia Division Committee developed three portfolios: Continuing Professional Development, Membership and Year of the Regional Engineering Team. The portfolios developed aims and members of Division Committee worked towards delivering outcomes during the year.</li> <li>• The Annual Division Meeting was held on 1 Dec 2011 with over 70 attendees.</li> </ul>

Our Results

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**Membership – South Australia Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	885	867	853	824	830	0.7%
Members	1,892	1,955	2,016	2,127	2,234	5.0%
Fellows (and others)	411	408	421	422	420	-0.5%
<b>Sub-total</b>	<b>3,188</b>	<b>3,230</b>	<b>3,290</b>	<b>3,373</b>	<b>3,484</b>	<b>3.3%</b>
Students	3,073	2,918	2,899	2,889	3,005	4.0%
<b>Total – at 30 June</b>	<b>6,261</b>	<b>6,148</b>	<b>6,189</b>	<b>6,262</b>	<b>6,489</b>	<b>3.6%</b>

**Division Committee – at 30 June 2012**

Gerry Doyle FIEAust CPEng EngExec – *President*

John Olson FIEAust CPEng EngExec – *Deputy President*

Dr David Cruickshanks-Boyd FIEAust EngExec – *Immediate Past President, Congress Delegate*

Greg Walters FIEAust CPEng EngExec – *National Councillor*

Dr Cris Birzer MIEAust

Steve BROWN MIEAust CPEng

Mark Brownley FIEAust CPEng EngExec

SQNLDR Fernando Gonzalez MIEAust CPEng

Mark Jones MIEAust

Lachlan Kinnear MIEAust CPEng

Steve Ludlum FIEAust CPEng EngExec

Anh Tran – GradIEAust

DIVISIONS

STRATEGIC DOMAINS	SYDNEY DIVISION
<p><b>1 Community Engagement</b></p> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Australian Engineering Week activities in August 2011 included 13 site tours, “Splash” opening event on Manly Beach, the Harricks Address and the annual Forum (this year a full house discussed the benefits and issues around Sydney’s Bikeways).</li> <li>• The Trivia Night was conducted by Young Engineers (with proceeds to Engineers Without Borders).</li> <li>• The finalists in the photo Competition by Engineers Media were displayed at the AEW Breakfast and the winner announced.</li> <li>• Extensive media coverage was achieved for the Excellence Awards, Engineering Week and especially for the Honeywell Engineering Summer School in the regional press.</li> </ul>
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Our 30 Sydney based Panels, Branches and Societies and 8 Regional Groups delivered 150 events with over 8,000 attendees.</li> <li>• YEAS highlights have been the Young Entrepreneurs workshop in July hosted by sponsors Davies Collision Cave and the Gala Dinner on 8 September where the Young Professional Engineer of the Year was announced.</li> <li>• The WIE Winter Gala Dinner on 30 July was another auspicious occasion. The WIE Eminent Speakers Breakfast in October 2011 was another highlight with more than 200 attending to hear three speakers on the theme – Humanitarians– Engineers – Women Going Places.</li> <li>• Extensive collaboration with Skillmax (through TAFE NSW) with 23 presentations where 267 overseas qualified engineers were provided with information about Engineers Australia and tips for resume writing and job seeking skills.</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• The Maritime Panel made a submission to NSW Government on coastal erosion policy; the Transport Panel made a submission on Integrated Transport Plan to Transport for NSW.</li> <li>• Meeting held with CEO Infrastructure NSW in October 2011; potential for further engagement with us, especially the Young Engineers on their vision for the future of our cities.</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Eleven Chartered workshops were held at the Chatswood Division Office with 285 attendees from non-PDP companies. Regional Chartered workshops were held at Bathurst, Dubbo, Parkes and Blue Mountains as a YoRET initiative.</li> <li>• Our Excellence Awards continued to attract a high number of entries and Emeritus Prof Elizabeth Taylor, Chair of RedR, was Guest of Honour. Annual exhibition of winners at Sydney Powerhouse Museum showcases engineering excellence to over 250,000 visitors.</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• Discover Engineering days were held at Epping Boys High School in Nov 2011 and Caringbah High School in March 2012. Over 300 year 10 students attended to discover all about engineering from young engineers, make paper planes and see how robots work.</li> <li>• University student Careers Expo was held in March 2012 at Sydney Masonic Centre. Over 600 students attended and 27 exhibitors. The Q&amp;A panel session to open the Expo was packed and very informative.</li> <li>• 15th Honeywell Engineering Summer School continues to be a huge success with 103 students and 70% from Regional areas.</li> <li>• Our Annual Education Forum (university, TAFE and high schools) is now held in collaboration with Newcastle Division.</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• All committee minutes are now available on the Confluence website.</li> <li>• Members are kept well informed through our monthly printed newsletter, monthly e newsletter, emails and website.</li> </ul>

**Membership – Sydney Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	3,216	3,086	3,000	3,018	2,951	-2.2%
Members	7,633	7,843	8,075	8,185	8,352	2.0%
Fellows (and others)	1,320	1,296	1,309	1,333	1,322	-0.8%
<b>Sub-total</b>	<b>12,169</b>	<b>12,225</b>	<b>12,384</b>	<b>12,536</b>	<b>12,625</b>	<b>0.7%</b>
Students	6,524	7,372	7,794	8,351	8,841	5.9%
<b>Total – at 30 June</b>	<b>18,693</b>	<b>19,597</b>	<b>20,178</b>	<b>20,887</b>	<b>21,466</b>	<b>2.8%</b>

**Division Committee – at 30 June 2012**

Brendyn Williams MIEAust – *President*  
 John Nichols FIEAust CPEng – *Deputy President*  
 Prof Alex Baitch HonFIEAust CPEng – *National Councillor, Congress Delegate*  
 Bruce Howard FIEAust CPEng – *National Councillor*  
 Kevin Dixon FIEAust CPEng – *Congress Delegate*  
 Michael Myers FIEAust CPEng EngExec – *Congress Delegate*  
 Ted Tooher FIEAust CPEng EngExec – *Congress Delegate*  
 Rosemary Crowhurst MIEAust  
 David Edwards FIEAust CPEng

Samuel Green MIEAust  
 Norm Himsley FIEAust CPEng  
 Michael Lucas MIEAust CPEng  
 Alexandra Meldrum FIEAust CPEng  
 Julie Mikhail MIEAust  
 Nikki New GradIEAust  
 Allan Sangster MIEAust CPEng  
 John Stornelli MIEAust CPEng  
 Maryam Khajeh Tabari MIEAust

DIVISIONS

STRATEGIC DOMAINS	TASMANIA DIVISION
<b>1 Community Engagement</b> > Seeking new forms of engagement > Australian Engineering Week	<ul style="list-style-type: none"> <li>During Australian Engineering Week 2011 we announced our Engineering Excellence Awards and promoted all entries in the media. Large engineering images were displayed in front of our Royal Engineers Building, with over 180,000 vehicles passing each week.</li> <li>Other activities included schools visits, guided Engineering Heritage Walks around Sullivans Cove and our regional groups were very active with schools visits, media supplement, stormwater seminar, lighting presentation and networking events .</li> <li>The week concluded with the very successful State Final of the Science &amp; Engineering Challenge held in Devonport.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> > Promoting CPD and networking events > Promoting the Professional Development Program > Promoting being Chartered > Supporting diverse member interests > Supporting engineering standards and ethical awareness	<ul style="list-style-type: none"> <li>Information on 111 events were distributed to members, with regular electronic updates.</li> <li>Young Engineers, Women in Engineering, Heritage, North West Group &amp; Young Professional Network continued to be very active.</li> <li>An ITEE local unit has been re-established.</li> <li>A number of events have been recorded/made available to regional members.</li> <li>Some external funds have been obtained to subsidise travel costs for regional members to attend events not held in their region, eg to EEA courses.</li> <li>A part time local Industry Manager was appointed; CPEng and eChartered presentations were provided to PDP Partners and the wider membership.</li> </ul>
<b>3 Leadership and Influence</b> > Engagement with Governments and the media > Professional and industry links > Regulatory framework > Providing Division leadership and governance	<ul style="list-style-type: none"> <li>The Parliamentary Support Program with members paired with 13 politicians continued.</li> <li>The Division has representation on many industry bodies including the Tasmanian Council of Professional Bodies &amp; Peak Bodies Group established through the Tasmanian Chamber of Commerce and Industry.</li> <li>Met with Tasmanian Government representatives prior to the April COAG meeting to outline the case for national registration. The Government indicated that it would support the proposal.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> > Public recognition of achievements > Members promoting the profession > Membership initiatives	<ul style="list-style-type: none"> <li>A record number of nominations were received for the Individual Awards for 2011, with three awards presented : Professional Engineer of the Year, Young Professional and Engineering Officer.</li> <li>Dr Jane Sargison was awarded the National Professional Engineer of the Year and has received very good media coverage since.</li> <li>15 entries were received for our 2011 Engineering Excellence Awards with 203 people attending the Awards dinner.</li> </ul>
<b>5 Education and Qualification</b> > Engineering competitions > Promoting engineering on campus > Engaging with academia > Assisting overseas qualified engineers	<ul style="list-style-type: none"> <li>The highly successful Engineering Initiative Program for 32 high-achieving Grade 10 students continues to broaden the awareness of the exciting opportunities an engineering career can lead to. Over 100 students, parents, teachers, engineering mentors, Education Dept representatives attended the end of year function.</li> <li>The program has been reviewed to become the Futures in Engineering program in 2012 which commences with a Taster Day in the three regions around the State involving 85 students, from which the final 32 were selected for the full program. New web pages and electronic material is being developed to support the program and to provide career information.</li> <li>The Science &amp; Engineering Challenge continues to be very successful.</li> <li>Support was given to a variety of schools programs including the Solar Model Vehicle Challenge, Tasmanian Science Talent Search, EngQuest etc.</li> </ul>
<b>6 Internal Structure and Administration</b> > Keeping members informed > Good management	<ul style="list-style-type: none"> <li>Our dedicated staff continued to provide friendly support to our office-bearers, volunteers and members.</li> <li>10 issues of our 20 page newsletter were sent to members and posted on our website.</li> </ul>

Our Results

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**Membership – Tasmania Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	251	273	268	238	237	-0.4%
Members	516	520	531	549	538	-2.0%
Fellows (and others)	126	128	136	135	137	1.5%
<b>Sub-total</b>	<b>893</b>	<b>921</b>	<b>935</b>	<b>922</b>	<b>912</b>	<b>-1.1%</b>
Students	404	396	375	374	375	0.3%
<b>Total – at 30 June</b>	<b>1,297</b>	<b>1,317</b>	<b>1,310</b>	<b>1,296</b>	<b>1,287</b>	<b>-0.7%</b>

**Division Committee – at 30 June 2012**

Keith Midson FIEAust CPEng – *President, Congress Delegate*

Robert Lowther FIEAust – *Deputy President, Congress Delegate*

Erin Jackson MIEAust

Grant Atherton FIEAust CPEng

Dan O’Toole FIEAust

Tammy Chu GradIEAust

Rowan Sharman AMIEAust

Alan Coote MIEAust CPEng

Michael Green FIEAust CPEng EngExec

Tung Hoang GradIEAust

Simon Angilley AMIEAust

Colin Mazengarb (*Geomechanics rep*)

David Brumby FIEAust CPEng (Ret)

Jane Sargison FIEAust

Ian Cooper FIEAust CPEng

Michael Sylvester MIEAust CPEng

Royce Aldred TMIEAust

Henk Kremer FIEAust CPEng

Richard Bevan FIEAust CPEng

Kurt Pudniak MIEAust CPEng

Bruce Cole FIEAust CPEng(Ret)

Tim Sutton MIEAust

Donald Vaughan GradIEAust

DIVISIONS

STRATEGIC DOMAINS	VICTORIA DIVISION
<p><b>1 Community Engagement</b></p> <ul style="list-style-type: none"> <li>&gt; Seeking new forms of engagement</li> <li>&gt; Australian Engineering Week</li> </ul>	<ul style="list-style-type: none"> <li>• Provided over 60 activities during AEW including site tours, seminars and school visits</li> <li>• Conducted 4 Heritage Marking Ceremonies</li> <li>• Continued the Division Outreach Program</li> <li>• Hosted the inaugural joint Presidents' meeting, Consult Australia, APESMA, IPWEA, ALDE</li> <li>• Established a Social Media Strategy</li> </ul>
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Promoting CPD and networking events</li> <li>&gt; Promoting the Professional Development Program</li> <li>&gt; Promoting being Chartered</li> <li>&gt; Supporting diverse member interests</li> <li>&gt; Supporting engineering standards and ethical awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Provided over 250 CPD opportunities delivered by college branches, technical societies, special interest groups and regional groups</li> <li>• Developed a series of one and two day symposia, including several delivered in conjunction with our regional groups</li> <li>• Delivered 20 public Chartered Pathway Presentations and Workshops</li> <li>• Conducted a total of 91 Chartered Professional Interviews.</li> <li>• Introduced a new weekly event alert 'Engage with EA' – a consolidated list of all EA events – which has been well received</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Engagement with Governments and the media</li> <li>&gt; Professional and industry links</li> <li>&gt; Regulatory framework</li> <li>&gt; Providing Division leadership and governance</li> </ul>	<ul style="list-style-type: none"> <li>• Introduced a new Division Strategic Agenda, with three key priority areas: Leading our Urban Growth, Leading Innovation in our Economy and Leading Professionalism in Engineering</li> <li>• Hosted 2 Industry Fellows Luncheons, with some 400 attendees each: in Nov 2011, 'A Monash Vision of the 21st Century - Securing Victoria's Baseload Power', and in Apr 2012, 'Should Engineering be one of Australia's Top 3 Priorities'.</li> <li>• Delivered two Industry Breakfasts, with some 250 attendees each: a keynote presentation on Green Energy, and in Jun 2012 a panel discussion to support the Urban Growth Strategy 'What does a Smart City mean to you?'</li> <li>• A flood forum was held in response to the Victorian floods and a policy position developed in conjunction with IPWEA and Consult Australia. This was submitted to the Government's inquiry into the Victorian Floods</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Public recognition of achievements</li> <li>&gt; Members promoting the profession</li> <li>&gt; Membership initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Presented the Victorian Engineering Excellence Awards at a black tie dinner with some 1,000 guests; over 70 entries were received judged by 90 judges</li> <li>• Our Annual Engineering Careers Expo exceeded expectations, attracting record numbers of exhibitors and attendees; a new interactive student laboratory was introduced</li> <li>• Hosted 4 Member Meet Ups – exclusive member only networking events, with some 80 members attending each event</li> <li>• Conducted the Annual Country Family Weekend held in Warrnambool attracting over 80 members, their families and guests, participating in an extensive two-day program</li> <li>• Presented 10 University and TAFE Awards; published the Engineering Employment Handbook which includes a listing of 208 organisations</li> <li>• Increased membership across all grades with an annualised growth of 2.4%</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Engineering competitions</li> <li>&gt; Promoting engineering on campus</li> <li>&gt; Engaging with academia</li> <li>&gt; Assisting overseas qualified engineers</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted 53 Discover Engineering Day school visits reaching over 3,000 Year 9 – 12 students</li> <li>• Supported the YEA-V group, in conjunction with Monash University, to launch the <i>Challenge for Change</i> project aimed at working with students on humanitarian projects</li> <li>• Over 300 students participated in the Engineering Schools at Work Program</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Keeping members informed</li> <li>&gt; Good management</li> </ul>	<ul style="list-style-type: none"> <li>• A review of all group websites was conducted and a refreshment project commenced</li> <li>• Held a Governance Workshop for all Office Bearers and staff to provide information on EA's governance and structure.</li> <li>• <i>Engineers Victoria (EV)</i> the quarterly publication of the Division was produced and distributed in the months of September, December, March and June</li> <li>• Introduced a new project management methodology to assist staff and volunteers to work in effective partnership to deliver our program.</li> </ul>

**Membership – Victoria Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	2,988	2,939	3,013	3,076	2,999	-2.5%
Members	6,800	7,056	7,347	7,507	7,692	2.5%
Fellows (and others)	1,377	1,372	1,381	1,376	1,359	-1.2%
<b>Sub-total</b>	<b>11,165</b>	<b>11,367</b>	<b>11,741</b>	<b>11,959</b>	<b>12,050</b>	<b>0.8%</b>
Students	7,709	8,478	9,708	10,789	11,253	4.3%
<b>Total – at 30 June</b>	<b>18,874</b>	<b>19,845</b>	<b>21,449</b>	<b>22,748</b>	<b>23,303</b>	<b>2.4%</b>

**Division Committee – at 30 June 2012**

John McIntosh FIEAust CPEng EngExec – *President*  
 Geoff Hayes FIEAust CPEng EngExec – *Deputy President*  
 Paul Collier FIEAust CPEng – *Immediate Past President*  
 David Eltringham FIEAust CPEng – *Congress Delegate*  
 Norman Tickner FIEAust CPEng – *Congress Delegate*  
 Janos Baranyai FIEAust CPEng  
 Peter Bowtell FIEAust CPEng  
 Leigh Coutie FIEAust CPEng EngExec  
 Margret Doring FIEAust CPEng

Matt Gazzard MIEAust CPEng  
 Mark Gregory FIEAust  
 Wayne Lewis FIEAust CPEng  
 Haris Moraitis MIEAust CPEng – *Congress Delegate*  
 Owen Peake HonFIEAust CPEng  
 Alesha Printz MIEAust  
 Ross Proud FIEAust CPEng  
 Meredith Rogers FIEAust  
 Tom Sargant FIEAust CPEng

DIVISIONS

STRATEGIC DOMAINS	WESTERN AUSTRALIA DIVISION
<b>1 Community Engagement</b> > Seeking new forms of engagement > Australian Engineering Week	<ul style="list-style-type: none"> <li>Increased community participation in and positive feedback on events in engineering week, including heritage tour and public forum.</li> <li>Regional presentations in themed years</li> <li>Raised public awareness of engineering through an exhibition of engineering excellence awards posters</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> > Promoting CPD and networking events > Promoting the Professional Development Program > Promoting being Chartered > Supporting diverse member interests > Supporting engineering standards and ethical awareness	<ul style="list-style-type: none"> <li>More than 12,410 members attended 211 technical sessions, 3 workshops, 1 major regional conference and 3 site visits</li> <li>Regional CPD activity increased</li> <li>New regional group formed (Boddington) and regional group revitalised (Northam)</li> <li>PDP activity at a high level</li> <li>Chartered membership actively promoted; 11 Chartered status workshops held</li> <li>Fellows dinners and member networking events well attended</li> <li>Stage 1 assessment workshop well attended and articulation sessions held</li> </ul>
<b>3 Leadership and Influence</b> > Engagement with Governments and the media > Professional and industry links > Regulatory framework > Providing Division leadership and governance	<ul style="list-style-type: none"> <li>Interaction with other associations and Government on local content</li> <li>Attendance at Senate Inquiry into Skills Shortages</li> <li>Media coverage by Division President, Director and spokesperson on skills issues</li> <li>Launch of Engineering WA 2020 skills report; Liaison with Government Ministers, Shadow Ministers and Departmental officers on skills issues</li> <li>Good links maintained with other professional and industry associations</li> <li>Supported National Science Week, Tournament of the Minds, and Engineers Without Borders</li> <li>High level of member engagement by Division President during regional visits</li> <li>High quality entrants in OF Blakey public speaking competition</li> <li>Themed years well promoted through all events</li> <li>Industry Leaders Forum well attended with positive feedback</li> </ul>
<b>4 Recognition, Promotion and Membership</b> > Public recognition of achievements > Members promoting the profession > Membership initiatives	<ul style="list-style-type: none"> <li>Membership continuing to grow</li> <li>Member certificate presentation nights well attended and appreciated</li> <li>Increased interaction with university students through presentations and other events</li> <li>1200 students and 78 exhibitors attended the Engineers Australia Careers Expo and vacation employment handbook very well received</li> <li>2011 Engineering Excellence Awards were well supported, with 48 entries and the presentation dinner for over 650 people sold out</li> <li>Excellence awards showcase booklet widely distributed to industry and government</li> </ul>
<b>5 Education and Qualification</b> > Engineering competitions > Promoting engineering on campus > Engaging with academia > Assisting overseas qualified engineers	<ul style="list-style-type: none"> <li>2011 WA Division Award for Excellence in Teaching awarded</li> <li>Expanded the success of the Science and Engineering Challenge for 2011</li> <li>Young engineers participated in career expos at several schools</li> <li>Girl Talk program was launched and well received by teachers and parents</li> <li>Regional groups held well attended spaghetti bridge and tower competitions</li> <li>Student information sessions during AEW oversubscribed</li> <li>Student medals awarded for University and TAFE students</li> </ul>
<b>6 Internal Structure and Administration</b> > Keeping members informed > Good management	<ul style="list-style-type: none"> <li>Members kept well informed through new electronic newsletter, weekly event alert, emails and website information</li> <li>A high level of volunteer support was provided, and good participation in Division elections</li> <li>Appropriate training was provided to volunteers and appropriate skills development provided to staff</li> </ul>

**Membership – Western Australia Division**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last yr
Graduates	2,158	2,297	2,282	2,218	2,390	7.8%
Members	4,546	4,960	5,368	5,793	6,174	6.6%
Fellows (and others)	610	624	652	677	673	-0.6%
<b>Sub-total</b>	<b>7,314</b>	<b>7,881</b>	<b>8,302</b>	<b>8,688</b>	<b>9,237</b>	<b>6.3%</b>
Students	3,904	3,990	4,356	4,822	5,374	11.4%
<b>Total – at 30 June</b>	<b>11,218</b>	<b>11,871</b>	<b>12,658</b>	<b>13,510</b>	<b>14,611</b>	<b>8.1%</b>

**Division Committee – at 30 June 2012**

Barry Tonkin FIEAust CPEng – <i>President, Congress Delegate</i>	Helen Pedersen FIEAust CPEng – <i>Deputy President, Congress Delegate</i>
Russell Byfield FIEAust CPEng	Prof Mark Bush FIEAust CPEng FTSE – <i>Immediate Past President, Congress Delegate</i>
Lorie Jones FIEAust CPEng	Prof Tony Lucey FIEAust – <i>Past President</i>
Dr David Mofflin FIEAust CPEng	Richard Atkinson FIEAust CPEng
Will Neethling TMIEAust CEngT	Andrew Bhartia MIEAust
Terry Spiro FIEAust CPEng	Dr Carla Boehl MIEAust CPEng
Prof Dong-Ke Zhang FIEAust CPEng FTSE	

