

Our Vision

Uplifting prospects
for New Zealanders
through engineering

Annual Review 2013

Our Mission

Advance the
profession of
engineering

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This is how we
progressed this year...

About us

As at 30 September, IPENZ Membership stood at 14,936. The fields of engineering our Members are practising in are expanding and our Members are to be found all over the globe, thanks to our internationally accepted educational, professional and ethical standards.

936



The Organisation

IPENZ is the professional body for engineers in New Zealand. The Institution operates a wide range of activities and services for engineers and the general public.

The Institution of Professional Engineers New Zealand Incorporated (IPENZ) is the professional body for professional engineers, engineering technologists and engineering technicians from all engineering disciplines in New Zealand.

It is also the Registration Authority under the Chartered Professional Engineers of New Zealand Act 2002.

In its role as a professional body, IPENZ provides a range of services and support for its nearly 15,000 Members and works to enhance the engineering profession. As the Registration Authority, it is responsible for maintaining the register of Chartered Professional Engineers, including assessing candidates and disciplining those registrants who have failed to meet their obligations under the Act.

IPENZ activities and services include:

Enforcing standards

Enforcing the standards of professional competence for the engineering profession, and ethical behaviour for its Members and ensuring the level is met

International alignment

Working to align New Zealand engineering with international best practice

Professional competence

Recognizing professional competence via competence-based IPENZ Membership classes and registration

Accreditation

Acting as the accreditation body for engineering degrees and diplomas in New Zealand

The voice

Providing a voice to bring an engineering perspective to inform public policy development and explain engineering to the public

Professional development

Providing a continued professional development programme, and support to employers

Practice support

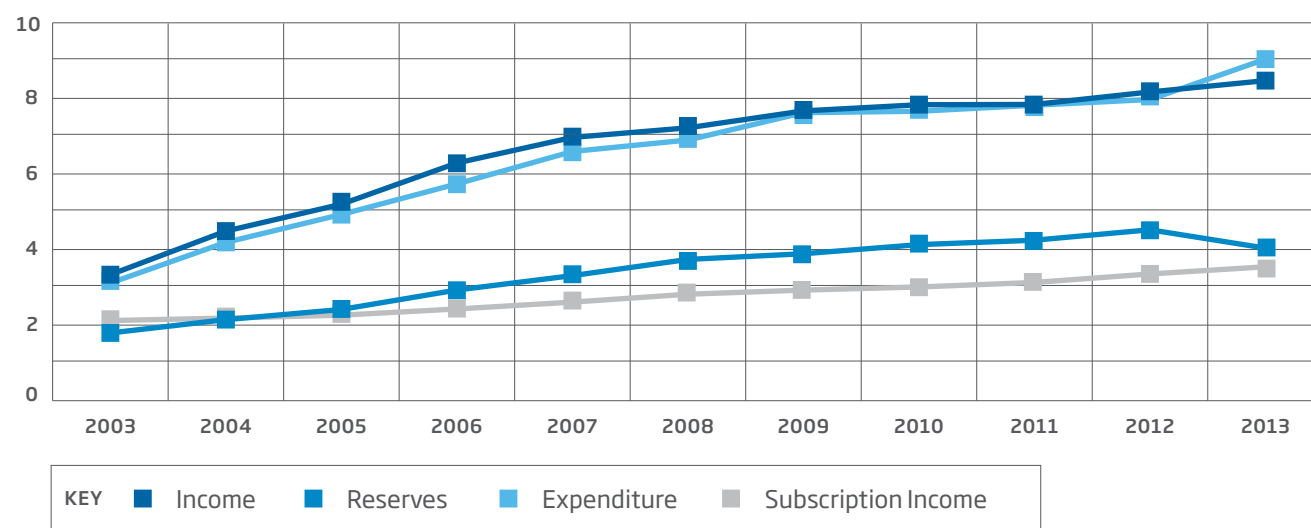
Supporting practising engineers through the development of guidance information

Promoting the profession

Working to attract young people to the engineering profession

More information about how IPENZ undertakes these activities and services is provided in the following sections of the report.