COLLEGES

STRATEGIC DOMAINS	COLLEGE OF BIOMEDICAL ENGINEERS
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>• August 2011 saw the public release of a discussion paper on the future direction of Clinical Engineering as part of the Australian Biomedical Engineering Conference (ABEC). The College developed the paper to identify the current issues facing the profession and to promote public discussion. Comments submitted were collated and have been utilised in production of draft position papers for future release by the College.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• We hosted the ABEC 2011 Conference in association with EPSM, in Darwin in August. Two speakers from the Conference agreed to a short speaker program: Joseph Smith in Adelaide and Melbourne 22-23 August, and Tom Judd in Perth 22 August.</li> <li>• ABEC 2011 Conference accounts are soon to be finalised. The conference achieved a profit of over \$40,000, with 40% of the final profit to EA.</li> <li>• Planning is well advanced for ABEC 2012 to be held in Brisbane 15-19 September, our first standalone conference. Registrations have been tracking close to projections, though sponsorship remains below target and expectations.</li> <li>• At our August 2011 meeting, Michael Bevan Associate Director, Registration, Education &amp; Assessment gave an update on the Stage 2 Competencies Review and what is expected from the College Board. Under his direction, the Stage 2 review is in progress, and College panels are working on finalising the Competency Standard Guidelines as required.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• ‘Crossroads’, the Discussion Paper on Managing Medical Technology for an Assured Future, by Ed Scull, was released for public comment in August 2011.</li> <li>• Public feedback has been reviewed, with a resultant position paper presented to the board at our April 2012 meeting. Further work is to be conducted in conjunction with the EA Policy unit to produce final paper/s, with final draft position papers well advanced.</li> <li>• The Board met in August, immediately following the ABEC 2011. A teleconference was held in October, following the meeting of College Chairs in September, and again in April 2012. Review of the College, Committee and four Panels has commenced.</li> <li>• The Board’s next face to face meeting is scheduled for September 2012, immediately following ABEC 2012 in Brisbane.</li> <li>• Mike Flood attended the IFMBE APWG Meeting in Kuala Lumpur on 22 June 2011. Support has been sought from the IFMBE for ABEC 2012.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• David Dewhurst Award for 2011 to Dr Graham Cameron Grant.</li> <li>• Women in Biomedical Engineering Scholarship for 2011 to Ms Emma Friesen.</li> <li>• Young Biomedical Engineering Conference and Poster Prize for 2011 to Michael Smith from Flinders Medical Centre for his paper on Managing Infusion Pump Device Safety in SEAsia.</li> <li>• All College awards open for 2012 nominations. An awards committee has been formed to manage the awards program. These Awards will be presented at the ABEC 2012 Dinner, in September.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	

**Membership – College of Biomedical Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	148	143	146	150	153	2.0%
Members	129	136	145	147	154	4.8%
Fellows (and others)	60	64	67	66	60	-9.1%
<b>Sub-total</b>	<b>337</b>	<b>343</b>	<b>358</b>	<b>363</b>	<b>367</b>	<b>1.1%</b>
Students	538	606	634	748	806	7.8%
<b>Total – at 30 June</b>	<b>875</b>	<b>949</b>	<b>992</b>	<b>1,111</b>	<b>1,173</b>	<b>5.6%</b>

COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON REHABILITATION ENGINEERING (NCRE)
<b>1 Community Engagement</b>	
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• The NCRE was actively engaged in 2011 Year of the Humanitarian Engineer activities, planning and hosting two Symposia and presenting at the YoHE Conference in December.</li> <li>• The first Symposium, was held in Darwin on August 16 in conjunction with EPSM-ABEC 2011, with good outcomes. The second Symposium two, held 22 November in Perth with acceptable outcomes. Both Symposia attracted allied health and other professionals from outside engineering.</li> <li>• NCRE has secured EA funding to host a YoRET event in Townsville focusing on air travel &amp; wheelchairs in regional Australia. NCRE will invite at least two prominent experts in accessible tourism. NCRE has hoped to collaborate with the Australian Rehabilitation &amp; Assistive Technology Association (ARATA) to run an Eminent Speaker event in conjunction with the conference, however changes to the keynote speaker and funding approval issues meant this could not proceed. NCRE has now made plans for an alternative speaker to meet with NCRE members and other AT professionals in Melbourne and Adelaide.</li> <li>• One NCRE member leads a project team which has been engaged by ARATA to conduct significant activities related to the AT component of the National Disability Insurance Scheme.</li> <li>• Two NCRE members are chairing working groups within the National Aids and Equipment Reform Alliance (NAERA). NAERA is developing a coordinated stakeholder response to government for the National Equipment Scheme.</li> <li>• NCRE members are actively involved in developing national and international standards through Standards Australia ME-067. One NCRE member chairs this committee and a further three members participate regularly.</li> <li>• NCRE are involved in reviewing Stage Two competencies as they relate to Rehabilitation Engineering.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• NCRE policy statements of 2010, “Assistive Technology for Australians” and “Assistive Technology and an Ageing Population”, were officially released to government in October 2011.</li> <li>• NCRE delegates are meeting with government representatives as responses are received. NCRE’s profile as a professional body with expertise in provision of assistive technology has been raised as a result of these meetings.</li> <li>• One NCRE member is leading the organising committee for ABEC 2012, to be held from September 15 to 19 in Brisbane. Another NCRE member is also on the organising committee. Additional NCRE members will be engaged in the conference, through hosting a half day work shop and chairing a paper presentation session.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• Planning is in place for development of a Professional Development Exchange Award, which will sponsor two REs or RTs to spend one week at a REC in another state.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• NCRE to continue to support progress in education and qualification where needed.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• NCRE developed a new brochure early in 2011-12.</li> </ul>

## COLLEGES

STRATEGIC DOMAINS	NATIONAL PANEL ON BIOMEDICAL ENGINEERING EDUCATION AND RESEARCH (NPBEER)	NATIONAL PANEL ON BIOMECHANICS OF IMPACT INJURY (NPBII)
<b>1 Community Engagement</b>		<ul style="list-style-type: none"> <li>Working to improve ATV safety for farm and recreational use.</li> <li>Contributed to the Engineers Australia input into the new Australian Road Safety Strategic Plan.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>Identifying CPD needs</li> <li>Conferences and publications</li> <li>Eminent speakers</li> <li>Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Committee members contributed to ABEC 2011 in Darwin in August 2011. NPBEER Chair was Scientific Chair of the conference.</li> <li>An NPBEER day is planned for ABEC 2012.</li> </ul>	<ul style="list-style-type: none"> <li>Panel is working on developing two technical seminars/ presentations, on ATV safety and helmets. These have not been able to be finalised, due to the complex issues involved.</li> <li>Both seminars are with the support of the SAEA.</li> <li>The Panel supports the College with filling vacancies on Standards Committees as required.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>Contributing to national policy development</li> <li>Leadership for the learned society</li> <li>Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Panel members are engaging with AusMedtech through membership on AusBiotech committees.</li> <li>Panel Chair Karen Reynolds was appointed as Deputy Chair of ATSE (Academy of Technological Sciences &amp; Engineering) Health &amp; Technology forum.</li> <li>Face-to-face meeting held on 18 August 2011 in Darwin.</li> </ul>	<ul style="list-style-type: none"> <li>The Panel is supporting the ABEC 2012 committee with a presentation, chairing of a session and participation in the student workshop.</li> <li>Teleconferences were held October and December 2011, and discussed options for papers to ABEC 2012.</li> <li>The Panel provides support for developing necessary changes to Australian standards certification system for safety equipment, to allow better harmonisation with international standards.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>Extensive discussions and planning during the NPBEER meeting in August 2011.</li> <li>Proposal for Australian Biomedical Engineering Conference (ABEC) student prize put forward in budget submission for 2012-13.</li> </ul>	
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>A Database of biomedical engineering courses in Australia has been developed. Content is currently being ratified.</li> <li>Panel members were involved in a Teaching Biomedical Engineering workshop hosted by University of Melbourne.</li> </ul>	<ul style="list-style-type: none"> <li>The Panel is involved with development of an injury biomechanics subject for Biomedical Engineering MSc at the UTS. This will be the only one in Australia.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>Improved information for members</li> <li>Good governance</li> </ul>	<ul style="list-style-type: none"> <li>NPBEER presence on website.</li> </ul>	

COLLEGES

STRATEGIC DOMAINS	NATIONAL PANEL ON CLINICAL ENGINEERING (NPCE)	NATIONAL PANEL ON BIOMEDICAL TECHNICAL AID – NPBTA
<b>1 Community Engagement</b>		<ul style="list-style-type: none"> <li>The Chairman was involved in the selection process for a new batch of BMETs for the BEMI Mk2 technical aid project in the Pacific.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Members contributed to the organisation of EPSM-ABEC Conference in August 2011 in Darwin, and were contributing to the planning of the standalone ABEC Conference in September 2012, Brisbane.</li> <li>The 2011 Clinical Development Workshop for young Clinical Engineers, Technologists and Associates was held prior to the August 2011 conference in Darwin, with six presenters and four mentors. The mentors comprised members of the Board and the Panel and the wider profession. \$6,000 in sponsored prizes were awarded to workshop participants.</li> <li>A subcommittee has been formed to review and determine how to improve the Development Workshop. Planning is progressing well for next workshop on the weekend preceding ABEC 2012.</li> <li>Seminars on the new AS/NZs3003, commenced with Melbourne run in February and in Queensland in May. Planning is underway to run in Sydney, Nov 21 Adelaide Oct 30 and then Perth Nov 1 next financial year.</li> <li>Supported the College filling vacancies on Standards Committees as required.</li> </ul>	<ul style="list-style-type: none"> <li>The NPBTA organised and hosted the Humanitarian Engineering Workshop at the EPSM-ABEC 2011 Conference in Darwin. This was regarded as one of the best workshops ever held at a Biomedical Engineering conference and involved participants from USA, Italy, East Timor and Australia.</li> <li>The Panel is actively involved in the organisation of the 2012 ABEC Conference in Brisbane. Four members of the Panel will be presenting eight papers or workshops at the ABEC conference.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Panel members provided input to the drafting of 'Crossroads', A Discussion Paper on Managing Medical Technology for an Assured Future, by Ed Scull of the College Board.</li> <li>A face-to-face meeting was held in August 2011, during the EPSM-ABEC Conference in Darwin. Following an update in October 2011 from the College Board, teleconferences were held in February and March 2012, with a key item discussed being review of the Panel's Terms of Reference. The next meeting is scheduled to follow ABEC 2012 in September.</li> </ul>	<ul style="list-style-type: none"> <li>The Panel has engaged with Rotary International, Engineers Without Borders (EWB), the RedR Society and AusAID. The Chairman has worked with Australian Volunteers International.</li> <li>The Panel did not meet during the EPSM-ABEC August Conference due to scheduling conflicts in the program, which included the Panel hosting the Humanitarian Engineering Workshop.</li> <li>Panel members who are attending the ABEC 2012 conference in Brisbane will meet on Tuesday 18 September 2012.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>		
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>		<ul style="list-style-type: none"> <li>The Chairman of the Panel has worked with Mr Bob Daly who is a biomedical engineer and consultant to the Strengthening Specialised Clinical Services in the Pacific Project or SSCSiP, on the development of a curriculum for the training of biomedical engineers/ technicians in the Pacific.</li> <li>This work will likely lead to a course being run jointly by the Fiji National University and the Australia-Pacific Technical College.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>		

## COLLEGES

STRATEGIC DOMAINS	COLLEGE OF CHEMICAL ENGINEERS*
<b>1 Community Engagement</b>	
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• The College strongly supports Chemical Engineering in Australia, a quarterly electronic newsletter published jointly with IChemE.</li> <li>• After reconfiguration of the National Committee on Fuels and Energy in 2010, the committee delivered on their key objective: an issues paper on Australia's Future Energy Options and Strategy. The paper is currently out to EA members for comment. A workshop on Australia's Energy Options and Strategies is planned for November 2012.</li> <li>• A highly successful Chemeca Conference on "Engineering a Better World" was held in Sydney in September 2011 with almost 450 delegates.</li> <li>• State-based joint committees are actively engaged in the regular delivery of technical programs and CPD to members.</li> <li>• The Board has supported Engineers Australia's <i>Year of Humanitarian Engineering</i> and <i>Year of the Regional Engineer</i> through delivery of events via the state-based joint committees.</li> <li>• A National Committee on Oil and Gas is currently being established to support member interests and meet the professional needs of engineers working within the Oil and Gas sector.</li> <li>• WA Division continued to run a WA Oil and Gas Facilities Group technical program, and QLD Division launched a local Oil and Gas group.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• The Board is committed to maintaining a cycle of reviews of all public Engineers Australia policies as per an established schedule.</li> <li>• Through the ANZFChE the Board continues to make a significant contribution to the work of the Asia-Pacific Confederation of Chemical Engineers (APCChE). The Board is strongly supporting the bid for the 15th Conference which will be held in Melbourne in 2015 in conjunction with Chemeca.</li> <li>• The Chemical College Board participated in the Australian Government's Department of Resources, Energy and Tourism's consultation workshop on energy efficiency knowledge and skills for engineers.</li> <li>• The Energy Options and Strategies issues paper provides EA with the opportunity to demonstrate leadership in the energy debate in the Australian community.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• The College Board awards the John A Brodie Medal for the "Best Chemical Engineering Paper" of the current year. The award is presented at the annual Chemeca Conference dinner as part of the Awards of Excellence.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• Monitored the progress of undergraduate programs as per established procedures.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• The National Committee on Oil and Gas reviewed its Terms of Reference and Business Case, and is currently drafting their TOR and Operational Plan for the next financial year.</li> <li>• Membership of the College Board has been expanded to provide broader coverage of ever expanding areas of innovation within the profession particularly in the nanotechnology and biochemical areas.</li> </ul>

**Membership – College of Chemical Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	1,018	1,005	1,008	987	953	-3.4%
Members	1,254	1,344	1,417	1,503	1,577	4.9%
Fellows (and others)	302	299	294	293	289	-1.4%
<b>Sub-total</b>	<b>2,574</b>	<b>2,648</b>	<b>2,719</b>	<b>2,783</b>	<b>2,819</b>	<b>1.3%</b>
Students	2,441	2,561	2,873	3,112	3,387	8.8%
<b>Total – at 30 June</b>	<b>5,015</b>	<b>5,209</b>	<b>5,592</b>	<b>5,895</b>	<b>6,206</b>	<b>5.3%</b>

\* Incorporates reports for the National Committee on Fuels and Energy (NCF&E) and the National Committee for Oil and Gas (NCO&G)

COLLEGES

STRATEGIC DOMAINS	COLLEGE OF CIVIL ENGINEERS	NATIONAL COMMITTEE ON CONSTRUCTION ENGINEERING (NCCE)
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>Civil College Board representatives assisted Divisions throughout Engineering Week.</li> </ul>	
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>Identifying CPD needs</li> <li>Conferences and publications</li> <li>Eminent speakers</li> <li>Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Two editions of the AJCE were published in 2011-12 and the Editorial team continue to improve the quality and standing of the Journal.</li> <li>The Board, through Board members and its National Committees, has provided assistance where possible for the Year of the Regional Engineering Team.</li> <li>The Civil and Structural College Boards have continued to collaborate on the development of a business case on the CROSS initiative.</li> </ul>	<ul style="list-style-type: none"> <li>The NCCE in conjunction with Engineering Education Australia (EEA) developed the Construction Management Series training course.</li> <li>One of the modules from the Construction Management Series is being delivered independently as the Graduates course, the first of which was delivered successfully in May 2012 with positive feedback from attendees.</li> <li>The 2012 Australian Construction Achievement Awards (ACAA) were held in May 2012. This prestigious award was well attended attracting a high number of quality entries.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>Contributing to national policy development</li> <li>Leadership for the learned society</li> <li>Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Civil College actively encouraged participation with kindred organisations. The Board Representative to ACCEC attended meetings in Japan and Delhi and will be producing a report for the Board on the continued value of our relationship with ACCEC.</li> </ul>	<ul style="list-style-type: none"> <li>The past 12 months has seen a notable decrease in the active membership within the NCCE. It is hoped that membership will increase in the near future with the NCCE committee currently standing at only 6 members.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>The Civil College 2011 Civil Engineer of the Year, Rod McGee Medal and the Warren Medal Awards event were presented in Sydney in October 2011. Our Awards Evening was held in conjunction with the Structural College who presented the John Connell Gold Medal. The awards presentation was an outstanding success for both Colleges.</li> </ul>	<ul style="list-style-type: none"> <li>The ACAA Awards were presented in May 2012 in Perth. The winner of the 2012 Award was Baulderstone for their Port Botany expansion Project. The Awards evening was attended by approximately 390 and was very successful.</li> <li>Planning is underway for the 2013 Awards.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>The Board has been heavily involved in providing assistance to the Education and Assessment Directorate on updating of the Stage 2 Competencies.</li> </ul>	<ul style="list-style-type: none"> <li>The Construction Management Series has been delivered successfully since its introduction.</li> <li>The Graduates Course has been successfully delivered.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>Improved information for members</li> <li>Good governance</li> </ul>	<ul style="list-style-type: none"> <li>The Civil College Board has focussed on governance over the 2011-12 year and will continue this into the 2012-13 year. The Board has been undertaking a review of its National Committees and will, in consultation with the Committees, be providing Terms of Reference.</li> </ul>	<ul style="list-style-type: none"> <li>The NCCE continued to encourage membership from Divisions.</li> </ul>

Our Results

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**Membership – College of Civil Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	4,204	4,220	4,123	4,126	4,235	2.6%
Members	15,288	16,229	16,794	17,158	17,619	2.7%
Fellows (and others)	2,488	2,599	2,666	2,697	2,707	0.4%
<b>Sub-total</b>	<b>21,980</b>	<b>23,048</b>	<b>23,583</b>	<b>23,981</b>	<b>24,561</b>	<b>2.4%</b>
Students	8,557	9,575	11,058	12,193	13,359	9.6%
<b>Total – at 30 June</b>	<b>30,537</b>	<b>32,623</b>	<b>34,641</b>	<b>36,174</b>	<b>37,920</b>	<b>4.8%</b>

## COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON COASTAL AND OCEAN ENGINEERING (NCCOE)	NATIONAL COMMITTEE ON TRANSPORT ENGINEERING (NCTE)
<b>1 Community Engagement</b>		
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• NCCOE's Coasts and Ports Conference was hosted in Perth in September 2011, and considered to be a resounding success. The 2013 Coasts and Ports conference is planned for Sydney.</li> <li>• A symposium launching the update on Climate Change and Sustainability and new Adaptation guidelines has been programmed for the Brisbane Coast to Coast conference in September.</li> <li>• Both the Climate Change and Sustainability Guidelines have been delivered to Engineers Media for proofing and printing. The third volume, Adaptation guidelines, is nearing completion.</li> <li>• NCCOE hosted Dr Kate White from the US on an Eminent Speaker Tour in May 2012 at 3 venues: Sydney, Melbourne and Canberra. The tour was a sellout success and considered to be one of the best NCCOE has hosted.</li> <li>• NCCOE wrote to the American College of Civil Engineers in 2011-12 proposing to hold the 2020 International Conference on Coastal Engineering (ICCE) in Sydney. It has been held twice before in Sydney – 1980 and 2000. This proposal has significant support from various agencies and organisations in NSW, and was presented to the ASCE at the 2012 ICCE by Dr Bill Pearson on behalf of NCCOE.</li> </ul>	<ul style="list-style-type: none"> <li>• 2010 Transport Medal winner, Mr Greg Martin PSM, presented the Eminent Speaker series in March 2012 to a wide range of Divisions, including several regional areas.</li> <li>• The TEA Journal editorship changed, and the Journal was not published in 2011-12, but steps have been taken to get back on track with publication of TEA Journal in 2012-13.</li> <li>• Steps were taken to achieve a Cycling Seminar in Sydney in early 2012-13.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• The NCCOE is revising its Climate Change and Sustainability Guidelines and developing a new Adaptation guideline with full engagement from DCCEE.</li> </ul>	
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• The 2011 Kevin Stark Medal was awarded to: Chari Pattiaratchi, Cyprien Bosserelle and Sarath Wijeratne.</li> <li>• The DN Foster Medal was awarded to: Erica Davey, Annika Tweddell and Khan Mizoguchi-Thorne.</li> </ul>	<ul style="list-style-type: none"> <li>• 2011 Transport Medal announced and awarded to Professor Buddimha Indraratna from the University of Wollongong at the joint Civil/Structural awards event in Sydney in October 2011.</li> <li>• Committee reviewed processes around Student prize with aim of achieving successful award in late 2012.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>		<ul style="list-style-type: none"> <li>• Significant contribution made on proposed competency standards for transport engineering.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• The NCCOE is currently working with the Victorian Division in forming a Victorian panel.</li> </ul>	<ul style="list-style-type: none"> <li>• The Committee reviewed its Terms of Reference.</li> <li>• Committee met more by teleconference and had one fewer face to face meeting, to improve cost-effectiveness.</li> <li>• Committee has an exchange of corresponding membership with the ITEE College Board, with particular focus on joint approaches regarding Intelligent Transport Systems.</li> <li>• Committee welcomed new members, Tom Brimson from ACT Division and Ronaldo Manahan from Sydney Division.</li> </ul>

COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON WATER ENGINEERING (NCWE)
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>Released a discussion paper on the impact of Farm Dams. This will also be published in the AJWR Journal.</li> <li>Undertaking revision of Australia Rainfall and Runoff flood design guidelines for Australian Community.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>The 8th WSUD Conference was held in Melbourne in February 2012. The conference hosted 344 attendees with 70 from overseas such as Netherlands, UK and Denmark. Professor Tony Wong the conference Chair stated that the organising committee had worked hard to broaden the program but felt it remained over-represented by engineers.</li> <li>2nd PRCC was held in Canberra in May 2012.</li> <li>The 34th IAHR Congress and 33rd HWRS Conference was held in Brisbane from 26 June 2011 to 1 July 2011. The conference attracted 350 Australian registrants and 450 overseas registrants, and was very well received.</li> <li>The NCWE held a Strategic Planning Workshop in Melbourne in February 2012. This was considered a success with clear objectives and activities to be held by the NCWE being cemented. In the workshop, the committee discussed the AJWR and concluded that they will continue with this project.</li> <li>Planning for conferences in 2012-13 is underway; this includes the 34th HWRS Conference to be held in Sydney in November 2012.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Funding for Australian Rainfall and Runoff was obtained.</li> <li>ARR Technical Committee developed and delivered projects associated with the Stage 1 and 2 ARR funding.</li> <li>ARR Technical Committee and NCWE has been seeking further funding to complete the ARR revision.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>The Jack Lawson Scholarship and Student Prize guidelines are currently being reviewed and revised.</li> <li>Potential candidates for a Hall of Fame were recognised.</li> <li>Henderson and Munro Orations were given at IAHR Congress in Brisbane.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>Concerns have been raised at the National Committee about the curriculum for Water Engineering in undergraduate degrees.</li> <li>Specialist postgraduate courses are difficult for graduate engineers to access across a broad range of engineering.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>Updated Terms of Reference for the National Committee have been in preparation for presentation at the November 2012 meeting.</li> <li>A new deputy chairman was elected.</li> <li>A review of EA governing regulations has been undertaken.</li> </ul>



COLLEGES

STRATEGIC DOMAINS	COLLEGE OF ELECTRICAL ENGINEERS
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>The Electrical College Board (ECB) is a sponsor of the 2012 National Solar Model Vehicles Challenge.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Organising a two day national conference and exhibition on Electrical Building Services and Industrial Installations to be held in Sydney April 2013.</li> <li>Organising a joint two day seminar with IEEE on high voltage cable insulation with a Canadian expert speaker, to be held in Brisbane November 2012.</li> <li>Continuing to share information between Divisions, Committees and the Board on CPD events.</li> <li>Confirmed the decision to publish a 4th edition of the AJEEE for this financial year.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>ECB is supportive of the reformation of the Society of Building Services Engineers (SBSE).</li> <li>ECB is seeking to establish improved communications with YEANC.</li> <li>ECB is seeking to improve communications and reporting with EA representatives on relevant Standards Australia committees.</li> <li>ECB executive contributing articles to the Electrical Insert contained within the EA magazine.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>The ECB website averaged 1550 hits per month by members.</li> <li>Content for the AJEEE is currently being reviewed by the board to include more papers on Electrical Engineering.</li> <li>The MA Sargent, NPEeOY, GEPEoY awards were all presented at the June 2012 Awards Dinner held in Sydney.</li> <li>The John Madsen Medal will be awarded at a function in Perth, late 2012.</li> <li>The winner of the NPEeOY Award, Robert Barr, is currently undertaking a national Eminent Speaker Tour.</li> <li>The Nomination period for major awards for 2013 opened at the beginning of June. Closing date extended to the end of September 2012.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>A Special Committee was formed with the aim of establishing nuclear physics and engineering education at a tertiary level within Australia.</li> <li>Confirmation received that regulatory aspects of electrical engineering are addressed in Stage 1 and Stage 2 competencies.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>The current Chair of Board (2011-2012) Mark Blundell is approaching end of term and will likely be succeeded by current deputy chair in January 2013. A new representative from Victoria Division joined the Board and a number of representative positions are subject to election at the end of the year.</li> <li>The relationship between ECB and EESA was discussed and concluded to be strong and mutually supportive.</li> <li>ECB has farewelled former Executive Officer Jenni Woodward and welcomed replacement Karen Barletta.</li> <li>ECB has been focussing on staying within budget and finding ways to improve financial impacts on EA.</li> </ul>

**Membership – College of Electrical Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	3,123	3,206	3,202	3,149	3,162	0.4%
Members	5,986	6,405	6,756	7,061	7,463	5.7%
Fellows (and others)	981	986	988	999	982	-1.7%
<b>Sub-total</b>	<b>10,090</b>	<b>10,597</b>	<b>10,946</b>	<b>11,209</b>	<b>11,607</b>	<b>3.6%</b>
Students	4,904	4,971	5,236	5,744	6,078	5.8%
<b>Total – at 30 June</b>	<b>14,994</b>	<b>15,568</b>	<b>16,182</b>	<b>16,953</b>	<b>17,685</b>	<b>4.3%</b>

COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON AUTOMATION, CONTROL AND INSTRUMENTATION (NCACI)	NATIONAL COMMITTEE ON SPACE ENGINEERING (NCSPE)
<p><b>1 Community Engagement</b></p>		
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• The Australian Control Conference (AUCC) 2012 (a conference series established by NCACI in 2011) is progressing well. The only concern is a delay in negotiating with IEEE towards publishing the AUCC 2012 proceedings in IEEE Xplore.</li> <li>• IFAC Symposium on Intelligent Autonomous Vehicles 2013: solid progress has been achieved including a cash sponsorship from Gold Coast Tourism and DSTO.</li> <li>• IEEE Symposium on Intelligent Vehicles 2013: Solid progress has been achieved including a cash sponsorship from Gold Coast Tourism.</li> <li>• An Expression of Interest to host the 2020 IFAC World Congress has been submitted.</li> </ul>	<ul style="list-style-type: none"> <li>• The Committee actively undertook an assessment of the National Space Industry Policy. Revised Federal Government space policy is expected at the end of 2012 following submission of two strategic infrastructure plans in positioning and earth observation.</li> <li>• The Australian Space Science Conference was held in September 2011, with an opening by the Minister for Innovation and with the ANU Vice Chancellor also in attendance. The conference was a success with 150 attendees, over 130 abstracts received and 12 plenary speakers. The Committee agreed to again support the inclusion of the National Space Engineering Symposium (NSES) as a stream within ASSC.</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• Six teleconference meetings were held within the reporting period.</li> <li>• A nomination for Prof Iven Mareels (NCACI member) to be elected as the 2017–2020 IFAC President has been submitted in conjunction with EOI to host the 2020 IFAC World Congress.</li> <li>• A new booklet on Australia &amp; IFAC has been produced and published, and will be presented to the IFAC Council members at their meeting in Japan in conjunction with the Australian bid to host the 2020 IFAC World Congress.</li> </ul>	<ul style="list-style-type: none"> <li>• The committee maintains links with the Australian Space Policy Unit (SPU), part of DIISRTE. The manager of SPU was a guest at the NCSPE annual face-to-face meeting in November 2011.</li> <li>• NCSPE remains unchanged awaiting Federal Government approval of the submitted space policy and space infrastructure plans.</li> <li>• The committee represents EA as a member of the International Astronautical Federation (IAF). A committee member attended the IAF General Assembly in South Africa in October 2011. The committee gave principal support for Adelaide’s bid to host IAC2014.</li> <li>• NCSPE has a VSSEC rep on their committee as a link to secondary level space education. Via Employer Organisations of some Committee Members NCSPE also has links to the Space Industry Association of Australia. This year the committee also became a corresponding member of the ITEE Board.</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• The Committee has continued to provide the NCACI Best Student Paper Award which will be presented at AUCC 2012.</li> <li>• The Committee has continued to provide its stakeholders with quarterly newsletters.</li> <li>• The Committee has continued to provide the NCACI Undergraduate Thesis Prize.</li> <li>• The NCACI Project Excellence Award arrangement is under review. This is a work-in-progress activity.</li> </ul>	<ul style="list-style-type: none"> <li>• The Committee liaised with Engineers Media regarding a space presence in E-News. There was a press release for the NCSPE Thesis Prize winner.</li> <li>• NCSPE Undergraduate Thesis Prize winner was also this year’s winner of the NASA Space Prize, which is part of the VSSEC/ NASA Space Prize competition.</li> <li>• NCSPE supported the visit of a Korean Astronaut as part of VSSEC education programme.</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• The 2011 submissions for the NCACI Undergraduate Thesis prize attracted three High Commendation certificates.</li> </ul>	<ul style="list-style-type: none"> <li>• NCSPE provided supporting scholarships to two graduate engineers in order for them to attend the Southern Hemisphere Summer Space Program, part of the International Space University.</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• The Committee has continued to work towards increasing its membership base. This is a work-in-progress.</li> <li>• The Committee is re-discussing allocation of its portfolios to committee members.</li> </ul>	<ul style="list-style-type: none"> <li>• Mirek Vesely continues as chair of the committee, and Liam Waldron represents the committee as a corresponding member to the ITEE Board.</li> <li>• A Confluence site is now available for Committee Membership use.</li> </ul>

COLLEGES

STRATEGIC DOMAINS		COLLEGE OF ENVIRONMENTAL ENGINEERS
<b>1 Community Engagement</b>		
<b>2 Body of Knowledge and Professional Development</b>	<ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• CPD for members is being delivered effectively through the various chapters of the SSEE, and there are many opportunities for members to attend additional technical seminars at Division level, which supplement these in members' specific technical areas.</li> <li>• The 2011 SSEE/CEE conference was held in Brisbane in Oct 2011. Whilst numbers were down on expected, there was a lot of positive feedback from conference attendees on the content and relevance to members.</li> <li>• The next SSEE/CEE conference is currently being organised and is scheduled to be held in Canberra in 2013.</li> <li>• The DYD (Define Your Discipline) report was presented to the CEE Board by Professor David Dowling at the March 2012 Board meeting, and final comments from the board members are to be provided before it is finalised in Nov 2012.</li> <li>• The Board is keen to update the Stage 2 competencies in the light of the DYD project outcomes, and a subcommittee is looking at the resources needed to achieve this.</li> <li>• The CEE board has identified a need to be more involved in having input to EA policy documents, and has initiated sub-committees to prepare broad policies on specific issues. A paper on Coal Seam Gas is to be developed for the next CEE Board meeting.</li> </ul>
<b>3 Leadership and Influence</b>	<ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• One of the key issues identified at the CEE Board Meeting in March 2012 was that communication between the Board and members needs to be enhanced. Some initiatives have been identified and are being implemented, utilising the EA website as a communications tool.</li> <li>• Publication of the SEEK journal has been suspended, until a replacement editor is found.</li> <li>• The CEE Board is now publishing a statement after each Board meeting to inform members about issues that the Board is working on, and decisions it has taken.</li> </ul>
<b>4 Recognition, Promotion and Membership</b>	<ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• An award has been created for Young Engineer of the Year, and it is due to be awarded for 2012.</li> <li>• An award is being created for Environmental Engineer of the Year, and should be in place by 2013.</li> </ul>
<b>5 Education and Qualification</b>	<ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• Assistance has been provided to the Accreditation Unit by providing expert assessors for various Environmental Engineering Course accreditations.</li> <li>• Practice Notes are to be developed to supplement Australian Standards and to be made available to members. These will initially be in key areas aligned with the various CEE Board member's expertise, then progressively expanded into other areas of practice.</li> </ul>
<b>6 Internal Structure and Administration</b>	<ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• The CEE Board meetings are aligned with SSEE Board meetings to promote mutual understanding and cooperation between the two boards.</li> <li>• This has been successful in enabling the SSEE to successfully deliver appropriate CPD on behalf of the CEE.</li> </ul>

**Membership – College of Environmental Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	682	707	653	645	611	-5.3%
Members	689	799	925	974	1,054	8.2%
Fellows (and others)	71	73	86	92	87	-5.4%
<b>Sub-total</b>	<b>1,442</b>	<b>1,579</b>	<b>1,664</b>	<b>1,711</b>	<b>1,752</b>	<b>2.4%</b>
Students	1,200	1,232	1,329	1,407	1,470	4.5%
<b>Total – at 30 June</b>	<b>2,642</b>	<b>2,811</b>	<b>2,993</b>	<b>3,118</b>	<b>3,222</b>	<b>3.3%</b>

COLLEGES

STRATEGIC DOMAINS		COLLEGE OF INFORMATION, TELECOMMUNICATIONS AND ELECTRONICS ENGINEERING
<b>1 Community Engagement</b>		
<b>2 Body of Knowledge and Professional Development</b>	<ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• Key activities included participation in organisation and sponsorship of conferences including Radar International 2013 (Adelaide), Australian Software Engineering Conference (ASWEC) 2013 (Melbourne) and AIPC/ACOFI 2012. The Board is supporting also the Australian Telecommunication Networks and Applications Conference ATNAC 2012 (Brisbane), Australian Symposium on Antennas (with CSIRO), various Intelligent Transport Systems conference initiatives and, with the EMC Society, is supporting APEMC 2013.</li> <li>• Eminent speaker Prof Sanjit Mitra toured 5 capital city locations with participation from CSIRO, NICTA, DSTO and four universities. Dr Trevor Bird commenced his tour in May 2012 and will include regional locations for Year of Regional Engineering Team. A program for eminent speakers is being developed for the next 3 years including a potential joint tour with NCSPE and another tour featuring a leader in the SKA project.</li> <li>• Monitoring of EA representatives on relevant Standards Australia committees and proposed representation on Radio Spectrum Advisory and Telecommunications Standards committees is under review.</li> <li>• Funding of the 4th issue AJEEE was agreed. A special issue is planned as a possible precursor to a new Journal on Networks and Applications.</li> <li>• Monitor continues to be published bimonthly. Six columns and two Board reports were developed as 'Chair Blogs' over past 12 months.</li> <li>• Review of the Stage 2 competency guidelines for ITEE area of practice is in progress: development of area of practice guidelines – this work has not yet been completed.</li> </ul>
<b>3 Leadership and Influence</b>	<ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• Possible EA participation with JTC/1 Strategic Advisory committee as the peak ICT standards strategy group is under investigation.</li> <li>• Board now has a dialogue with Australian Council of Deans of ICT with ACDICT providing a corresponding member.</li> <li>• Discussions commenced on policy in the areas of Cyber Security and in the area of remote sensing (space policy).</li> </ul>
<b>4 Recognition, Promotion and Membership</b>	<ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• Poor response to call for nominations for IREE Neville Thiele Award led to decision not to make an award for 2012.</li> <li>• Proposal for second IREE award progressed and due for review by EA Honours and Awards Committee.</li> <li>• John Madsen Medal 2011 to be awarded at an event in Perth.</li> <li>• MA Sargent Medal was awarded to Dr Trevor Bird.</li> </ul>
<b>5 Education and Qualification</b>	<ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• Commenced the development of practice notes.</li> <li>• Commenced engagement with industry liaison to support attempts to improve participation in EA of ITEE related organisations.</li> <li>• Members of ITEE College participated in discussions regarding Energy Efficiency skills within engineering education.</li> </ul>
<b>6 Internal Structure and Administration</b>	<ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• A website review is currently underway, focusing on the ITEE Website, the use of Social Media and information portals.</li> <li>• Face to face meetings held in November 2011 and May 2012 with an Executive teleconference in March 2012. All divisions except Newcastle are now represented on the Board.</li> <li>• A review of NCSWE is nearing completion.</li> <li>• Corresponding members on Board extended to include NC Transport Engineering and NC Space Engineering, joining NC Automation, Control and Instrumentation.</li> </ul>

**Membership – College of Information, Telecommunications and Electronics Engineering**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	1,992	1,853	1,799	1,702	1,613	-5.2%
Members	2,737	2,884	3,038	3,161	3,283	3.9%
Fellows (and others)	459	457	454	462	454	-1.7%
<b>Sub-total</b>	<b>5,188</b>	<b>5,194</b>	<b>5,291</b>	<b>5,325</b>	<b>5,350</b>	<b>0.5%</b>
Students	3,806	3,297	2,948	2,912	2,869	-1.5%
<b>Total – at 30 June</b>	<b>8,994</b>	<b>8,491</b>	<b>8,239</b>	<b>8,237</b>	<b>8,219</b>	<b>-0.2%</b>

COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON SOFTWARE ENGINEERING (NCSWE)
<b>1 Community Engagement</b>	
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• The Software Engineering and Architecture (SEA) Joint Technical Program (JTP) in Adelaide went into a 'hold' position in the first half of 2012 pending administrative changes in relation to presentations. The program draws on attendees from members of both Engineers Australia and the Australian Computer Society (ACS).</li> <li>• The SEA Program in Canberra, whilst not occupying a regular timeslot within the Division's Technical Program schedule, has commenced. A regular timeslot is envisaged during 2013. It has drawn out members from the software engineering and architecture community, who do not necessarily engage with the Division's technical program.</li> <li>• Planning for the Australian Software Engineering Conference (ASWEC) 2013 is underway; there was no ASWEC 2012.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• At the request of the Accreditation Board, the Joint Board on Software Engineering (Engineers Australia and Australian Computing Society) has been re-established; it had been dormant for quite some time. A meeting in February 2012, affirmed the need for the Joint Board and paved the way for its reconstitution. NCSWE has representation on the Joint Board.</li> <li>• The NCSWE Chair attended the ACS Computer Systems and Software Engineering (CSSE) Academic/Technical Board meeting in May 2012; this Board is being re-invigorated after being dormant for several years.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• Support to the Engineer Australia's course accreditation program is through the JBSE.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• Committee member Jocelyn Armarego is Chair of the ASWEC Steering Committee.</li> <li>• Committee members are active at Divisional and College Board level.</li> <li>• The Committee has been affected by constraints on members' availability. A face to face meeting was held in March 2012.</li> <li>• The SEA-JTP initiative is dependent on volunteer support; Bill Malkin (Adelaide) has been instrumental in achievements to date.</li> <li>• The Committee reviewed its Terms of Reference and supported Engineers Australia's committee review activity through the ITEE College Board.</li> </ul>

COLLEGES

STRATEGIC DOMAINS	COLLEGE OF MECHANICAL ENGINEERS
<b>1 Community Engagement</b>	
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>• Two editions of the Australian Journal of Mechanical Engineering were issued. Prof Adam Wittek has been appointed as new editor of the AJME. Well done Jonathan Coultrick for achieving this result.</li> <li>• The Board is actively sourcing potential speakers for our Eminent Speaker program. Well done Michael King for leading this effort.</li> <li>• MCB continues to share information with Divisions on CPD events, particularly in regard to interesting speakers.</li> <li>• NCED Chair Alex Churches and his team have developed a business plan for an Australian Graduate School of Mechanical Engineering Design and Manufacture.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>• NPMech Chair James Trevelyan contributed a great deal of input for the recently published Senate Committee report into Engineering Skill Shortages.</li> <li>• Ongoing monitoring and support of National Panels / Committees associated with the Mechanical College.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>• Jane Sargison was awarded the 2011 Professional Engineer of the Year, presented at the Engineering Excellence Awards dinner, Parliament House, Canberra in November 2011.</li> <li>• AGM Michell Award was presented to John Hart-Smith.</li> <li>• Sir George Julius medal was awarded to Prof Adam Wittek and Prof Karol Miller.</li> <li>• The Young Mechanical Engineer award was presented to Paula West, Deputy Chair of the MCB.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>• The Board continued its involvement with Engineers Australia Accreditation Panel, assisting with reviews of Engineering Degree programs in Universities.</li> <li>• MCB members have participated in four (4) Accreditation reviews during the past 12 months. Thank you Ross Milton and Brian Forester for your considerable time and effort.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>• The Board has gained new representatives for the following:                             <ul style="list-style-type: none"> <li>– Sydney Division, Tasmania Division, Northern Division, Women in Engineering, Queensland Division and Newcastle Division.</li> </ul> </li> <li>• Over 40 applications received for the vacant YEA representative position.</li> <li>• New representatives have shown a willingness to accept the responsibilities of being on Mechanical College Board.</li> </ul>

**Membership – College of Mechanical Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	4,283	4,327	4,380	4,366	4,311	-1.3%
Members	7,916	8,605	9,186	9,598	10,073	4.9%
Fellows (and others)	1,189	1,228	1,258	1,272	1,259	-1.0%
<b>Sub-total</b>	<b>13,388</b>	<b>14,160</b>	<b>14,824</b>	<b>15,236</b>	<b>15,643</b>	<b>2.7%</b>
Students	9,861	10,408	11,321	12,110	12,673	4.6%
<b>Total – at 30 June</b>	<b>23,249</b>	<b>24,568</b>	<b>26,145</b>	<b>27,346</b>	<b>28,316</b>	<b>3.5%</b>

## COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON APPLIED MECHANICS (NCAM)	NATIONAL COMMITTEE ON ENGINEERING DESIGN (NCED)
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>A technical workshop on sustainability is being planned, most likely at RMIT in Melbourne during the first half of 2013.</li> <li>The ACAM 7 committee have encouraged papers to be presented on applied mechanics education.</li> </ul>	<ul style="list-style-type: none"> <li>The Warman National Final as well as Campus Heats around Australia engage the broader engineering student/university community with family members.</li> <li>Members of the public are invited, EA Magazine runs coverage and local media are often engaged.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>Identifying CPD needs</li> <li>Conferences and publications</li> <li>Eminent speakers</li> <li>Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Committee is planning a workshop on sustainability. Several sustainability technical experts have been identified and a draft workshop program developed.</li> <li>Planning for ACAM 7 is well underway and is scheduled for 9-12 December 2012 at the University of Adelaide.</li> <li>180 abstracts were received and reviewed. Abstracts were received from 20 countries.</li> <li>Planning is also underway for a special edition of AJME to be published with the best selected papers from ACAM 7.</li> </ul>	<ul style="list-style-type: none"> <li>A business plan has been prepared and discussions continue with Deakin University on the possibility of establishing a Graduate School of Engineering Design and Manufacture. An invited presentation was made at the Deakin University Design Discussion Seminar on 10 July 2012.</li> <li>Members of the College of Mechanical Engineers were surveyed to assess industry support for the proposed Graduate School. The results of the survey are available on the NCED website and were reported in EA magazine.</li> <li>NCED continues to encourage CPD of their members as well as the wider engineering-design community, e.g. participation by Campus Organisers in running the National Final of the Weir Warman Competition.</li> <li>An annual forum for NCED members and Campus Organisers on design-education ideas was also held in conjunction with the final of the Warman competition.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>Contributing to national policy development</li> <li>Leadership for the learned society</li> <li>Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Six internationally recognised speakers have been chosen to present keynote addresses at ACAM 7.</li> <li>NCAM continue to be supportive of the concept of a national flagship Engineers Australia Convention. ACAM has the potential to be a part of the convention.</li> <li>The special issue of AJME was issued from 12 of the best papers from ACAM 6.</li> </ul>	<ul style="list-style-type: none"> <li>Policy input was provided to the Senate Inquiry into Skills Shortage as well as to EA's recent Policy Review.</li> <li>NCED continued to provide advice to the Mechanical College Board on engineering design and engineering-design education.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>The AGM Michell award was presented to NCAM nominee John Hart-Smith.</li> <li>The NCAM are currently reviewing potential applicants for future nominations.</li> </ul>	<ul style="list-style-type: none"> <li>2011 Weir Warman Student Design and Build competition was held at the Australian Technology Park in Sydney in September and deemed a success. It was well attended and supported by the Mechanical College Board.</li> <li>The 2012 Weir Warman Student Design competition will be held in Sydney from 28 – 30 September – the 25th in the series.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>Best Student Paper awards will be given at ACAM 7, with a budget allocated to this initiative.</li> </ul>	<ul style="list-style-type: none"> <li>Correspondence was sent to EA Accreditation Panel regarding the acceptable standard of teaching in engineering design in universities and concern over diminution of design content. No response has been received.</li> <li>Members provide design lectures in WA as industry design consultants and assist the UWA faculty on their industry advisory panel. Members in industry provide work experience to students.</li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>Improved information for members</li> <li>Good governance</li> </ul>	<ul style="list-style-type: none"> <li>The Committee held 2 face to face meetings to discuss and further develop its activities.</li> <li>The current Chair of NCAM – Ian Howard, will step down from the role at the end of the year. Succession planning is underway, with 2 new members welcomed onto the committee.</li> </ul>	<ul style="list-style-type: none"> <li>Whilst most committee members are active in NCED affairs, a review of membership is listed for the committee's face-to-face meeting on 1 Oct 2012.</li> <li>The committee held a face-to-face meeting which coincided with the Warman competition in Sydney in September 2011, as well as one teleconference.</li> </ul>

COLLEGES

STRATEGIC DOMAINS	NATIONAL COMMITTEE ON NANOENGINEERING (NCNE)	NATIONAL PANEL ON MECHATRONICS (NPMECH)
<p><b>1 Community Engagement</b></p>	<ul style="list-style-type: none"> <li>NCNE are collaborating with DIIRSTE to put together the Nanotechnology and Australia's Energy Future community engagement workshop.</li> </ul>	<ul style="list-style-type: none"> <li>The panel is promoting and assisting with events in the national tour of the Young Australian of the Year, Marita Cheng. Marita is a mechatronic engineering student at Melbourne University who founded Robogals – an organisation to promote the development of engineering skills by young girls in primary schools. (<a href="http://www.robogals.org">www.robogals.org</a>).</li> </ul>
<p><b>2 Body of Knowledge and Professional Development</b></p> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>Nanotechnologies are emerging technologies that are likely to impact significantly on engineering science and practice in the future. The NCNE continues to examine the role that nanotechnology and nano-engineering might play.</li> <li>There is potential for green and sustainable technologies, novel medical technologies, and improved manufacturing techniques that may allow Australia to remain competitive despite increasing wage costs.</li> <li>Strategic networks are being established with a view to work closely with those developing nanotechnologies and with those who may regulate and promote industry uptake of nanotechnologies.</li> </ul>	<ul style="list-style-type: none"> <li>The panel is collaborating with ASME and IEEE to promote the International conference on mechatronics systems in Wollongong in 2013. Members of the panel have identified shortcomings in knowledge of occupational health and safety issues, specifically electrical safety, that apply both to mechatronic and electrical engineers. The panel is working on solutions with the possibility of developing special professional development courses in this area.</li> </ul>
<p><b>3 Leadership and Influence</b></p> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>There is some opposition within the Australian community to the adoption of nanotechnologies due to fear and a lack of understanding of nanotechnologies. The NCNE aims to promote responsible and ethical development and uptake of nanotechnologies and is committed to a program of community engagement and education with a particular focus on the engineering and associated professions.</li> </ul>	<ul style="list-style-type: none"> <li>A submission was made by the Chair to the Senate Skills Shortages Inquiry in January 2012.</li> <li>Substantial research-based input was provided for the Stage 2 competencies review. A large proportion of the competency indicators were reworded and new sections added to promote the ability of engineers to earn sufficient income. For technologists and associates, new competencies were defined for specific areas of knowledge and skill unique to their roles, which are not applicable for professional engineers.</li> </ul>
<p><b>4 Recognition, Promotion and Membership</b></p> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>		<ul style="list-style-type: none"> <li>The panel is concerned that it is difficult to access engineers with interest in mechatronics because of limitations in Engineers Australia's current membership and renewal systems.</li> <li>The panel has resolved to find better ways to access this community, particularly by providing relevant news items for the EA website.</li> </ul>
<p><b>5 Education and Qualification</b></p> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>		<ul style="list-style-type: none"> <li>The panel has found research that shows that OH&amp;S issues are not, nor likely to be, satisfactorily addressed in undergraduate engineering education. This is due largely to the lack of sufficient industry exposure among academics. The response rate to research surveys demonstrates this conclusively. The panel believes this issue is better addressed post-graduation.</li> </ul>
<p><b>6 Internal Structure and Administration</b></p> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>The committee is constantly seeking to refine its membership.</li> <li>Various portfolios have been assigned to members.</li> </ul>	<ul style="list-style-type: none"> <li>The panel held regular teleconferences to further its activities, an improvement on previous years, with planning for a face to face meeting.</li> <li>Tim Gale is the new Chair and the panel has 2 new members who have only recently joined Engineers Australia and who represent a pool of potential new members.</li> </ul>

COLLEGES

STRATEGIC DOMAINS	COLLEGE OF STRUCTURAL ENGINEERS
<b>1 Community Engagement</b>	<ul style="list-style-type: none"> <li>The Structural College Board (SCB) is working to develop an Australian adaptation of the UK version of CROSS. A draft Business Plan is being formulated to present to Council.</li> <li>The College is assessing the existing MOU with IStructE and is investigating if a similar memorandum is required with IABSE.</li> </ul>
<b>2 Body of Knowledge and Professional Development</b> <ul style="list-style-type: none"> <li>&gt; Identifying CPD needs</li> <li>&gt; Conferences and publications</li> <li>&gt; Eminent speakers</li> <li>&gt; Keeping competencies and practice standards current</li> </ul>	<ul style="list-style-type: none"> <li>ASEC 2012 was held in Perth in July 2012, the Conference was well attended and both technically and socially successful.</li> <li>Mr Len Dalziel embarked on an Eminent Speaker Tour in Regional Queensland as part of the 2012 Year of the Regional Engineering Team. The tour was very well supported and Mr Dalziel has advised he would be happy to repeat next year.</li> <li>Two editions of AJSE were published during 2011-2012.</li> <li>Mr Jacque Combault, a keynote speaker at ASEC 2012 also presented to the Sydney Civil-Structural Panel on "Fixed Links and Longspan Bridges" and was extremely well received.</li> </ul>
<b>3 Leadership and Influence</b> <ul style="list-style-type: none"> <li>&gt; Contributing to national policy development</li> <li>&gt; Leadership for the learned society</li> <li>&gt; Engagement with kindred bodies – national and international</li> </ul>	<ul style="list-style-type: none"> <li>Planning is proceeding for ASEC 2014. It is to be held in Auckland, New Zealand in conjunction with SESOC-NZ.</li> <li>Discussions have commenced regarding the location of ASEC 2016.</li> <li>The Structural College and IABSE are investigating holding a joint conference in 2018.</li> </ul>
<b>4 Recognition, Promotion and Membership</b> <ul style="list-style-type: none"> <li>&gt; Recognising excellence and contributions to the profession</li> </ul>	<ul style="list-style-type: none"> <li>The RW Chapman Medal was awarded this year to Siva Sivanerupan, Professor John Wilson and Professor Emad Gad.</li> <li>The John Connell Gold Medal was awarded to Professor Mark Bradford and presented to him at the recent ASEC Conference in Perth.</li> <li>Planning has commenced for Professor Mark Bradford to present an Eminent Speaker tour for 2012-2013.</li> </ul>
<b>5 Education and Qualification</b> <ul style="list-style-type: none"> <li>&gt; Contributing to relevant tertiary curricula</li> </ul>	<ul style="list-style-type: none"> <li>The College has presented discussion papers on the following:                             <ul style="list-style-type: none"> <li>Succession Planning for College Boards</li> <li>Stage 2 Competency for Structural Engineers</li> <li>Model Codes of Practice for Formwork &amp; Scaffolding.</li> </ul> </li> </ul>
<b>6 Internal Structure and Administration</b> <ul style="list-style-type: none"> <li>&gt; Improved information for members</li> <li>&gt; Good governance</li> </ul>	<ul style="list-style-type: none"> <li>The SCB is proceeding with a review in delegating 'portfolios'.</li> <li>The College website has been updated.</li> </ul>

**Membership – College of Structural Engineers**

Grade	2007-08	2008-09	2009-10	2010-11	2011-12	% incr last year
Graduates	433	651	868	1,053	1,134	7.7%
Members	2,068	2,440	2,865	3,270	3,672	12.3%
Fellows (and others)	306	327	350	372	383	3.0%
<b>Sub-total</b>	<b>2,807</b>	<b>3,418</b>	<b>4,083</b>	<b>4,695</b>	<b>5,189</b>	<b>10.5%</b>
Students	909	1,064	1,301	1,507	1,726	14.5%
<b>Total – at 30 June</b>	<b>3,716</b>	<b>4,482</b>	<b>5,384</b>	<b>6,202</b>	<b>6,915</b>	<b>11.5%</b>

## SPECIAL INTEREST GROUPS

### CENTRE FOR ENGINEERING LEADERSHIP AND MANAGEMENT

#### Passing the Baton

##### Engineering Leadership Conference 2012

CELM and YEANC again collaborated on developing and delivering our Engineering Leadership Conference (ELC) 2012. The ELC speaker program addressed many different aspects of engineering leadership, all linked to the four core issues of **Pathways to Leadership, Transitions in Leadership, Leadership in Industry and Engineering a Better Society.**

I would like to congratulate the Organising Committee and everyone who assisted in developing the Conference which was an outstanding success. The ELC will be the linchpin around which Engineers Australia is developing its National Convention model and is a testament to its impact and success.

Regrettably, John Phillips retired from the Board after six years of providing a valuable contribution to CELM. The Board and I wish John well and thank him for his enthusiasm and contributions. The Board has put a nomination to Council for endorsement to fill the vacancy.

The CELM Board and Chapter Chairs developed a Strategic Plan for the years 2012 to 2015 in December 2011 which identified the following focus areas for 2012-13

- > Leadership Education
- > EngExec Value Proposition
- > Awareness Education
- > Mentoring
- > CELM Funding
- > Governance

Steering Committees of the Board were constituted to explore and develop the focus areas further and I am pleased to say that we are progressing steadily in all areas.

CELM Division Committees have continued their activities and their unceasing commitment to developing programs and events for existing and emerging leaders is an example to us all of what can be achieved.

We have published a number of articles on leadership in the Engineers Australia magazine and, this year, CELM decided to sponsor the Top 100 Engineers.

Finally, I wish to thank Board members for their continuing positive contributions to the Board as well as the CELM Chapter Chairs for their ongoing commitment and enthusiasm.

**Dr Bronwyn Evans**  
*Chair*

### ENGINEERING HERITAGE AUSTRALIA

#### Highlights of the Year

A major achievement was the very successful 16th EHA Conference in Hobart. During the November conference, the 2011 Colin Crisp Award was presented to the Tasmanian Lake Margaret Power Scheme Redevelopment. Together with a pre-conference tour, it was very well organised and attended, receiving excellent coverage in the Hobart media.

During the year, work continued on the book project to celebrate the 100th anniversary of Engineers Australia in 2019. A big project with ambitious objectives, it will require much research, writing and funding.

The regular monthly email News Bulletin to members of the National Board and its Corresponding Members is continuing. However, the format of the EHA Newsletter, usually published once a year to a wider engineering audience, is under consideration for conversion to a more regular internet publication to allow more contact with the wider engineering community.

Our national Heritage Recognition Program had another busy year with eight new sites recognised and two additional ceremonies for existing sites, across five Divisions. Victoria Division recognised the Janevale Bridge near Bendigo, Budj Bim Aboriginal Hydraulic Works at Lake Condah, the Yallourn Power Station and the Geelong-to-Ballarat Railway. Queensland Division recognized the Grafton to Brisbane Standard Gauge Railway and the Barcaldine Water Tower. Western Australia Division recognized the Fremantle to Kalgoorlie Standard Gauge Railway and the Carnarvon Tracking Station. Tasmania Division recognized the Tasmanian Transport Museum at Glenorchy and Canberra Division recognized the Canberra Main Sewer Outfall.

The Sir John Monash Medal was awarded at the Engineers Australia AGM to Chris Martin, a self-employed consulting engineer with a passion that helped preserve the Lake Margaret Power Scheme on Tasmania's West Coast.

Only four Awards of Merit were made during the year, recognising the continuing contributions made by many individuals to the achievements of Engineering Heritage Australia. The guidelines have been expanded and more emphasis will be given to this process in the coming year.

I take this opportunity to thank everyone who has worked so hard to achieve the objectives of EHA during this year, especially our outgoing Chair, Owen Peake.

**John Heathers**  
*Chair*

## SPECIAL INTEREST GROUPS

**YOUNG ENGINEERS AUSTRALIA  
NATIONAL COMMITTEE****New Minds. New Ideas.**

In May 2012, Young Engineers Australia (YEA) celebrated 25 years since its establishment in 1987 and reflected on its distinctly measurable achievements and remarkable progress over those years. YEA National Committee (YEANC) tirelessly sought every opportunity to contribute to Engineers Australia undertakings, studies, surveys and pilot programs and offered substantial input into engaging discussions taking place at the time. Financial year 2011-12 was no exception.

In 2011, YEANC members contributed to the work of Council's Special Committee on Chartered whilst undertaking in parallel its own study *Views of Young Engineers on Being Chartered*. With approximately 5,500 Young Engineers participating in the study, it provided a robust and reliable data sample of diverse opinions on the chartered accreditation process, the value of being chartered, and key motivators for pursuing chartered accreditation. Study outcomes were presented at the annual National Congress meeting in November 2011 and were well-received.

In early 2012, YEANC was tasked by Engineers Australia CEO Steve Durkin with three special assignments relating to member retention and engagement. YEANC initiated discussions with Divisions seeking their input to the development of a member retention strategy for making YEA and Engineers Australia more relevant to engineers under 35 years of age. In addition, YEANC commenced the 'optioneering' phase into the type of viable financial models for student membership with the intention to increase conversion rates from student to graduate membership. Separately, YEANC is considering best social media outlets and forums to engage with young engineers.

Both Engineers Australia staff and volunteers organising the Engineering Leadership Conference 2012 (ELC 2012) deserve a loud round of applause for their sterling efforts resulting in a highly successful event. The conference was undoubtedly the highlight of the 2012 engineering calendar. Over 440 delegates convened in Adelaide over two days in May to celebrate the Year of the Regional Engineering Team and deliberate challenges of passing the leadership baton. The success of ELC 2012 followed the auspicious ELC 2010 in Brisbane and ELC 2008 in Perth, and left a lasting legacy for ELC 2014 which is planned as part of the new Engineers Australia National Convention in Melbourne in November 2014.

YEANC welcomes the 2013 Chair of YEA, Ben Aldham of Victoria.

**Sofia Sapojnikova**  
Chair

**WOMEN IN ENGINEERING NATIONAL COMMITTEE****... to attract, support and celebrate females in the field of engineering.**

Female engineer membership continued to grow from 2011 to 2012 and comprised 11.3% of total Engineers Australia members at June 2012. Excluding students, female membership grew 7.4% during 2011-12.

**Highlights of the year**

Women in Engineering committees in Divisions were active again, delivering a number of events across Australia. Joint events were held with Young Engineers and CELM. To celebrate 2011 the Year of Humanitarian Engineering, each division committee held at least one event to celebrate the theme.

WiENC have continued to highlight the achievements of inspirational female engineers, profiling stories in the Engineers Australia magazine and the Make it so website.

Working with large engineering employers, WiENC developed a professional women's program 'industry blueprint' – a document for companies to refer to when setting up professional women's programs within their organisations. The paper was developed following a round table discussion with industry partners. It looks at programs proven to encourage and retain women in the engineering profession including issues to consider, some of the key messages to achieve success, and some lessons learnt. The document will enable industry to evolve and successfully compete in a changing environment.

Responding to the needs for Fit for Purpose PPE (Personal Protective Equipment) for female engineers, WiENC commissioned the Challenger TAFE in Western Australia to design a series of four PPE clothing. The designs were launched at the ICWES15 conference dinner and were well received. Stage 2 of the Fit for Work project partnered with John Holland to pilot the designs. 55 John Holland employees are trialling the garments in real working environments on sites across Australia. The trial is expected to be completed at the end of September. Feedback will assist in shaping the next steps of the project. Feedback from the pilot to date is that this is a great initiative.

In September 2011, WiENC published a position statement endorsing the UN Women Empowerment Principles.

The WiENC awarded two scholarships to female engineers to attend the Engineering Leadership Conference in Adelaide, held in May 2012.

Communications with all Divisions and College Boards were maintained throughout the year, and the committee held two face to face meetings during the year.

**Michelle Thompson**  
Chair

SPECIAL INTEREST GROUPS

**ENGINEERING TECHNOLOGISTS OF AUSTRALIA**

**The National Committee of Engineering Technologists of Australia (NCETA) represents a small group within Engineers Australia. Many new technologist members are overseas qualified.**

All technologist members are encouraged to attend and participate actively in Divisional CPD events relating to their disciplines. CPD is not arranged by NCETA as members practice in a range of disciplines across many Colleges. Indeed, Engineering Technologist members are now represented on the Civil, Structural, Mechanical, Biomedical, Electrical and ITEE College Boards and members are represented on most Division Committees. An Engineering Technologist member was President of Northern Division in 2010 and 2011.

Several member profiles are available online, and NCETA members and other Engineering Technologists work with Divisions on local issues.

Technologist members are encouraged to become Chartered. I was a member of the 2010-2011 Special Committee of Council which undertook a review on being Chartered.

Engineering Technologist members are encouraged to enter the People in Engineering Awards in each State and Territory Engineering Excellence Awards.

Members are made aware of articulation opportunities and encouraged to pursue articulation. Christine Haydon, a member of NCETA, is on the Articulation Committee and ensures NCETA is informed of relevant developments.

Two face-to-face meetings of the National Committee are held each year, with additional teleconferences as required

A Tasmania representative joined the committee earlier this year, a Sydney representative joined in August, and a YEA representative will most likely join in September. In addition, NCETA has now formalised the appointment of the Biomedical College Board representative.

In 2010 NCETA provided input and comment on the new Stage 1 Competencies, and did the same for the new Stage 2 Competencies in late 2011, with further comment in 2012.

The focus of NCETA for the next year will be to align with the new vision for EA, whilst at the same time ensure the interests of Engineering Technologists are addressed, and to ensure that the role and profile of Engineering Technologists is fully understood within the profession, as well as the broader community.

NCETA will continue to support initiatives for more consistent regulation of engineering nationally, particularly to include provision for Engineering Technologists. NCETA remains in close liaison with the NERB to promote the interests of Engineering Technologists in future proposed National Registration.

**Will Neethling**  
*Chair*

**NATIONAL COMMITTEE OF ENGINEERING ASSOCIATES**

**I have the privilege of serving my second year as Chair of the Committee. The Deputy Chair, Major Keith Chambers, is well known to most of you for his video acceptance message as the 2009 Engineering Officer of the Year during his Army deployment. As a respected member of the Australian Army and the National Engineering Registration Board, Keith will be an outstanding representative as the new Chair of the Committee.**

The national membership numbers for Associates have increased from 5,477 in June 2011 to 5,589 in June 2012. This modest but pleasing increase of 2% is accompanied by a disappointing increase of only one Chartered member. The Committee is very active in promoting the benefits of Engineers Australia membership and Chartered status to the TAFE sector, mining, the Australian Public Service, and the Australian Defence Force – Engineers Australia’s largest Professional Development Program partner.

The Immediate Past Chair, WGCDR Ross Magno, and I had the pleasure of attending the Engineering Leadership Conference in Adelaide earlier this year. Whilst it is difficult to identify the highlights of this very impressive event, the opportunity to network with some of the sharpest individuals in Australia, and provide mentoring and guidance to the many motivated young engineers, were certainly the most rewarding aspects of the Conference for Ross and myself. On behalf of the Committee, I congratulate Engineers Australia and attendees for a very successful and memorable experience.

During the year, Engineers Australia removed the confusion surrounding the terms “Associate” and “Officer”, which were interchangeably used when referring to Engineering Associates. As one of the outcomes of the Year of the Regional Engineering Team, the term Officer has been dropped in preference for the term Associate. This small but important change will remove confusion and provide consistency in terminology.

The National Committee for Engineering Associates Australia has a membership of state representatives and corresponding members who are all very proud of their Engineers Australia membership, and are very passionate about representing the interests and welfare of the Engineering Team. The Committee appreciates the efforts of Engineers Australia volunteers and staff in supporting the Engineering Team throughout 2012.

**Rob Williamson**  
*Chair*

## SPECIAL INTEREST GROUPS

**REGIONAL SPECIAL INTEREST GROUP  
NATIONAL COMMITTEE**

The Regional SIG represents approximately 15% of the Engineers Australia membership who live in regional Australia, plus many other members whose work takes them to regional areas. The Regional SIG's main task in 2011-12 has been planning and delivering the *Year of the Regional Engineering Team (YoRET)*, with a theme *Regional Engineering – The Heart of Australia*.

A key aspect of the YoRET has been supporting and building on existing Division regional groups, and each regional group has been given \$500 to host a "signature" YoRET event. Examples of the range of signature initiatives funded include the Dubbo group (Sydney Division) screening the film *Revenge of the Electric Cars*, a Professional Development night held at Gove (Northern Division) and the South West Group (Victoria Division) developing a partnership with TAFE for live streaming of presentations from Division.

Other YoRET highlights in 2011-12:

- > several Eminent Speaker programs have included regional group presentations
- > increased liaison between Engineers Australia and kindred groups, including joint promotion of events
- > a focus at the 2012 Engineering Leadership Conference on regional issues, including nine Regional SIG scholarships – two keynote presentations were on regional issues
- > engaging a media consultant to write regional specific engineering stories for regional newspapers
- > service to regional groups in many Divisions has improved as a direct result of the YoRET
- > a focus on regional events across Divisions, with ties between Division regional groups strengthened.

For more information visit the Regional SIG webpages at <https://www.engineersaustralia.org.au/regional-engineering>.

The Regional SIG Committee has held monthly teleconferences to develop and deliver YoRET outcomes, as well as bringing regional views to the national level on policy, organisation, strategic planning and issues such as service and CPD delivery. Our main challenge for 2012-13 will be to continue building on the momentum developed by YoRET in these areas.

As National Committee Chairperson, I would like to thank all the committee members for their continuing commitment to delivering the YoRET and to developing strategies to support members living and working in regional Australia.

**Greg Mashiah**  
Chair

**OVERSEAS CHAPTERS AND INTEREST GROUPS**

Engineers Australia's overseas members represent a very important and integral part of its membership. At the same time, overseas members who return to Australia bring home with them a wealth of experience across all disciplines of engineering.

The largest concentration of our overseas members is in East and South East Asia. Local Chapters have been set up in Hong Kong, Malaysia, Singapore and the United Kingdom with the objective of enhancing our services to local members.

In March 2012 the National President and the CEO visited our three Asian Chapters. This visit provided members of our Asian chapters with an opportunity to personally meet the National President and CEO and discuss issues facing the profession, both in Australia and overseas.

As the incoming CEO, Stephen Durkin provided members with an overview of his early priorities for Engineers Australia. During his early career as an engineer Stephen gained a range of overseas work experience, and he shared his experiences with members outlining his belief that our overseas Chapters have a vital role to play within Engineers Australia.

During the visit the Chapters kindly arranged a number of visits with local dignitaries and also arranged a number of site visits to major engineering projects. The visit was a resounding success and our appreciation goes to all of the Chapter members who dedicated their time to make the visit memorable and worthwhile for all involved.

The success of our overseas Chapters is underpinned by the ongoing efforts and support provided by our many volunteers, committee members and organisers. These people make considerable sacrifices to ensure the effective operation of our overseas Chapters and they deserve special thanks and recognition.

Contributed by

**Brent Jackson**  
*Director International and National Policy*  
*Engineers Australia*



## TECHNICAL SOCIETIES

In accordance with Section 17 of the Guidelines and Regulations for Technical Societies of Engineers Australia, the following societies and Joint Boards have provided reports on their activities for the year 2011-12.

### Page Technical Societies

92	AaeE	Australasian Association for Engineering Education
	ACES	Australian Cost Engineering Society
93	ACSS	Australian Composite Structures Society
	AEES	Australian Earthquake Engineering Society
94	AGS	Australian Geomechanics Society
	APTS	Australasian Particle Technology Society
95	ASBSH	Australian Society for Bulk Solids Handling
	ATS	Australasian Tunnelling Society
96	ASDE	Australian Society for Defence Engineering
97	EESA	Electric Energy Society of Australia
	EMCSA	Electromagnetic Compatibility Society of Australia
98	IES	Industrial Engineering Society
	IPWEA	Institute of Public Works Engineering Australia
99	MA	Materials Australia
	MEMMES	Mining Electrical and Mining Mechanical Engineering Society
100	MSTS	Mine Subsidence Technological Society
	Red R	Red R Society
101	RTSA	Railway Technical Society of Australasia
	SBSE	Society of Building Services Engineering
102	SEAg	Society for Engineering in Agriculture
	SESA	Systems Engineering Society of Australia
103	SFS	Society of Fire Safety
	SSEE	Society for Sustainability and Environmental Engineering
	<b>Joint Boards</b>	
104	RAeS	Joint Board for Aerospace Engineering with RAeS Australia Division

### Non-Reporting Societies and Groups

No contribution to this Annual Report has been received from:

- > Asset Management Council (AMC)
- > Australasian Fluids and Thermal Engineering Society (AFTES)
- > Risk Engineering Society (RES)
- > Joint Board for Naval Architecture (EA with RINA)

## TECHNICAL SOCIETIES

**AUSTRALASIAN ASSOCIATION FOR ENGINEERING EDUCATION (AAEE)****www.aeee.com.au**

AAEE represents a vibrant community passionate about transforming engineering education across Australasia and forming links with high quality engineering education communities across the world.

Our key initiatives during 2011-12 were aimed at continuously improving AAEE value to Engineers Australia, ACED and the engineering education community nationally and internationally:

- > Increasing AAEE's identity and communication both within our membership and within our member institutions
- > increasing our relationships and exposure in South East Asia
- > strategies to increase the impact and recognition of engineering education scholarship and scholarly publication.

AAEE continued to increase engagement of its membership during the year and to deliver relevant professional development programs including a number of workshops: the 2012 AAEE Winter School, EA/AAEE Accreditation and Curriculum Design workshops, Closing the Loop workshops (good practice to good research to good practice – a special ACED sponsored project).

AAEE contributed to ACED's submission to the Senate Inquiry on Engineering Skills Shortages and has developed closer links with the Australian Council of Deans (ICT) through support of Discipline Networks. Many of AAEE's Executive and its members are leading Office of Learning and Teaching (formerly ALTC) national grants aimed at improving engineering education research and practice.

The 22nd Annual AAEE Conference was held in December, 2011 in Fremantle and was chaired by Euan Lindsay with 255 delegates from 17 countries. The conference brought together a broad spectrum of international experts across engineering education. The theme for the conference was "Developing Engineers for Social Justice: Community Involvement, Ethics & Sustainability", chosen to coincide with EA's theme year for 2011 as the Year of Humanitarian Engineering.

AAEE is in a unique position and is highly valued by many colleagues around the world. Our relationships with EA, IPENZ, ACED and NZCED benefit our members and the engineering education community through financial support, input to decision making, collaboration in special projects and the provision of an avenue to publish in an ERA ranked journal (Australasian Journal of Engineering Education).

In closing I acknowledge and applaud current and past AAEE Executive members who have made a major contribution to enhancing engineering education research and practice through their passion and dedication.

**Les Dawes**  
*President*

**AUSTRALIAN COST ENGINEERING SOCIETY (ACES)****www.costengineer.org.au**

The Australian Cost Engineering Society (ACES) has chapters in Melbourne, Sydney, Brisbane and Perth.

Members are drawn from a wide range of industries, including oil and gas, minerals and mining, and building. They include project managers, cost engineers, planners, estimators and contract administrators who apply cost engineering skills to support effective cost and schedule control on major engineering and construction projects.

The following are the past year's highlights, achievements, notable activities and planned events:

- > ACES membership has shown a significant increase in membership over the past year with total membership numbers now around 630.
- > ACES website provides a good communication tool for our diverse and often remote membership. Presentations from our Chapters are added to the website as they occur, so that members who cannot attend can still benefit.
- > An active program of professional presentations continues.
- > In Melbourne a technical program was developed that focused on the fundamentals of cost engineering. Presentations were made by experienced cost engineers and estimators, with the response from members, and the wider membership of Engineers Australia, leading to full and overflowing venues.

ACES continue its ongoing commitment to education and professional development of engineers in the methodology and application of project controls including:

- > ACES Melbourne sponsor a Cost Engineering course unit in the Swinburne University of Technology civil engineering degree for undergraduates and master of construction management for postgraduate students. Current enrollments include 150 undergraduates, 45 post graduates, and 20 distance learning students. A similar Cost Engineering unit, using ACES source material, is also taught at the Sarawak, Malaysia campus of Swinburne.
- > The ACES library continues to lend out specialist CDs of cost engineering papers and practice to members throughout Australia.
- > ACES Perth facilitates eLearning courses in Cost Estimating and Project Controls via [www.costengineer.org.au](http://www.costengineer.org.au).
- > ACES Brisbane and Melbourne proctored multiple AACEI certification exams.

ACES is committed to providing forums for spreading cost engineering knowledge and techniques between members. All meetings and events are focused on technical issues of interest to members and deliver professional development through these meetings.

**Alistair Bowden**  
*National Chairman*

## TECHNICAL SOCIETIES



## AUSTRALIAN COMPOSITE STRUCTURES SOCIETY (ACSS)

[www.acss.org.au](http://www.acss.org.au)

The Australian Composite Structures Society (ACSS) is approaching its 20th anniversary and continues the tradition of providing a high quality lecture program, together with support for relevant special events in the field.

Over the reporting period, there were only two lecture meetings, both of which were held in Melbourne. The AGM was held on 20 December 2011, prior to one of the lectures. The lectures were of a high standard with the presenters coming from Australia (1) and USA (1).

Dr Viktor E Verijenko concluded his term as Vice-President of the Society, and Prof Murray L Scott continued into his second year as President, and also maintained his long-standing role as ACSS Director. The position of ACSS Administrator continued to be filled by Mrs Denise M Bennett, a staff member at the Cooperative Research Centre for Advanced Composite Structures, which she has held since January 2007. Dr Rikard B Heslehurst as Canberra Chapter Chairman continued leading activities in the ACT, which involves occasional joint lectures with the Australian Defence Force Academy's Advanced Composite Research Unit. Dr Adrian Orifici continued as Melbourne Chapter Chairman and web administrator, and Dr Andrew G Beehag continued in the role of Sydney Chapter Chairman.

After reducing over the past year or so, the membership of the Society has stabilised with the total remaining at around 40 – officially, 38 financial members, which includes Engineers Australia members (35) and direct members (3). However, the financial position remains sound, as reported by Ms Sook Phin Leong – the Society's Honorary Auditor.

Once again, the Society made contributions in support of the major annual composites event for Australia: the joint annual conference and exhibition of Composites Australia – the national industry association, and the Cooperative Research Centre for Advanced Composite Structures. The event was held in Leura, New South Wales, 15-16 March 2012, and was a great success.

Also this year, the Society made contributions in support of the major biennial composites world event: the Eighteenth International Conference on Composite Materials (ICCM-18), Jeju, Korea, 22 to 26 August 2011. Murray Scott continues to serve on the Executive Council of the International Committee on Composite Materials.

**Prof Murray L Scott**  
*Director*



## AUSTRALIAN EARTHQUAKE ENGINEERING SOCIETY (AEES)

[www.aees.org.au](http://www.aees.org.au)

### World Conference on Earthquake Engineering (WCEE)

WCEE is the official conference of the International Association of Earthquake Engineering (IAEE), held at different venues every four years, and attracting a few thousand delegates from all over the world. All IAEE member countries can apply to host the conference.

AEES formed a committee in December 2011 to prepare a bid to host the 16th WCEE in 2016 in Melbourne. The bid will be presented at the 15th WCEE in September 2012 in Lisbon. With supporting letters from a few Universities in Australia, the President and CEO of Engineers Australia, and the Lord Mayor of Melbourne, the bid is planned to be lodged with the Secretary-General of IAEE in August 2012. If our bid is successful, it will be the first time that WCEE will be held in Australia. At this stage, Chile, Indonesia and Japan have also submitted expressions of interest to host the 16th WCEE.

### Website

AEES maintains an up-to-date website for its members and the general public, providing information on recent earthquakes, technical papers, and a photo gallery. It also contains earthquake reconnaissance reports and members' commentaries. All the published papers in AEES annual conferences from 1992 to 2010 have recently been posted on the website, and can be downloaded free of charge.

### Online Discussion Group

An online discussion group for AEES members was established in February 2012. AEES members can post messages and discussion topics, and the content is available on a read-only basis to the general public.

The discussion group was created to disseminate earthquake and earthquake risk related information, and educate the interested public on the possibilities and uncertainties of earthquake risks worldwide, especially in Australia.

### Continuing Professional Development

The Society's annual Technical Conference and AGM were last held at Barossa Valley, SA on 18-20 November 2011. 52 papers including 4 keynote papers were presented in the conference. All the papers were peer reviewed and included in the conference proceedings distributed to all participants.

Preparations for our 2012 Annual Conference on the Gold Coast 7-9 December are well underway, with the theme 'Historical beginnings, Current status, Recent advances and Future directions'. Researchers from Japan and New Zealand are scheduled to present at the conference on their experiences, observations and new research results from the Japan and New Zealand earthquakes in 2011.

**Hong Hao**  
*President*

TECHNICAL SOCIETIES



**AUSTRALIAN GEOMECHANICS SOCIETY (AGS)**

[www.australiangeomechanics.org](http://www.australiangeomechanics.org)

The Australian Geomechanics Society (AGS) has an active membership with local chapters in the major centres and some regional cities. We reach our members through the Australian Geomechanics Journal, local technical lectures, specialty conferences, symposia, seminars and workshops. AGS is jointly sponsored by Engineers Australia and the Australasian Institute of Mining and Metallurgy, and has a growing member base of about 1,560. AGS has representation in associated international societies, ISSMGE, IAEG and ISRM.

AGS delivered the very successful ANZ Geomechanics conference in Melbourne in July 2012 and is now preparing for the 2014 International Congress on Environmental Geotechnics. AGS is bidding to host the 2017 International Conference on Soil Mechanics and Geotechnical Engineering in Sydney.

The 2011 EH Davis Lecture was awarded to Professor Mark Cassidy from the University of Western Australia. The award recognises distinguished contribution to geomechanics. Professor Ian Johnston from the University of Melbourne was presented the John Jaeger Award for his contribution of the highest order over a lifetime commitment to the geotechnical profession in Australia.

The AGS journal Australian Geomechanics continues to be published quarterly and is now printed in full colour. In 2012, a sub-editor was appointed to assist with organising peer reviews.

Members of AGS recognise the journal as a key member benefit. Another is the Distinguished Speakers programme that brings renowned speakers from around Australia and the world to tour Australia presenting lectures. Speakers on the program in 2011-12 included Dr Robert Holtz presenting the 46th Terzaghi lecture, Dr O’Riordan and Professor Tom O’Rourke presenting his 2009 Rankine Lecture.

The AGS Landslide Risk Management sub-committee delivered a fantastic resource in the LRM Education Empowerment website [lrm.australiangeomechanics.org](http://lrm.australiangeomechanics.org). There’s a wealth of information here on Landslide Risk Management for practitioners, clients and the general public. Other AGS current initiatives are a revision to Australian Standard AS1726-1993 Geotechnical Site Investigations, and work with NSW government departments to clarify the requirements for licensing of test bores in NSW.

**Sam Mackenzie**  
*National Chair*



**AUSTRALASIAN PARTICLE TECHNOLOGY SOCIETY (APTS)**

[www.engineersaustralia.org.au/apts](http://www.engineersaustralia.org.au/apts)

The Australasian Particle Technology Society held its AGM during Chemeca conference 2011 in Sydney. APTS organised the Particle Technology streams with members contributing significantly in various roles, including in technical committees and in editing special issue journals from papers presented at the conference.

Following the AGM, Dr Cordelia Selomulya was elected as president, with Prof George Franks as vice president and Dr Roberto Moreno-Anatasio in a new role of webmaster for the society’s website.

Li Wang from the University of Queensland was awarded the annual Graeme Jameson Award for a paper titled “Nanotubular structured material supported Ru nanoparticles for preferential CO oxidation in H<sub>2</sub>-rich stream”. The prize is given for the best paper by a postgraduate student in the area of Particle Technology. Prof George Franks presenting the award at the Chemeca conference dinner. A certificate for highly commended paper was presented to Wenjie Liu from Monash University during AGM held at the same conference for her paper titled “One-pot synthesis and encapsulation of hydrophilic drug in uniform microparticles for controlled release”. These awards aim to support upcoming research leaders in the particle technology area, as one of the key aims of APTS.

APTS will again be involved in the upcoming Chemeca 2012 in Wellington, New Zealand, and will be co-sponsoring PARTEC 2013, the International Congress on Particle Technology, in Nuremberg. We look forward to another year of exciting activities in 2012-2013.

A special thanks to the outgoing president, A/Prof Karen Hapgood, for her service to the society.

**Dr Cordelia Selomulya**  
*President*

## TECHNICAL SOCIETIES



### AUSTRALIAN SOCIETY FOR BULK SOLIDS HANDLING (ASBSH)

[www.engineersaustralia.org.au/asbsh](http://www.engineersaustralia.org.au/asbsh)

Mr Owen Scott, General Manager, Kooragang Coal Terminal Expansions, Port Waratah Coal Services, received the ASBSH Award in 2011 for his outstanding contributions to bulk solids handling. Mr Brad Lawson, Principal Mechanical Engineer, Laing O'Rourke, received the A W Roberts Award (the second award from the Society) for his significant contributions to bulk solids handling technology. Both awards were presented at the 6th Annual Australian Bulk Handling Awards that were held at Doltone House in Sydney on 26 October 2011. These awards were organised by Informa Australia, and the Society worked with Informa to develop suitable prize categories and also evaluate and judge the various nominations from industry.

Our Technical Convener in WA, Mr Eric Lau from Worley Parsons has been quite busy over the past year and has organised many successful seminars on numerous topics, including: dust mitigation; transfer chute design; belt conveyors; stockpile and bin design; reliable and sustainable supply of bulk commodities. He also organised a Site Visit to the Fenner Dunlop Conveyor Belting plant in Kwinana. It is great to see the Society so active in the West. Keep up the good work Eric!

In the East, the Newcastle Branch of the ASBSH held a joint information evening with the Newcastle Mechanical Branch on 29 March 2012. The evening consisted of a technical site tour of the new TUNRA Bulk Solids Laboratories followed by two seminars on conveyor transfers and disposal of coal washery waste.

The Society continues its association with Informa Australia and the journal Australian Bulk Handling Review. Representatives of Informa Australia attend the Society meetings that are held each year to discuss and plan relevant events for the future. This association and developing relationship have been quite productive and fruitful, such as: the Australian Bulk Handling Awards; the Dust Explosions Conference, which was held on 29-30 May 2012 in Penrith. These new activities are providing greater options and opportunities for the members of the Society.

**Peter Wypych**

*Chair*



### AUSTRALASIAN TUNNELLING SOCIETY (ATS)

[www.ats.org.au](http://www.ats.org.au)

2011-12 was another successful year for the Australasian Tunnelling Society.

The Society again conducted technical sessions of interest and relevance to members with some Technical Sessions proving so popular they have been held in more than one Chapter. The Executive Committee and I would like to thank each of our Chapters for the fantastic work they undertake in bringing these sessions to members as well as the presenters who continue to be willing to share their expertise and time.

As reported last year the ATS Executive Committee continues to focus on corporate governance and is working with Engineers Australia to streamline regulations and terms of reference for all constituent bodies of that organisation.

The Executive Committee and our Journal Editor continue to review the ATS Journal critically with a view to improving its contents as well as ensuring it stays relevant to our members. The ATS Journal remains extremely popular outside the ATS membership base with regular requests being received from individuals and companies wishing to purchase it. However it is a benefit of ATS membership which will remain available to members only.

The ATS is holding our Tunnel Design and Construction Short Course in September 2012 which is again proving extremely popular. Featuring a series of presentations by leading experts on topics relevant to the current tunnelling industry in Australia, the course will include health and safety, tunnel design, risk assessment and risk management, quality management, management of groundwater issues and tunnel construction. Course delegates will receive a comprehensive set of course notes, as well as access to the presentation material. In addition to the lecture presentations, some topics will be delivered in an interactive workshop format.

The Society has constituted a working group to prepare submissions on the Safe Work Australia draft Guide for Tunnelling Work and we thank members of the Working Group as well as our members for contributing their time and expertise to this body of work.

Our New Zealand Chapter also developed and submitted a submission to the Royal Commission on the Pike River Coal Mine Tragedy.

**Simon Knight**

*Chairman*

## TECHNICAL SOCIETIES

**AUSTRALIAN SOCIETY FOR DEFENCE ENGINEERING (ASDE)****[www.engineersaustralia.org.au/asde](http://www.engineersaustralia.org.au/asde)**

The National Committee continues to meet quarterly, usually by teleconference but face to face at least once a year in Canberra, and has achieved progress in a number of areas.

First of all the relationship with Department of Defence and the Defence Materiel Organisation (DMO) has continued to develop. At the last Canberra meeting a reception with senior Defence appointments was held and we continue to cooperate with DMO to conduct all day conferences known as Defence and Industry Engineering Team (DIET) Day. The next one will be held in Melbourne in August with the theme of Safety. We also worked with Engineers Australia and the Submarine Institute of Australia (SIA) to support the inaugural SIA Conference on Submarine Science, Technology and Engineering held in Adelaide in November 2011. Planning is underway to support a similar conference again in 2013. A particular highlight for the Society in 2012 was our sponsorship of an Engineers Australia Eminent Speaker Series throughout most of Australia on the Future Submarine Project – the speaker is Rear Admiral Rowan Moffitt, RAN, the Head, Future Submarine Project.

Secondly, the deep seated interest of our membership in defence engineering is such that concerns and perceived problems are often raised by our membership. In addressing these we work, where we can, within the Engineers Australia structure. To this end we worked with EA staff in April 2012 on a submission in response to the Skills Australia Defence Industry Workforce Strategy Discussion Paper. Articles on defence engineering topics, sourced from our Society, have also appeared in the Journal of Engineers Australia.

Thirdly, we continue to award prizes for graduates of the Australian Defence Force Academy and have decided to award an additional prize for Master of System Engineering (Military Systems Integration) graduates from the University of South Australia.

Fourthly, we continue a strong focus on the most important role of our Society which is the contribution we make to the Continuing Professional Development (CPD) programs of Engineers Australia. The members of our Society have a good knowledge of defence engineering and this gives us an understanding of its changes and developments. We use this knowledge in all of our Chapters to arrange regular presentations to our members, as well as to the general EA membership, which furthers the understanding of developments in defence engineering. The support of Defence and the defence industry through the provision of excellent speakers is greatly appreciated in this regard. The addition of

the recordings of many of these presentations to the EA website adds to their value. In arranging these presentations we often cooperate with other EA groups and with the Australian Industry Defence Network (AIDN), with which we have mutually beneficial relationship which adds to our influence.

A special item raised by our Society with Engineers Australia this year is the need to recognise the role of engineering in World War 1 the centenary of which will be commemorated over the next few years. We are working with the Heritage Committee and Engineers Australia on this project.

Financially the Society is in reasonable shape and able to meet its commitments.

And finally I would like to turn to membership and our relationship with Engineers Australia. Our membership levels are being maintained but are not increasing. We keep in touch with members with a newsletter after each quarterly National Committee Meeting. Our website needs to be refreshed and the National Committee has initiated a project to undertake this in conjunction with EA and we are investigating the establishment of a new Chapter in WA.

Our Society has an excellent relationship with EA and contributes where possible to its activities – we ensured the role of Defence received due recognition during the recent Year of Humanitarian Engineering. We receive extremely professional and helpful administrative support from EA without which we just would not be as effective as we are. However, we do not have a good understanding of the roles of the various specialist groups within EA nor do we cooperate with them as much as we should, which is not surprising given the complex structure and many varying interests within EA. I was therefore most pleased with the Engineering Practice Advisory Committee Meeting I attended in February at which the need to better integrate the activities of the various groups within EA was highlighted and accepted. As a first step in this process the role of the technical societies and their relationship with EA will be addressed, a process to which members of the ASDE National Committee are contributing.

So, in summary, I am pleased to report that I am well satisfied with the progress ASDE has made over the last 12 months and I strongly believe that our Society is making a difference to, and is relevant to, the defence engineering fraternity and to Engineers Australia.

**Doug Roser**  
*National Chair*

## TECHNICAL SOCIETIES

**ELECTRIC ENERGY SOCIETY OF AUSTRALIA (EESA)**

[www.eesa.asn.au](http://www.eesa.asn.au)

**Chapters**

The real strength of the EESA lies in the active committees at work in the state chapters. Each state chapter delivered an impressive technical program which has worked for the benefit of all our members.

Chapter Chairs are:

- > Colin Frost (Vic)
- > Lawrie Cleary (Qld)
- > Bob Smith (NSW)
- > Martyn Pearce (SA)
- > Michael Verrier (Tas – newly-formed).

**Chapter Conferences (EECON)**

**NSW 2011-2012:** A very successful EESA 2011 conference was held at the Australian Technology Park, Eveleigh, Sydney 7-9 September 2011, with some 200 delegates and a strong exhibitor presence. The theme was “New Technologies in Energy Networks – topping up or tripping over”. Gold Sponsors were Endeavour Energy, Ausgrid, Essential Energy and TransGrid.

Plans are in place for the next EECON NSW conference at the same venue. Restructuring of the NSW electricity industry is presenting some challenges for the committee.

**Victoria – Ballarat:** Our first EECON branded conference for Victoria was planned for March 2012 at Ballarat in association with the Year of the Regional Engineering Team. Due to low registrations the conference was deferred to a later date in Melbourne.

**QLD 2012:** Plans for EECON (29-31 August 2012) at the Brisbane Convention Centre have had to be cancelled because of major industry restructuring in Queensland.

**Electricity Engineers Association of New Zealand**

Each year, EESA and EEA New Zealand host the prize-winning papers from our respective conferences. EESA sent 4 delegates to the EEA Annual Conference in Auckland (20-22 June 2012), including our most recent Conway and Creswell prize winners from our 2011 National Conference.

**Finances**

Membership of the EESA continues to grow and stands at more than 860 members.

Very successful annual conferences and other seminars and workshops for which fees are charged, has seen the Society maintain a healthy financial position, both nationally and at the state chapter level.

**Dr Robert Barr**  
President

**ELECTROMAGNETIC COMPATIBILITY SOCIETY OF AUSTRALIA (EMCSA)**

[www.emcsa.org.au](http://www.emcsa.org.au)

Our sound financial position enabled us to embark confidently on our ninth annual EMC Symposium in Perth in November 2011. The Society's self-funded newsletter presented articles and papers on EMC from local and overseas authors and attracted industry support through institutional listings. Requests for re-publication continue to be received, establishing the newsletter as a substantial source of new papers in the EMC field.

At the AGM, the EMCSA Council for 2012 was declared. Members are: Mark Mifsud (Chairman), Kingsley McRae (Treasurer), Andrew Walters (Secretary) Gordana Felic, Jean Michel Redoubte, Paul Kay, Arthur Weedon, Franz Schlagenhauser, Graeme Madigan and Phu Nguyen.

**Technical Presentations**

Technical presentations by local and international speakers enabled the EMC community to share experiences and provided CPD opportunities for EA members:

**Oct 2011:** *Design Challenges when Attempting to Reduce Susceptibility to EMI of Analog Integrated Circuits* – Jean Michel Redoubte from Monash University.

**Feb 2012:** *Decoupling PCB's for EMC and Functionality in the Real-World* – Prof Bruce Archembeault, distinguished IEEE lecturer and EMC Society Board member.

**May 2012:** *Opportunities in the Risk Management of EMC* – Keith Armstrong, prominent UK consultant.

**Asia Pacific EMC Symposium in 2013**

In Singapore in late 2011, it was agreed that the Asia Pacific EMC Symposium and Exhibition in 2013 would be hosted in Australia. The EMC Society Council formed a conference organising committee, with some Council members and prominent local and international volunteers, chaired by Franz Schlagenhauser, and a professional conference organizer commissioned. The venue will be the MCG in May 2013.

A call for papers has been issued and the various logistical details are currently being organised.

**Organisation**

The EMCSA continued close co-operation with the Victorian chapter of the IEEE EMC Society. Commonality of interests and membership between the two bodies has resulted in mutual benefit.

The Society has an active National Committee with members drawn from Melbourne, Adelaide and Perth, and is continually seeking to foster the formation of Chapters in other centres. Serving the needs of a geographically dispersed membership remains one of our challenges.

**Mark Mifsud**  
Chair

TECHNICAL SOCIETIES



**INDUSTRIAL ENGINEERING SOCIETY (IES)  
(INSTITUTE OF INDUSTRIAL ENGINEERS)**

[www.iie.com.au](http://www.iie.com.au)

This past year has seen an increased focus on the health of the manufacturing sector within Australia. Activity levels have fallen over the last decade, employment in the sector remains under pressure, and our perceived competitiveness lags that of our Asian neighbours. These factors place high demand on the skills and experience of both industrial and manufacturing engineers, and we must play a more prominent role in the future. This has been the top item on the agenda of the Institute of Industrial Engineers (IIE) over the last 12 months, and recognising the value members can contribute to improving the competitiveness of Australian industry.

The 2011 AGM was held in Melbourne, and I am pleased to say that the addition of a further two new Directors onto the Board of the IIE means that we have the healthiest and most diverse Board for many years. Dr John Blakemore and Mohammad Barghash have joined the Federal Council and provide representation of a wider cross-section of members, especially in manufacturing. And for the first time in several years NSW Division is represented federally (the omission of which has been a cause of concern).

Earlier this year IIE provided direct representation to the Australian Commonwealth on its Skilled Occupations List (SOL) for 2012. Both Industrial and Production / Plant Engineers appear on the recent update to the list, representing the increased demand being experienced for these skills and limited local supply from our premier Universities. At the same time, many of the new IIE members from last year are Industrial Engineers migrating to Australia. There is a lot to learn from these international members.

The results from 2011-12 remain steady and the Institute is in a healthy position. IIE is on good financial footings, we have welcomed a number of new members, and produced some well received editions of our flagship publication "New Engineer". The local level of activity of many state divisions has been depressed in recent times, and this should be an area of focus in the new year.

I thank you for your support and look forward to continuing to work with all members in the year ahead.

**Daniel Kulawiec FIIE**  
Federal President



**INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA (IPWEA)**

[www.ipwea.org.au](http://www.ipwea.org.au)

IPWEA is the professional association "informing, connecting, representing ...and leading" those providing public works and engineering services to the community, and undertakes the role of Technical Society for Local Government and Public Works Engineering on behalf of Engineers Australia.

**IPWEA had an exceptionally strong year in 2011-12.**

Our communications have undergone a major revamp with the launch of a new format bi-monthly magazine. Five online Communities of Practice were launched late last year and new eNewsletters launched based around our Fleet and Assets Communities. An IPWEA App has also been launched.

The 4th edition of the International Infrastructure Management Manual (IIMM) was released during the year providing continued global leadership in asset management. Practice Notes were published for Stormwater Drainage and also Long Term Financial Planning in association with the Australian Centre of Excellence in Local Government (ACELG).

The Institute is the lead agency for ACELG in its capacity building program with a particular emphasis on asset management and infrastructure financial planning. A key role has been to facilitate a nationally consistent approach to infrastructure management and planning.

IPWEA is a lead player in international developments and is having a major influence along with other Australian delegates in the direction of the new International Standard (ISO) on Asset Management. The IPWEA CEO has been appointed to convene gNAMS, the global network for asset management societies, and has also been appointed by the US Federal Highways to their key AM Task Group. IPWEA is delivering asset management workshops in a number of Canadian provinces and fleet workshops for the Hong Kong Police.

A push into sustainability issues has been commenced with the appointment of a National Director Sustainability. A national strategy is currently being developed that will seek to embed a practical approach to sustainability for public works professionals.

IPWEA's national conference held in Canberra last year continued to be a most successful technical and social event making it the premier event on the public works calendar.

As IPWEA has grown it has been developing its underlying business systems and technology. There is a healthy regard and focus also on governance issues with the establishment of an Audit & Risk Committee reporting to the Board.

IPWEA is now focused on delivering on its next 'top 10' strategic key tasks for the coming year.

**Chris Champion**  
Chief Executive Officer

## TECHNICAL SOCIETIES

**MATERIALS AUSTRALIA**

[www.materialsaustralia.com.au](http://www.materialsaustralia.com.au)

Firstly, thanks go to the members of Engineers Australia who continue to support Materials Australia by their involvement in this technical society! In this excerpt from the annual President's Report, I aim to highlight our activities and benefits.

Conferences run by the society in 2011, included PACRIM 9, featuring ceramics, in Cairns; MISE 2011, on surface engineering, in Melbourne; and Powder Metallurgy –Titanium held in Brisbane. Materials Forum 2011 consisted of selected papers presented at the MISE conference. The successful Material Australia quarterly magazine publication Vol. 44 was issued to all members in May, July, September and December 2011. Members also receive frequent email updates and news from the National Office and their nominated state Branch (VIC, WA, QLD, NSW, SA).

Materials Australia, in partnership with ASM International now offers a total of 22 on-line home study courses and face-to-face professional development courses/workshops. Training courses delivered in 2011 included Metallurgy for non-metallurgists (Bendigo), Failure analysis (South Australia), Non-destructive testing, Welding metallurgy (Darwin), Heat-treatment and surface engineering (Melbourne). Materials Australia, Enterprise Connect, CAST CRC and 2XE supported the Australian Foundry Institute in an application for a Workshop, Industry, Intelligence and Networking (WIIN) grant to conduct a National Energy Efficiency Roadshow across Australia in early 2012.

State Branch seminar programs have continued to be varied and informative ranging from the esoteric "Metallurgy of Swords" by Matt Fuller, to the practical "Materials for mechanical seals" by Ian Smith. Also, plant and site visits were organized by the branches. There are national and branch awards each year for students, professional service and international standing. The non-annual Silver Medal for outstanding contribution was presented to Professor David St.John (Univ of Qld).

In 2011, there were 440 individual and 30 company memberships. 25% of members have been accepted as Certified Materials Professionals (CMP's) and their names are listed in each quarterly publication.

For a more comprehensive report on the year's activities, please visit the website and use the member login to see documents prepared for the AGM as well as upcoming branch and national activities. We look forward to your continued involvement!

**Malcolm Couper**  
*National President*

**MINING ELECTRICAL AND MINING MECHANICAL ENGINEERING SOCIETY (MEMMES)**

[www.engineersaustralia.org.au/memmes](http://www.engineersaustralia.org.au/memmes)

The Mining Electrical and Mining Mechanical Engineering Society (MEMMES) have had another busy year with monthly meetings, formation of chapters and our continued apprentice/trainee engineers visit to TestSafe at Londonderry. This has been the 6th year we have sponsored these visits – over this time we have taken approximately 550 to the site, all from the Hunter Valley, Southern and Lithgow mines and support industries.

The re-formation of the Queensland Chapter is on the agenda for the next 12 months.

**MEMMES Hunter Valley Electrical Chapter**

The chapter has continued with their bi-monthly meetings which have a very good attendance. This is a good opportunity for the Electrical Engineers to discuss various problems and industry advancements.

**MEMMES Western NSW Chapter**

In May a committee was appointed to form the Western NSW chapter and they are busy with the agenda for the next seminar to be held in Cobar on 17 Oct 2012.

Once again there were two seminars held in western NSW, in Cobar in Oct 2011 and in Dubbo in Mar 2012. These seminars are always well-attended, with representatives of the Metalliferous Mining, Sand Mining and Support Industries travelling from a vast area of NSW to attend.

**MEMMES Western Australia Chapter.**

In March this year a half day seminar was held in Perth, with a good attendance and positive feedback. MEMMES asked for nominees to form a committee which we have now appointed.

**Convention**

As 2013 is our 60th anniversary our convention for 2012 was postponed and rescheduled to 2013. It will be held on Fri-Sat 19-20 April, and combined with a Trade Exhibition as we have previously held.

The venue will be the Hunter Valley Crowne Plaza situated in wine country at Pokolbin.

**Peter Whipp**  
*President*

TECHNICAL SOCIETIES



**MINE SUBSIDENCE TECHNOLOGICAL SOCIETY (MSTS)**

**www.mstsociety.org**

Established in 1988, the Mine Subsidence Technological Society (MSTS) promotes the interchange of technical information amongst persons interested in coal mine subsidence throughout Australia. There is increased expectation that those with a detailed knowledge of mine subsidence will impart that information to assist the understanding of others in the general community.

Australia now has a strong database of mine subsidence information, a high level of expertise, and valuable history from mining beneath and around significant surface features. Detailed monitoring and analysis associated with underground mining projects, along with additional research and development has seen a beneficial increase in mine subsidence information relating to a range of surface features over the past decade.

Through their own organisations members of the Society are continuing to meet the challenges set by mine subsidence. The knowledge base on specific subjects such as upsidence, anomalous impacts, far field effects, mine subsidence impacts on surface features and surface strains has developed markedly in the past decade.

MSTS triennial conferences are eagerly anticipated as they present the only specialised conference dealing with coal mine subsidence in Australia. The inaugural 1988 conference foreword indicated that an Inquiry into proposed longwall mining under urban areas 'appeared to have experienced, at least to some degree, the lack of published information based on Australian data on the structural behaviors of buildings and structures'. Since then, over 170 technical papers relating to mine subsidence have been presented at MSTS conferences. MSTS has broadened the range of topics covered at conferences to include subsidence management, the environment and community issues, in addition to more technical papers. Previous conference papers are available to members through the MSTS website.

Executive Office bearers are Greg Cole-Clark – Chair, Don Kay – Secretary and Ken Mills – Treasurer. The contribution of other office bearers and Society members is appreciated. The Society is in a sound financial position and both membership fees and conference costs are based to encourage ongoing membership.

The MSTS Executive is currently giving consideration to additional Technical Sessions to provide further opportunity for Members to get together and discuss the latest projects and research involving mine subsidence.

The MSTS website provides member services and contacts. Enquiries are received both nationally and internationally from persons interested in coal mine subsidence.

**Greg Cole-Clark**  
*Chair*



**RED R AUSTRALIA LTD**

**www.redr.org.au**

Millions of people around the world endured the grimmest of years. RedR Australia stepped its mission up a notch or two, and engineers were again prominent.

Simultaneous humanitarian crises, particularly in North Africa and the Middle East, competed for attention with food shortages in the Horn of Africa and the Sahel countries, and with massive dislocation in South Sudan. Conflict created more human misery than did natural disasters. Nature's biggest blow was again struck in Pakistan, severely flooded after not recovering from wet season devastation the previous year.

We continued to recruit and select new talented people, including engineers. If recruitment stalls, the subsequent steps are compromised, so to add new names to the Standby Register of the willing was a pleasing development.

We continued to train and prepare people with Standby Register intent, for the purposes of other NGOs, for government departments and services, and for diverse objectives of individuals exploring their suitability in international aid contexts.

RedR Australia's field deployment lists grew steadily throughout the year, and our people found themselves in 26 countries (previous year 20). Burkina Faso, Mauritania and Senegal were probably the biggest surprises in the list since we have not been active there in the past.

430 aggregate field months (previous year 278) meant that the year rivalled 2005 for workload, which was the tsunami response year after Boxing Day 2004. Some of our people joined World Health Organisation (WHO) operations. WHO now officially joins UNICEF, UNHCR, WFP and OCHA on our list of internationally-mandated UN agencies which receive RedR Australia contributions of talented people.

Our focus is sharply upon people. People in desperate need after disasters and emergencies. People with skills and a willingness to respond. People who receive professional preparation. People who detach themselves from home base and contribute their time and talent in the most challenging, and sometimes dangerous circumstances. People helping people.

RedR Australia is well into its 20th year of humanitarian action, and the engineers associated with its creation might feel some pride in the maturing child.

Australian Government interest and support via AusAID was greatly appreciated again this year. Our humanitarian action also contributes to Australia's overall interests.

We warmly thank donors and corporate supporters, and commend our mission to EA members' attention.

**Emeritus Professor Elizabeth Taylor**  
*Chair*

## TECHNICAL SOCIETIES



## RAILWAY TECHNICAL SOCIETY OF AUSTRALASIA (RTSA)

[www.rtsa.com.au](http://www.rtsa.com.au)

2011-12 has been a year of consolidation for RTSA, with good progress being made on initiatives aimed at expanding our profile across the rail industries of Australia and New Zealand.

A new logo was adopted by the RTSA Executive in March to give a more modern identity for the Society and to appeal to a broader audience within the railway sector than just engineers.

In addition, the RTSA is collaborating with Engineers Australia on the upgrade of our website, taking advantage of EA's recent significant Information Technology investments, with the new website planned to be launched at our CORE2012 conference in Brisbane in September.

Chapter technical meetings and events in the RTSA's six chapters across Australia and New Zealand have continued to be the main vehicle for the Society to engage with its members and the wider rail community. Attracting younger people working in the rail industry to attend chapter meetings and join the RTSA remains a challenge.

The New South Wales Chapter ran a very successful three day Study Trip on Railway Engineering (STORE) to the Hunter Valley coal haulage rail system in March 2012, in conjunction with the Permanent Way Institute, which was attended by 87 delegates in total. It is hoped that similar study tours to other parts of the Australasian Rail networks will be undertaken in future years.

The RTSA annual awards program, recognising individual and rail project excellence, has continued to attract high quality nominations, although fewer in number than in 2010-11. In addition 50 youth scholarships will be awarded to enable students and recent graduates to attend the CORE 2012 conference in Brisbane this September.

Work is underway by the National Executive Membership Sub Committee to revamp the RTSA's Corporate Membership scheme, to enable the RTSA to develop deeper ongoing relationships with organisations in the rail industry. In addition the Professional Development Subcommittee is developing proposals to jointly run introductory seminars on aspects of railway engineering in conjunction with the Australasian Railway Association, with the first seminar on track engineering planned to be run in 2013.

RTSA's financial position remains healthy, with a significant part of our revenues flowing from the CORE Conferences. Member numbers have continued to grow steadily with total membership now in excess of 1400.

**Simon Wood**

*Executive Chairman*



## SOCIETY OF BUILDING SERVICES ENGINEERING (SBSE)

[www.engineersaustralia.org.au/sbse](http://www.engineersaustralia.org.au/sbse)

### Current Activities

Throughout 2011-12 the Society of Building Services Engineering (SBSE) continued to host various technical sessions and meetings directly through the established Panels and groups in New South Wales, South Australia and Western Australia and indirectly nationally with kindred building services related organisations having common aims. During this year consideration has been given to opportunities to strengthen and broaden the range of activities and identifying common industry requirements for CPD.

### National Focus

A message was sent out to all members early in the operating year advising the intention to broaden the national focus of SBSE through the formation of a new National Committee. The strong response to the message is an indication that strengthening and broadening the activities of SBSE nationally is preferred and fully supported by the members. Therefore a new National Committee is to be established, under new operating guidelines, to provide a national focus for activities, CPD and the building services industry engineering needs generally.

### Future Planning

The proposal to E-Publish a Quarterly Newsletter to all members has advanced to the draft stages and is planned to commence this year. In addition SBSE will be focusing on cooperation with kindred industry organisations having common aims to limit duplication of resources and capitalize on opportunities to participate in established events such as ARBS. With the support of Engineers Australia SBSE is positioning itself to play a leadership role in Australia in the area of Building Services Engineering.

### Member Services

In keeping with Engineers Australia initiatives SBSE, through the new National Committee, will be aiming to improve the information flow to members, improve opportunities for members to participate, add value to members as professionals in Building Services Engineering and seek to provide relevant practice notes.

**Terry P Spiro**

*National Chairman*

## TECHNICAL SOCIETIES



Society for  
ENGINEERING  
in  
AGRICULTURE

## SOCIETY FOR ENGINEERING IN AGRICULTURE (SEAG)

[www.engineersaustralia.org.au/seag](http://www.engineersaustralia.org.au/seag)

### Biennial Conference

The 2011 CIGR International Symposium of the Australian Society for Engineering in Agriculture was held at the Gold Coast on 29-30 September.

The title of the conference was "Engineering in Agriculture – Diverse Challenges, Innovative Solutions". Once again the themes were very broad, including irrigation and water resources, post-harvest technologies and processing, structures, equipment and environment, power and machinery and precision agriculture and livestock management.

The plenary sessions focussed on commercialisation of agricultural technologies and we were fortunate to have a number of prominent local and international speakers sharing their experiences. We were particularly grateful to the Sugar Research and Development Corporation and Grains Research and Development Corporation who were the main conference sponsors.

The conference provided a great opportunity to improve international linkages between researchers and scientists and improve our understanding of the role of innovative technological solutions to address agricultural challenges.

Over 150 delegates attended from 20 countries making this the largest conference SEAg have ever hosted. We were very well supported by Engineers Australia who were co-organisers of the event.

Additionally, a number of associated sessions were hosted including a Spatially Enabled Livestock Management workshop which attracted much interest. Pre-conference tours covered conservation agriculture, sugar production and technologies for livestock management.

### Journal

Selected articles presented at the 2009 SEAg Conference were published in the Australian Journal of Multi-disciplinary Engineering Vol 8 No 2. Articles presented at the 2011 SEAg Conference are currently being prepared for inclusion in our next special issue of the Australian Journal of Multi-disciplinary Engineering.

### Other business

Linkages with the Commission Internationale du Genie Rural (CIGR) which is the International Commission of Agricultural and Biosystems Engineering continue to be strong. SEAg continues to produce newsletters for members. State activities are few but are actively encouraged.

USQ Ag Eng student David Mohr won the 2011 Michael Woodhouse Memorial Award from the Engineers Australia Queensland Division Water Panel.

**Glen Riethmuller**  
Chairman



## SYSTEMS ENGINEERING SOCIETY OF AUSTRALIA (SESA)

[www.sesa.org.au](http://www.sesa.org.au)

In 2011-12, Engineers Australia on behalf of the Systems Engineering Society of Australia (SESA) established a Memorandum of Understanding (MOU) with the International Council on Systems Engineering (INCOSE). SESA, while remaining a Technical Society of Engineers Australia, became the Australian Chapter of INCOSE. SESA since its inception has had a close relationship with INCOSE and the MOU achieved a long-held goal for both organisations. Membership of SESA now includes full membership of INCOSE, with a key benefit for Australian members being access to the systems engineering body of knowledge (SEBOK) documented and available via the INCOSE website.

SESA has endeavoured to establish and support special interest groups in a range of knowledge domains. Now able to leverage the association with INCOSE and in order to make an Australian contribution to the SEBOK a number of initiatives have commenced. A chapter working group was established to develop knowledge and application of model-based systems engineering principles and practices to capability definition, which is the early development of solution concepts and requirements.

Beyond the traditional systems engineering domain of military-aerospace, SESA continued to promote systems engineering methods and techniques in non-traditional domains such as transport and other social infrastructure, mining operations, medical and bio-mechanical systems, and environmental protection. A transport working group has been established as an adjunct to INCOSE's international working group and an energy transition group aligned with the INCOSE power and energy working group has been initiated.

In May, SESA held the annual Systems Engineering and Test Evaluation conference in Brisbane. This year the conference incorporated the Asia Pacific Council on Systems Engineering Conference with representatives from several Asian nations involved. The INCOSE Board of Directors also held their quarterly meeting in Brisbane and participated in the conference. SESA's recognition in Australia, the region and globally is steadily increasing.

The management committee members, most of whom were returned unopposed at our AGM held with the conference, continued to make a significant contribution to the organisation. Formal quarterly management meetings were held and committee members participated in one day business planning workshops. The committee's commitment and contribution throughout the year is gratefully acknowledged.

**Paul Logan**  
Immediate Past President

## TECHNICAL SOCIETIES

**SOCIETY OF FIRE SAFETY (SFS)**

[www.engineersaustralia.org.au/sfs](http://www.engineersaustralia.org.au/sfs)

also [www.sfs.au.com](http://www.sfs.au.com)

With nearly 500 members in chapters all over Australia, the Society of Fire Safety (SFS) has had continued growth resulting in another strong year. Firstly a big thank you and 'happy retirement' note to Rocarm who has been the Society's administrative arm since its inception (some 17 years ago). We wish you all the best! Moving on, we will be supported by Engineers Australia which will further strengthen this relationship.

A big thank you also to all of our committee members and those who continue to work so tirelessly behind the scenes to ensure, among other things, that the state chapters hold technical forums and seminars for the benefit and interest of our members. These seminars provide useful information and excellent networking opportunities for fire safety engineering professionals. Some recent practice notes/position papers the group has published as a result of this work include: "The Role of Registered Practitioners in Fire Safety Engineering", "Visibility Criteria", "Derivation of Design Fire Scenarios", to name a few.

SFS continued to be involved within the legislative and governmental arenas by providing input to Australian Standards and State Government Technical Committees. This has included discussions with Engineers Australia on national registration programs, correspondence with the various Building Commissions, representation on Standards Committees, etc.

Looking forward, the SFS will continue to strive to deliver and provide support to our members on the issues that are important to them. In particular we have committed to:

- > Hold free 'Open House' guided tours of Fire Engineered Buildings, showcasing special design features in a number of states as part of Australian Engineering Week each August
- > Host two 2-day workshops by international speakers Morgan Hurley, Jim Milke and Ian Thomas on 'Engineering Principles of Smoke Control Systems' and 'Advanced Fire Dynamics Simulator, FDS' (November); this is a first for the SFS!
- > Representation on Standards Australia Committees to provide further strategic opportunities for members to contribute
- > Provide industry sessions/site visits
- > Promote SFS and the Fire Safety Engineering profession to the wider community, universities and schools.

I look forward to challenging the Society to make a difference for the profession as we work towards closing the gaps within the industry in general.

If you would like to find out more about the SFS, please refer to our website [www.sfs.au.com](http://www.sfs.au.com).

**Elissa Fazio**

*National President*

**SOCIETY FOR SUSTAINABILITY AND ENVIRONMENTAL ENGINEERING (SSEE)**

[www.engineersaustralia.org.au/ssee](http://www.engineersaustralia.org.au/ssee)

SSEE has had an active and productive year, with many technical sessions held by our chapters. We achieved many of our national goals for 2011-12, including:

- > The SSEE 2011 International Conference was held very successfully in Brisbane in October. Very high profile keynote speakers included Annie Leonard and Paul Gilding. A call to action for engineers was also developed and agreed to by all delegates at the conference. Our next conference will be held in Canberra in September 2013, to coincide with Floriade and the Canberra Centenary Celebrations.
- > A stand and technical stream were provided at the 2012 Ecoforum in Sydney from 7-9 March 2012. SSEE intends to participate in Ecoforum 2013.
- > A sustainability survey was sent to all members of Engineers Australia and associated societies. We are very happy to have received 3484 responses from a wide range of EA members. Most respondents were not members of SSEE. Respondents overwhelmingly believe that climate change is occurring (75%), with 65% considering it human-induced. We are in the process of having a report prepared to summarise the results, which will be published in our magazine.
- > The winner of our 2012 National Student Award was Daniel Harrington from the University of Southern Queensland for his project on coal seam gas water as a medium to grow marine microalgae for biofuel production. Daniel will present his paper on this topic at the SSEE 2013 conference in Canberra next year.
- > A special general meeting was held online to vote on a name change so that it is more manageable and suited to our needs. Voting is now complete, and the results are soon to be announced; however, we still need to gain approval from Engineers Australia Council. We anticipate that Council will consider the name-change favourably, given the transparency of the process adopted by the SSEE Board.

I see SSEE as a great vehicle for assisting change in many different ways, and encourage you all to become active members so we can network and support each other. I look forward to working with the Board and our members to achieve our goals in the coming year.

**Lara Harland**

*Chair*

## JOINT BOARDS



### **JOINT BOARD FOR AEROSPACE ENGINEERING – ENGINEERS AUSTRALIA AND ROYAL AERONAUTICAL SOCIETY – AUSTRALIA DIVISION (RAES)**

[www.raes.org.au](http://www.raes.org.au)

The Royal Aeronautical Society, Australia Division (RAES) and Engineers Australia (EA) continue to provide two members each to the joint Board for Aerospace Engineering (JBAeroEng). The JBAeroEng provides elements of the College function for Aerospace Engineering, and has a set of agreements that enable the Royal Aeronautical Society to act in Australia as a Technical Society of Engineers Australia.

The JBAeroEng is accountable for the activities of the Joint Conferences Committee (JCC), which has oversight of the Australian International Aerospace Congress (AIAC) series. Since 2005 this major biennial event has been held in Melbourne in conjunction with the Avalon Airshow. The 14th Congress in the series – AIAC-14, was held in March 2011, and planning is progressing for AIAC-15, which is scheduled for February 2013.

The JBAeroEng also arranged its fifth International Eminent Speaker – Mr Doug Arbuckle from the United States Federal Aviation Administration (FAA). Mr Arbuckle visited several cities around Australia during March 2012, lecturing on the Next Generation Air Transportation System (NextGen).

Our Results

104 The JBAeroEng continued to support Australian representation to the International Council of the Aeronautical Sciences (ICAS) during the period, and noted the preparations being made for the 28th ICAS Congress (ICAS 2012), which will be held in Brisbane in September 2012.

The Aerospace Engineering General Area of Practice (GAP) under the National Engineering Registration Board is the responsibility of the JBAeroEng. Developments in relation to registration issues, particularly as they affect Aerospace Engineers, continue to be monitored.

There were no new Aerospace Engineering degree accreditation activities reported in the period. Auditing of CPEng Aerospace Engineers continued in the period. The JBAeroEng also issued in May 2012 a new brochure outlining the scope of Aerospace Engineering.

**Prof Murray L Scott**  
*Chair, Joint Board*







ENGINEERS  
AUSTRALIA

# ANNUAL CONSOLIDATED CONCISE FINANCIAL REPORT

FOR THE FINANCIAL YEAR ENDED 30 JUNE 2012

National Council Report

Councillors' Declaration

Audit Report

Statement of Comprehensive Income

Statement of Financial Position

Statement of Changes in Equity

Statement of Cash Flows

Accompanying Notes

## NATIONAL COUNCIL REPORT

The members of Council of Engineers Australia present the annual financial report of the consolidated entity for the financial year ended 30 June 2012.

### Council Members

The names and particulars of the members of Council of Engineers Australia during or since the end of the financial year are:

NAME	IEAUST QUALIFICATION	PERIOD OF OFFICE		OFFICE HELD
D A Hood	FIEAust CPEng	24-11-10	Ongoing	National President
M Kanga	FIEAust CPEng	26-11-07	Ongoing	National Deputy President
M L Lindsay	FIEAust CPEng	01-12-05	Ongoing	Immediate Past National President
A Baitch	HonFIEAust CPEng	25-11-09	Ongoing	National Councillor
D J Gillott	FIEAust CPEng	24-11-10	Ongoing	National Councillor
B D Howard	FIEAust CPEng	13-11-02	Ongoing	National Councillor
M E McManus	FIEAust	01-01-12	Ongoing	National Councillor
B J Strout	FIEAust CPEng	23-11-07	Ongoing	National Councillor
G P Walters	FIEAust CPEng	01-01-12	Ongoing	National Councillor, NVP (Finance)
D J Hargreaves	FIEAust CPEng	20-11-08	31-12-11	Immediate Past National President
D A McHugh	FIEAust CPEng	25-11-09	31-12-11	National Councillor

**Office Held** as at 30 June 2012 or at the end of term of office.

### Principal Activities

The principal activity of Engineers Australia during the financial year was to operate as a professional association to advance the science and practice of engineering.

### Future Developments

Engineers Australia will continue to review the consolidated entity's activities to ensure that the objectives of Engineers Australia are maintained in the best interests of members.

Signed at Canberra this 16 October 2012, in accordance with a resolution of Council.

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### Operating Result

The net surplus of the consolidated entity for the year was \$867,000 (2011: net deficit \$603,000).

### Subsequent Events

There has not been any matter or circumstance that has arisen since the end of the financial year that has significantly affected, or may significantly affect, the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity in future financial years.

### Changes in State of Affairs

There was no significant change in the state of affairs of the consolidated entity during the financial year.



**David Hood**  
National President



**Greg Walters**  
National Councillor, NVP (Finance)

## COUNCILLORS' DECLARATION

The councillors declare that:

- a) in the councillors' opinion, the attached financial statements and notes thereto comply with Accounting Standard AASB 1039 'Concise Financial Reports'; and
- b) the attached financial statements and notes thereto have been derived from the full financial report of Engineers Australia.

Signed at Canberra this 16 October 2012, in accordance with a resolution of Council.



**David Hood**  
*National President*



**Greg Walters**  
*National Councillor, NVP (Finance)*

## AUDIT REPORT



Deloitte Touche Tohmatsu  
ABN 74 490 121 060

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### **Independent Auditor's Report to the members of The Institution of Engineers Australia**

We have audited the accompanying concise financial report of The Institution of Engineers Australia which comprises the statement of financial position as at 30 June 2012, the statement of comprehensive income, statement of changes in equity, statement of cash flows for the year then ended, and related notes, derived from the audited financial report of The Institution of Engineers Australia for the year ended 30 June 2012 and the discussion and analysis. The concise financial report does not contain all the disclosures required by the Australian Accounting Standards and accordingly, reading the concise financial report is not a substitute for reading the audited financial report.

#### *Members of the Council's Responsibility for the Concise Financial Report*

The members of the council are responsible for the preparation of the concise financial report in accordance with Accounting Standard AASB 1039 *Concise Financial Reports* and the *Corporations Act 2001*, and for such internal control as the councillors determine are necessary to enable the preparation of the concise financial report.

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on the concise financial report based on our procedures which were conducted in accordance with Auditing Standard ASA 810 *Engagements to Report on Summary Financial Statements*. We have conducted an independent audit, in accordance with Australian Auditing Standards, of the financial report of The Institution of Engineers Australia for the year ended 30 June 2012. We expressed an unmodified audit opinion on that financial report in our report dated 17 October 2012. The Australian Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report for the year is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the concise financial report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the concise financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the concise financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

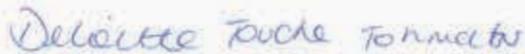
## AUDIT REPORT

Our procedures included testing that the information in the concise financial report is derived from, and is consistent with, the financial report for the year, and examination on a test basis, of audit evidence supporting the amounts, discussion and analysis, and other disclosures which were not directly derived from the financial report for the year. These procedures have been undertaken to form an opinion whether, in all material respects, the concise financial report complies with Accounting Standard AASB 1039 *Concise Financial Reports* and whether the discussion and analysis complies with the requirements laid down in AASB 1039 *Concise Financial Reports*.

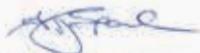
We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion*

In our opinion, the concise financial report, including the discussion and analysis of The Institution of Engineers Australia for the year ended 30 June 2012 complies with Accounting Standard AASB 1039 *Concise Financial Reports*.



DELOITTE TOUCHE TOHMATSU



Alexandra Spark  
Partner  
Chartered Accountants  
Canberra, 17 October 2012

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME for the year ended 30 June 2012

	Consolidated		Engineers Australia	
	2012 \$'000s	2011 \$'000s	2012 \$'000s	2011 \$'000s
<b>Income</b>				
Revenue	45,007	37,767	35,004	29,539
Other Income	3,497	3,444	3,354	3,353
<b>Total Income</b>	<b>48,504</b>	<b>41,211</b>	<b>38,358</b>	<b>32,892</b>
<b>Expenses</b>				
Employee Expenses	17,881	16,736	15,585	14,431
Consultancy Expenses	3,083	2,502	3,087	2,502
Administration, Publication and IT Expenses	8,149	8,641	6,940	7,515
Travel Expenses	2,167	1,860	2,129	1,860
Premises Expenses (Excl Depreciation)	2,017	1,892	1,799	1,666
Finance Costs	–	–	128	98
Provision of Doubtful Debts	33	–	–	–
Depreciation and Amortisation	1,259	1,188	1,184	1,106
Conference / Meeting Expenses	12,589	8,612	7,018	4,516
Other Expenses	459	383	150	84
<b>Total Expenses</b>	<b>47,637</b>	<b>41,814</b>	<b>38,020</b>	<b>33,778</b>
<b>Net surplus (deficit) before income tax expense</b>	<b>867</b>	<b>(603)</b>	<b>338</b>	<b>(886)</b>
Income tax expense	–	–	–	–
<b>Net surplus (deficit) from operations</b>	<b>867</b>	<b>(603)</b>	<b>338</b>	<b>(886)</b>
<b>Other Comprehensive Income</b>				
Profit arising on revaluation of properties	1,948	518	1,948	518
<b>Total Comprehensive income for the year</b>	<b>2,815</b>	<b>(85)</b>	<b>2,286</b>	<b>(368)</b>
Total Comprehensive income attributable to members	2,815	(85)	2,286	(368)

The above Statement of Comprehensive Income should be read in conjunction with the Notes to the financial statements included on pages 117 to 119.

Engineers Australia's (the parent) surplus from operations was \$338,000 (2011: deficit \$886,000). The increase in the parent entity's revenue reflects an increase in membership subscriptions, increase in the number of professional assessments and the income generated from conferences.

The consolidated surplus from operations was \$867,000 (2011: deficit \$603,000). The major contributor of the surplus was Engineering Education Pty Ltd, which made a surplus of \$469,220.

The overall increase in revenue and expenditure reflects the increased level of activity within approved financial plans of the parent and its subsidiaries.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION as at 30 June 2012

	Consolidated		Engineers Australia	
	2012 \$'000s	2011 \$'000s	2012 \$'000s	2011 \$'000s
<b>Current Assets</b>				
Cash and Cash Equivalents	19,479	15,271	16,375	12,891
Other Financial Assets	2,000	10,000	2,000	10,000
Trade and Other Receivables	2,088	2,353	914	1,406
Inventories	73	91	–	–
Prepayments	1,704	1,505	1,397	1,128
<b>Total Current Assets</b>	<b>25,344</b>	<b>29,220</b>	<b>20,686</b>	<b>25,425</b>
<b>Non-Current Assets</b>				
Other Financial Assets	–	–	804	804
Property, Plant, Equipment and Intangible Assets	37,128	32,222	36,934	31,982
<b>Total Non-Current Assets</b>	<b>37,128</b>	<b>32,222</b>	<b>37,738</b>	<b>32,786</b>
<b>Total Assets</b>	<b>62,472</b>	<b>61,442</b>	<b>58,424</b>	<b>58,211</b>
<b>Current Liabilities</b>				
Trade and Other Payables	6,050	5,840	3,764	3,908
Borrowings	–	–	2,354	2,277
Provisions	2,763	2,288	2,371	2,139
Other	16,978	19,279	16,965	19,267
<b>Total Current Liabilities</b>	<b>25,791</b>	<b>27,407</b>	<b>25,454</b>	<b>27,591</b>
<b>Non-Current Liabilities</b>				
Provisions	381	550	335	271
<b>Total Non-Current Liabilities</b>	<b>381</b>	<b>550</b>	<b>335</b>	<b>271</b>
<b>Total Liabilities</b>	<b>26,172</b>	<b>27,957</b>	<b>25,789</b>	<b>27,862</b>
<b>Net Assets</b>	<b>36,300</b>	<b>33,485</b>	<b>32,635</b>	<b>30,349</b>
<b>Members' Funds</b>				
Reserves	20,823	18,543	20,977	18,697
Retained Earnings	15,477	14,942	11,658	11,652
	36,300	33,485	32,635	30,349
<b>Equity attributable to members</b>	<b>36,300</b>	<b>33,485</b>	<b>32,635</b>	<b>30,349</b>
<b>Total Members' Funds</b>	<b>36,300</b>	<b>33,485</b>	<b>32,635</b>	<b>30,349</b>

The above Statement of Financial Position should be read in conjunction with the Notes to the financial statements included on pages 117 to 119.

Engineers Australia's (the parent) Cash and Cash Equivalents increased by \$3,484,000 due to funds transferred from term deposits.

Other Financial Assets are bank Term Deposits that have a maturity date greater than 3 months from balance date.

The consolidated Property, Plant, Equipment and Intangible Assets increased by \$4,906,000 mainly due to \$3,777,000 spent on the MIS project and \$1,575,000 increase in the land and buildings valuation (the valuation of the property located at 21 Bedford Street Melbourne increased by \$2,400,000).

Other Current Liabilities consist mainly of prepaid membership subscriptions for the 2012-13 financial year.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY for the year ended 30 June 2012

**Consolidated**

	Retained Earnings \$'000s	Asset Revaluation Reserve \$'000s	Major Capital Reserve \$'000s	Minor Capital Reserve \$'000s	Central Building Fund \$'000s	Technical Initiatives Fund \$'000s	Attributable to owners	Total \$'000s
<b>Balance 1 July 2010</b>	<b>12,132</b>	<b>16,490</b>	<b>1,996</b>	<b>1,054</b>	<b>283</b>	<b>1,630</b>	<b>33,585</b>	<b>33,585</b>
(Deficit) attributable to members	(603)	-	-	-	-	-	(603)	(603)
Other comprehensive income for the year								
Gain on revaluation of property	-	518	-	-	-	-	518	518
Total comprehensive income for the year	(603)	518	-	-	-	-	(85)	(85)
Net transfer to retained earnings	3,413	-	(1,996)	(1,054)	(283)	(80)	-	-
Other – payments made from Technical Initiatives Fund	-	-	-	-	-	(15)	(15)	(15)
<b>Balance 30 June 2011</b>	<b>14,942</b>	<b>17,008</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,535</b>	<b>33,485</b>	<b>33,485</b>
Profit attributable to members	867	-	-	-	-	-	867	867
Other comprehensive income for the year								
Gain on revaluation of property	-	1,948	-	-	-	-	1,948	1,948
Total comprehensive income for the year	867	1,948	-	-	-	-	2,815	2,815
Net transfer from retained earnings	(332)	-	-	-	-	332	-	-
<b>Balance 30 June 2012</b>	<b>15,477</b>	<b>18,956</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,867</b>	<b>36,300</b>	<b>36,300</b>

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY for the year ended 30 June 2012

	Retained Earnings \$'000s	Asset Revaluation Reserve \$'000s	Major Capital Reserve \$'000s	Minor Capital Reserve \$'000s	Central Building Fund \$'000s	Technical Initiatives Fund \$'000s	Attributable to owners	Total \$'000s
<b>Engineers Australia</b>								
<b>Balance 1 July 2010</b>	<b>9,125</b>	<b>16,644</b>	<b>1,996</b>	<b>1,054</b>	<b>283</b>	<b>1,630</b>	<b>30,732</b>	<b>30,732</b>
(Deficit) attributable to members of parent entity	(886)	-	-	-	-	-	(886)	(886)
Other comprehensive income								
Gain on revaluation of property	-	518	-	-	-	-	518	518
Total comprehensive income	(886)	518	-	-	-	-	(368)	(368)
Net transfer from retained earnings	3,413	-	(1,996)	(1,054)	(283)	(80)	-	-
Other	-	-	-	-	-	(15)	(15)	(15)
<b>Balance 30 June 2011</b>	<b>11,652</b>	<b>17,162</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,535</b>	<b>30,349</b>	<b>30,349</b>
Profit attributable to members of parent entity	338	-	-	-	-	-	338	338
Other comprehensive income								
Gain on revaluation of property	-	1,948	-	-	-	-	1,948	1,948
Total comprehensive income	338	1,948	-	-	-	-	2,286	2,286
Net transfer from retained earnings	(332)	-	-	-	-	332	-	-
<b>Balance 30 June 2012</b>	<b>11,658</b>	<b>19,110</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,867</b>	<b>32,635</b>	<b>32,635</b>

The above Statement of Changes in Equity should be read in conjunction with the Notes to the financial statements included on pages 117 to 119.

## CONSOLIDATED STATEMENT OF CASH FLOWS for the year ended 30 June 2012

	Consolidated		Engineers Australia	
	2012	2011	2012	2011
	\$'000s	\$'000s	\$'000s	\$'000s
<b>Cash Flows from Operating Activities</b>				
Payments to Employees, Suppliers and Others	(42,647)	(39,411)	(33,463)	(30,837)
Receipts from Members, Customers and Others	42,216	40,934	32,580	32,940
<b>Net Cash (Used in)/Generated by Operating Activities</b>	<b>(431)</b>	<b>1,523</b>	<b>(883)</b>	<b>2,103</b>
<b>Cash Flows from Investing Activities</b>				
Interest Received	857	796	705	672
Purchase of Investments	–	(1,000)	–	(1,000)
Proceeds from Maturity of Investments	8,000	–	8,000	–
Purchase of Property, Plant, Equipment & Intangible Assets	(4,218)	(1,544)	(4,188)	(1,505)
Proceeds from Sale of Property, Plant and Equipment	–	–	–	–
<b>Net Cash (Used In)/Generated by Investing Activities</b>	<b>4,639</b>	<b>(1,748)</b>	<b>4,517</b>	<b>(1,833)</b>
<b>Cash Flows from Financing Activities</b>				
Repayment of Borrowings	–	–	(150)	–
<b>Net Cash (Used in)/Generated by Financing Activities</b>	<b>–</b>	<b>–</b>	<b>(150)</b>	<b>–</b>
Net (Decrease)/Increase in Cash and Cash Equivalents	4,208	(225)	3,484	270
Cash and Cash Equivalents at Beginning of Financial Year	15,271	15,496	12,891	12,621
<b>Cash and Cash Equivalents at End of Financial Year</b>	<b>19,479</b>	<b>15,271</b>	<b>16,375</b>	<b>12,891</b>

The above cash flow statement should be read in conjunction with the Notes to the financial statements included on pages 117 to 119. Cash Flows from Investing Activities include proceeds from maturity of investments of \$8,000,000 which represents a decrease in Bank Term Deposits with a maturity date greater than 3 months from balance date. The funds were transferred to cash and mainly used to fund spending on the MIS project.

## NOTES TO THE CONCISE FINANCIAL STATEMENTS for the year ended 30 June 2012

### 1. Basis of preparation of concise financial report

The concise financial report has been prepared in accordance with Accounting Standard AASB 1039 'Concise Financial Reports'. The concise financial report, including the financial statements and specific disclosures included in the concise financial report, has been derived from the Engineers Australia group's full financial report for the financial year.

All amounts are presented in Australian dollars.

A full description of accounting policies adopted by the group may be found in the group's full financial report. These accounting policies have been consistently applied by each entity in the group and, except where there is a change in accounting policy, are consistent with those of the previous year.

### 2. Technical Societies

The financial results of the Technical Societies are not consolidated into the accounts of Engineers Australia. Revenue for Technical Societies is received by Engineers Australia and distributed directly to the Technical Societies. Any undistributed Technical Society revenue at balance date is included as Sundry Creditors in the Balance Sheet.

The financial results of the Technical Societies are disclosed in the Technical Societies own audited financial statements.

### 3. Conference Revenue

Conference revenue and expenditure is recognised after the conference has occurred.

In 2011 the conference income was recognised on a net basis for conferences which were managed by an external PCO.

In these financial statements the comparatives have been amended to reflect the change in accounting policy as indicated above. This change in comparatives is not material and has no impact on the net result presented in the prior period.

### 4. Technical Initiative Funds

Technical Initiative Funds (TIF) represent surpluses from specific events or initiatives which are attributed to the efforts of groups within Engineers Australia. These funds are treated as reserves on the balance sheet awaiting future use. These funds can be used by these groups to undertake activities consistent with their purpose and are subject to utilisation within the ordinary budgetary processes of Engineers Australia.

### 5. Events after Balance Sheet Date

On 6 July 2012, Engineering Education Australia Pty Ltd (a subsidiary of Engineers Australia) entered into a Share Sale Agreement to purchase the shares of The Moreland Group Pty Ltd. This sale was finalised on 3 August 2012 and has resulted in the acquisition of the assets and liabilities of the company.

Other than the above, there has not been any matter or circumstance occurring subsequent to the end of the financial year that has significantly affected, or may significantly affect, the operations of the company, the results of those operations, or the state of affairs of the company in future financial years.

### 6. Adoption of new and revised Accounting Standards

- a) The following new and revised Standards and Interpretations have been adopted in the current period and have affected the amounts reported in these financial statements. Details of other Standards and Interpretations adopted in these financial statements but that have had no effect on the amounts reported are set out in Note 6b.

#### *Standards affecting presentation and disclosure*

Amendments to AASB 7 'Financial Instruments: Disclosure'	The amendments (part of AASB 2010-4 'Further Amendments to Australian Accounting Standards arising from the Annual Improvements Project') clarify the required level of disclosures about credit risk and collateral held and provide relief from disclosures previously required regarding renegotiated loans.
Amendments to AASB 101 'Presentation of Financial Statements'	The amendments (part of AASB 2010-4 'Further Amendments to Australian Accounting Standards arising from the Annual Improvements Project') clarify that an entity may choose to present the required analysis of items of other comprehensive income either in the statement of changes in equity or in the notes to the financial statements.

NOTES TO THE CONCISE FINANCIAL STATEMENTS for the year ended 30 June 2012

**b) Standards and Interpretations in issue not yet adopted**

At the date of authorisation of financial statements, the Standards and Interpretation listed below were in issue but not yet effective.

Standard/Interpretation	Expected to be initially applied in the financial year ending
AASB 2009-11 'Amendments to Australian Accounting Standards arising from AASB 9'	30 June 2014
AASB 2010-2: Amendments to Australian Accounting Standards arising from Reduced Disclosure Requirements [AASB 1, 2, 3, 5, 7, 8, 101, 102, 107, 108, 110, 111, 112, 116, 117, 119, 121, 123, 124, 127, 128, 131, 133, 134, 136, 137, 138, 140, 141, 1050 & 1052 and AASB 2010-6: Amendments to Australian Accounting Standards – Disclosures on Transfers of Financial Assets] [AASB 1 & AASB 7]	30 June 2014
AASB 2010-7 Amendments to Australian Accounting Standards arising from AASB 9 (December 2010) [AASB 1, 3, 4, 5, 7, 101, 102, 108, 112, 118, 120, 121, 127, 128, 131, 132, 136, 137, 139, 1023 & 1038 and Interpretations 2, 5, 10, 12, 19 & 127]	30 June 2014
AASB 2011-4 Amendments to Australian Accounting Standards to Remove Individual Key Management Personnel Disclosure Requirements [AASB 124]	30 June 2014
AASB 2011-6 Amendments to Australian Accounting Standards – Extending Relief from Consolidation, the Equity Method and Proportionate Consolidation – Reduced Disclosure Requirements [AASB 127, AASB 128 & AASB 131]	30 June 2014
AASB 2011-7 Amendments to Australian Accounting Standards arising from the Consolidation and Joint Arrangements Standards [AASB 1, 2, 3, 5, 7, 9, 2009-11, 101, 107, 112, 118, 121, 124, 132, 133, 136, 138, 139, 1023 & 1038 and Interpretations 5, 9, 16 & 17]	
AASB 2011-8 Amendments to Australian Accounting Standards arising from AASB 13 [AASB 1, 2, 3, 4, 5, 7, 9, 2009-11, 2010-7, 101, 102, 108, 110, 116, 117, 118, 119, 120, 121, 128, 131, 132, 133, 134, 136, 138, 139, 140, 141, 1004, 1023 & 1038 and Interpretations 2, 4, 12, 13, 14, 17, 19, 131 & 132]	30 June 2014
AASB 2011-9 Amendments to Australian Accounting Standards – Presentation of Items of Other Comprehensive Income [AASB 1, 5, 7, 101, 112, 120, 121, 132, 133, 134, 1039 & 1049]	30 June 2013
AASB 2011-10 Amendments to Australian Accounting Standards arising from AASB 119 (September 2011) [AASB 1, AASB 8, AASB 101, AASB 124, AASB 134, AASB 1049 & AASB 2011-8 and Interpretation 14]	30 June 2014
AASB 2011-11 Amendments to AASB 119 (September 2011) arising from Reduced Disclosure Requirements	30 June 2014
AASB 2011-12 Amendments to Australian Accounting Standards arising from Interpretation 20 [AASB 1]	30 June 2014
AASB 2012-1 Amendments to Australian Accounting Standards – Fair Value Measurement – Reduced Disclosure Requirements [AASB 3, AASB 7, AASB 13, AASB 140 & AASB 141]	30 June 2014
AASB 2012-2 Amendments to Australian Accounting Standards – Disclosures – Offsetting Financial Assets and Financial Liabilities [AASB 7 & AASB 132]	30 June 2014
AASB 2012-3 Amendments to Australian Accounting Standards – Offsetting Financial Assets and Financial Liabilities [AASB 132]	30 June 2015
AASB 2012-5 Amendments to Australian Accounting Standards arising from Annual Improvements 2009–2011 Cycle [AASB 1, AASB 101, AASB 116, AASB 132 & AASB 134 and Interpretation 2]	30 June 2014

**7. Dividends**

The payment of dividends is not permitted under the Royal Charter of Engineers Australia. Accordingly no dividend was paid or provided for during the financial year.

**8. Segment Reporting**

Engineers Australia is a member based national professional body of engineers.

Engineers Australia operates predominately in one geographical segment, namely Australia, however groups of overseas members meet in various parts of the world.

NOTES TO THE CONCISE FINANCIAL STATEMENTS for the year ended 30 June 2012

**9. Revenue**

	Consolidated		Engineers Australia	
	2012 \$'000s	2011 \$'000s	2012 \$'000s	2011 \$'000s
<b>Revenue and Income</b>				
<b>Revenue</b>				
Membership Subscriptions	19,943	18,966	19,943	18,966
Revenue from Courses Provided	7,566	5,652	–	–
Revenue from Publishing	2,544	2,663	–	–
Migration Skills Assessment	3,053	2,904	3,067	2,904
Assessment Fees Other	3,227	2,429	3,227	2,429
Events Income	5,600	2,956	5,612	2,959
Sponsorship	2,436	1,646	2,443	1,655
Commission Income	606	530	606	530
Management Fee	32	21	106	96
<b>Total Revenue</b>	<b>45,007</b>	<b>37,767</b>	<b>35,004</b>	<b>29,539</b>
<b>Income</b>				
Other Income				
– Costs Recovered	1,244	1,244	1,272	1,269
– Rent Received	814	887	876	951
– Sales	158	201	160	202
– Interest Income (external)	857	796	705	672
– Other Income	424	316	341	259
<b>Total Other Income</b>	<b>3,497</b>	<b>3,444</b>	<b>3,354</b>	<b>3,353</b>
<b>Total Revenue and Income</b>	<b>48,504</b>	<b>41,211</b>	<b>38,358</b>	<b>32,892</b>

**10. Building Revaluation**

In accordance with Engineers Australia policy, the land and buildings were revalued by independent professional valuers to determine the fair value of the land and buildings.

Land and buildings are situated throughout Australia and each valuation is performed by a different valuer. The valuation was determined on the basis of market value for existing use on 30 June 2012.

Land & Buildings @ Valuation by Location	Consolidated		Engineers Australia	
	2012 \$'000s	2011 \$'000s	2012 \$'000s	2011 \$'000s
National Office Canberra	8,449	9,249	8,449	9,249
Sydney	2,570	2,540	2,570	2,540
Melbourne	8,500	6,100	8,500	6,100
Newcastle	950	930	950	930
Adelaide	1,550	1,530	1,550	1,530
Brisbane	3,000	3,000	3,000	3,000
Perth	5,800	5,800	5,800	5,800
	<b>30,819</b>	<b>29,149</b>	<b>30,819</b>	<b>29,149</b>





ENGINEERS  
AUSTRALIA

# INDEX

Acronyms and Abbreviations  
Global Reporting Initiative

## ACRONYMS AND ABBREVIATIONS

AEEE	- Australasian Association for Engineering Education
ABSDO	- Accreditation Board for Standards Development Organisations
ACAA	- Australian Construction Achievement Awards
ACAM	- Australasian Congress on Applied Mechanics
ACECC	- Asian Civil Engineering Coordinating Council
ACED	- Australian Council of Engineering Deans
ACES	- Australian Cost Engineering Society
ACIF	- Australian Construction Industry Forum
ACPSEM	- Australasian College of Physical Scientists and Engineers in Medicine
ACS	- Australian Computer Society
ACRS	- Australasian College of Road Safety
ACSS	- Australian Composite Structures Society
AEES	- Australian Earthquake Engineering Society
AFEO	- ASEAN Federation of Engineering Organisations
AFMBE	- Australian Federation For Medical and Biological Engineering
AFTES	- Australasian Fluids and Thermal Engineering Society
AGS	- Australian Geomechanics Society
AINDT	- Australian Institute for Non-Destructive Testing
AJCE	- Australian Journal of Civil Engineering
AJSE	- Australian Journal of Structural Engineering
AJEEE	- Australian Journal of Electrical and Electronic Engineering
AJWR	- Australian Journal of Water Resources
ALTC	- Australian Learning and Teaching Council
ANET	- Australian National Engineering Taskforce
ANZFChE	- Australian and New Zealand Federation of Chemical Engineers
APCCChE	- Asia Pacific Confederation of Chemical Engineers
APEC	- Asia-Pacific Economic Cooperation
APESMA	- Association of Professional Engineers, Scientists and Managers, Australia
APSEC	- Asia-Pacific Software Engineering Conference
APTS	- Australasian Particle Technology Society
ARATA	- Australian Rehabilitation and Assistive Technology Association
ASBSH	- Australian Society for Bulk Solids Handling
ASCE	- American Society of Civil Engineers
ASDE	- Australian Society for Defence Engineering
ASEC	- Australasian Structural Engineering Conference
ASI	- Australian Steel Institute
ASME	- American Society of Mechanical Engineers
ASWEC	- Australian Software Engineering Conference
ATS	- Australasian Tunnelling Society
ATSE	- Academy of Technological Sciences and Engineering
AWA	- Australian Water Association
CECAR5	- Civil Engineering Conference in the Asian Region
CELM	- Centre for Engineering Leadership and Management
CIA	- Concrete Institute of Australia
CIBSE	- Chartered Institution of Building Services Engineers
CIGR	- Commission Internationale du Genie Rural (International Commission of Agricultural and Biosystems Engineering)
CPD	- continuing professional development
DCCEE	- Department of Climate Change and Energy Efficiency
DIIRD	- Department of Innovation, Industry and Regional Development
EEA	- Engineering Education Australia
EESA	- Electric Energy Society of Australia
EMBC	- Engineering in Medicine and Biology Conference
EMCSA	- Electromagnetic Compatibility Society of Australia
EngExec	- Engineering Executive
EPAC	- Engineering Practice Advisory Committee
EPSM-ABEC	- Engineering and Physical Sciences in Medicine and the Australian Biomedical Engineering Conference
ESTPSS	- Engineering Science and Technology Professional Standards Society
EUR-ACE	- European Accreditation of Engineering Programmes
FEIAP	- Federation of Engineering Institutions of Asia and the Pacific
GRI	- Global Reporting Initiative
IABSE	- International Association for Bridge and Structural Engineering
IAEG	- International Association for Engineering Geology and the Environment
IAHR	- International association for Hydro-Environment Engineering and Research
IChemE	- Institution of Chemical Engineers
ICOMES	- International Congress of Mechanical Engineering Societies
ICT	- Information and Communications Technology
ICWES	- International Conference for Women Engineers and Scientists

## ACRONYMS AND ABBREVIATIONS

IEA	- International Engineering Alliance
IEAust	- Institution of Engineers Australia (Engineers Australia)
IEEE	- Institute of Electrical and Electronics Engineers
IEPNG	- Institution of Engineers Papua New Guinea
IES	- Industrial Engineering Society
IET	- The Institution of Engineering and Technology
IFAC	- International Federation Of Automatic Control
IFMBE	- International Federation for Medical and Biological Engineering
IMechE	- Institution of Mechanical Engineers
INCOSE	- International Council on Systems Engineering
IntPE (Aus)	- International Register of Professional Engineers (Australia)
IPENZ	- Institution of Professional Engineers New Zealand
IPWEA	- Institute of Public Works Engineering Australia
IREE	- International Review of Electrical Engineering (journal)
ISRM	- International Society for Rock Mechanics
IStructE	- Institution of Structural Engineers
ITEE	- Information, Telecommunications and Electronics Engineering
JMEA	- Australian Journal of Mechanical Engineering
JPT	- Journal of Petroleum Technology
MEMMES	- Mining Electrical and Mining Mechanical Engineering Society
MSA	- Migration Skills Assessment
MSTS	- Mine Subsidence Technological Society
NCACI	- National Committee on Automation, Control and Instrumentation
NCAM	- National Committee on Applied Mechanics
NCCE	- National Committee on Construction Engineering
NCCOE	- National Committee on Coastal and Ocean Engineering
NCED	- National Committee on Engineering Design
NCF&E	- National Committee on Fuels and Energy
NCO&G	- National Committee for Oil and Gas
NCRE	- National Committee on Rehabilitation Engineering
NCSpE	- National Committee on Space Engineering
NCSWE	- National Committee on Software Engineering
NCTE	- National Committee on Transport Engineering
NCWE	- National Committee on Water Engineering
NERB	- National Engineering Registration Board
NICTA	- National Information and Communications Technology Australia
NP-ADRC	- National Panel on Aid to Developing and Recovering Countries
NPBII	- National Panel on Biomechanics of Impact Injury
NPCE	- National Panel on Clinical Engineering
NPER	- National Professional Engineers Register
NPNE	- National Panel on Nano-engineering
NVP	- National Vice President
PIANC	- The World Association for Waterborne Transport Infrastructure
PDP	- Professional Development Program
PFP	- Parliamentary Fellows Program – SA
RAeS	- Royal Aeronautical Society
Red R	- Registered Engineers for Disaster Relief
RES	- Risk Engineering Society
RINA	- Royal Institution of Naval Architects
RMIT	- Royal Melbourne Institute of Technology
RPEQ	- Registered Professional Engineers of Queensland
RTSA	- Railway Technical Society of Australasia
SA	- Standards Australia
SBSE	- Society of Building Services Engineering
SEA-JTP	- Software Engineering and Architecture – Joint Technical Program
SEAg	- Society for Engineering in Agriculture
SESA	- Systems Engineering Society of Australia
SFPE	- Society of Fire Protection Engineers
SFS	- Society of Fire Safety
SMART	- science, maths and real technology
SMBE	- Society for Medical and Biological Engineering
SPE	- Society of Petroleum Engineers
SSEE	- Society for Sustainability and Environmental Engineering
TEA	- Transport Engineering in Australia Journal
VSSEC	- Victorian Space Science Education Centre
WFEO	- World Federation of Engineering Organisations

## GLOBAL REPORTING INITIATIVE

The Global Reporting Initiative (GRI) was established in 1997 to provide a trusted and credible common international framework for organisations of any size to use in reporting to their stakeholders on the sustainability of their activities. In addition to each organisation’s own operational performance measures, the GRI Sustainability Guidelines provide a wide range of economic, social, and environmental indicators.

The Guidelines were completely reissued in 2006 (known as ‘G3’). In March 2011, the Guidelines were updated to G3.1 to now include expanded guidance for reporting on Human Rights, Local Community Impacts, and Gender. New sector guidance continues to be developed and issued, with none of the five new sector guides to operate from December 2012 considered relevant to Engineers Australia.

Engineers Australia is a small-to-medium office-based organisation, so only a small number of the indicators in GRI are materially relevant to our operations. Five of the 30 G3 environmental performance indicators are considered relevant; the remaining 25 are not reported. Two of the nine economic indicators are currently considered materially relevant, and 14 of the 40 social indicators.

For space purposes, the G3 content index templates for ‘Standard Disclosures’ have not been used in full, rather they have been simplified and condensed for the purpose of reporting on the indicators considered relevant. GRI Part II Disclosures on Management Approach are not included.

### Reviewing our approach to GRI-based reporting

Even though we strive to adhere to the spirit of the GRI Guidelines, producing annual reports in full compliance with the guidelines, including external assurance, has so far been considered beyond our resources to implement.

### GRI Application Level

For this year’s report, we again adopt a self-declared Application Level of C:

### Report Application Levels

Report Application Level	C	C+	B	B+	A	A+
G3 Profile Disclosures	Report on: 1.1 2.1-2.10 3.1-1.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Same as requirement for Level B.			
G3 Management Approach Disclosures	Not Required	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured	Management Approach Disclosures for each Indicator Category	Report Externally Assured
G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one from each of Economic, Social and Environmental.	Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human rights, Labor, Society, Product Responsibility.	Report on each core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either a) reporting on the Indicator or b) explaining the reason for its omission.			

\*Sector supplement in final version

GLOBAL REPORTING INITIATIVE

PROFILE DISCLOSURES

Profile Disclosure	Reported	Comment/Explanation	
<b>1</b>	<b>Strategy and Analysis</b>		
1.1	Sustainability statement	Page 39	Corporate Responsibility and Sustainability statement
1.2	Key impacts, risks and opportunities		Predominantly by contribution to national public policy debate
<b>2</b>	<b>Organisational Profile</b>		Disclosures 2.1-2.10 covered under "Our Governance" at pages 27-39
<b>3</b>	<b>Report Parameters</b>		
3.1	Reporting period	Page 4	
3.2	Previous report	Page 4	
3.3	Reporting cycle	Page 4	
3.4	Contact point	Page 4	
3.5	Process for defining report content	Communication Objectives, page 4	Derived from corporate performance management framework
3.6	Boundary – entities represented	Complete	Covers staff and pro bono contribution of members; includes summary reports for subsidiaries
3.7	Limitations on scope or boundary	Largely complete	GRI environmental indicators fully reviewed. Economic and social indicators remain to be formally assessed.
3.8	Changes affecting reporting comparability	Under 'Our Results'	Operational performance reported under 6 'Strategic Domains', marking the shift to a new Strategic Plan format after 2009-1010.
3.9	Data measurement techniques	Not covered	Commonwealth Greenhouse Challenge Plus tools used to compile environmental impact of energy usage.
3.10	Re-statements from earlier reports	Not material	
3.11	Changes from previous reporting methods	Nil	
3.12	GRI content index	Pages 125-126	
3.13	External assurance	Financial reports only	Non-financial measures are derived from internal data sources, only some of which are subject to occasional internal audit.
<b>4</b>	<b>Governance, Commitments and Engagement</b>		
4.1	Governance structure	Page 28	
4.2	National President	Honorary elected role	Non-executive
4.3	Unitary board	No	See "Structure" at page 28
4.4	Access to Congress and Council for members and staff	Partial	Members have access to Congress delegates and other avenues to raise issues or motions. Staff do not have direct formal access other than through the CEO.
4.5	Remuneration linked to corporate performance	No	Councillors (voluntary office bearers) have determined performance-linked remuneration for non-executive staff is no longer relevant
4.6	Conflicts of interest	Yes	Covered in respective Codes of Practice and Conduct – terms available to members
4.7	Qualifications for Council	Elected under By-laws	Newly-elected Councillors given induction on their roles
4.8	Mission, values and principles	Strategic Plan	See also at page 36
4.9	Oversight of performance	Regular	Managers produce quarterly performance reports on their key goals; little corporate-level monitoring of sustainability associated with operations
4.10	Self-evaluation by Council	Annually	Focus varies each year
4.11	Precautionary approach	Yes	Incorporated in Sustainability Charter – page 39 refers; also website
4.12	Commitment to external charters	Yes	As for 4.11; also Taipei Declaration on Sustainable Development, June 2007
4.13	Membership of other associations	Multiple	See for example report on Strategic Domain 3
4.14	Stakeholder groups engaged	At page 37	
4.15	Selecting stakeholders to engage	Strategic planning	Stakeholder analysis was part of the process for new Strategic Plan 2010-2015; also periodic national and local member surveys, and periodic planning by various constituent groups of Engineers Australia.
4.16	Approaches to stakeholder engagement	Periodic	New CEO has embarked on a direct engagement strategy with key stakeholders derived as per 4.14 and 4.15 above.
4.17	Key stakeholder issues	Partial	As for 4.15 above; many products and services available to members online; corporate performance reporting and Annual Reports

GLOBAL REPORTING INITIATIVE

GRI PERFORMANCE INDICATORS CONSIDERED RELEVANT FOR REPORTING PURPOSES

Indicator	Reported	Comment/Explanation	
<b>Economic</b>			
EC1	Economic value generated and distributed	Annual Report	Key financial results at page 8; also audited Concise Financial Report
EC8	Spending or services provided for public benefit	Multiple services	Pro bono or in-kind services apply to most of our activities
<b>Environmental</b>			
EN1	Materials used by weight or volume	Partial	Some reporting on internal paper usage at SD6
EN2	Percentage of materials used that are recycled input materials	No	Not measured
EN3	Direct energy consumption by primary energy source	Yes	Report at SD6; some use of zero emission options in local offices
EN5	Energy saved due to conservation and efficiency improvements	No	Building efficiencies (eg sensor lighting, hot water, upgraded air conditioning systems) not yet measured.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved (business travel)	Partial	Carbon emissions from air travel are fully abated.
<b>Social</b>			
PR5	Customer satisfaction	Strategic Domain 4	Periodic national and local member surveys; plus ongoing member engagement through CPD events
PR8	Incidence of breaches of customer privacy	Strategic Domain 4	No material incidents to report
LA1	Breakdown of workforce	Strategic Domain 6	
LA2	Employee turnover	Strategic Domain 6	Quantitative measures not used
LA3	Benefit differences for full or part-time staff	Nil	Available on pro-rata basis
LA6	Workforce representation on OHS committees	Yes	
LA7	Rates of injury, lost days, absenteeism	Not reported	
LA10	Hours of training per year per employee	Not reported	
LA11	Employee development and transition programs	Yes	See "Staffing and Workplace Practices" at page 38
LA12	Regular performance and development reviews	Not reported	
LA13	Composition of workforce and governing bodies	Partial	Staff breakdown at Strategic Domain 6; governing bodies elected from membership – breakdown not reported
LA14	Comparison of male to female salary bands	No difference	
SO5	Participation in public policy development	Strategic Domains 2 and 3	Major organisational purpose on behalf of the engineering profession
SO6	Contributions of a political nature	Nil	

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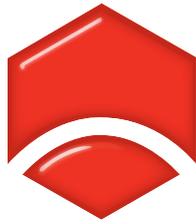
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