Financial Performance (Millions)



2013 at a Glance

Enforcing standards

89

COMPLAINTS RECEIVED
OR IN PROGRESS

International alignment

Washington,
Sydney and
Dublin Accords

SIGNATORY STATUS

Professional competence

6,379

COMPETENCE-GRADED
MEMBERS

Accreditation

14

ACCREDITED PROVIDERS

**Our
activities
and
services**

The voice

17

SUBMISSIONS ON PUBLIC
POLICY ISSUES

Promoting the profession

2,598

FUTUREINTECH AMBASSADOR
VISITS TO PRIMARY AND
SECONDARY SCHOOLS

Practice support

5

PRACTICE NOTES
PUBLISHED OR UPDATED

Professional development

41

PROFESSIONAL DEVELOPMENT
PARTNERS

Our Membership

IPENZ Membership provides a range of benefits. Membership demonstrates each individual's commitment to professional values and support for the engineering profession.

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Our Members include engineering students, practising engineers and people with an association or involvement with the profession. IPENZ offers a range of Membership classes that provide enhanced professional standing for engineers at differing career stages. There are also Membership classes for non-engineers who engage with or contribute to the engineering profession in different ways.

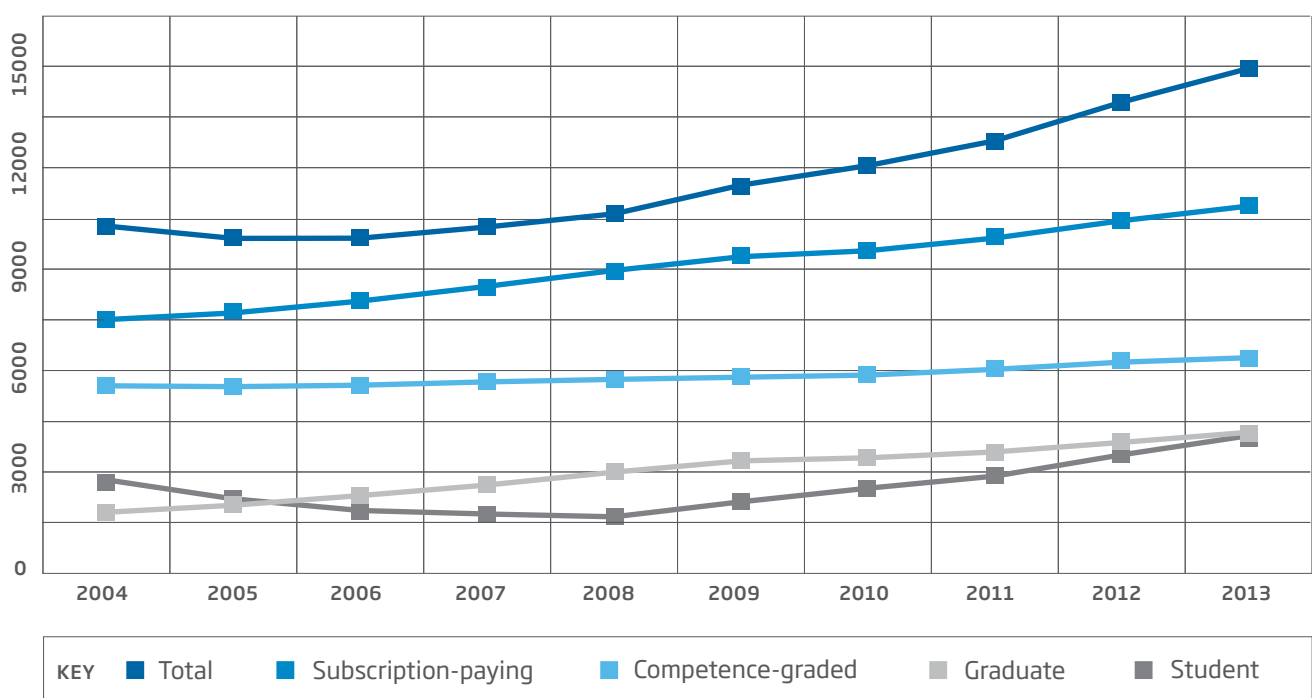
The advantages of joining IPENZ include international recognition

of qualifications, assistance with gaining and developing competence, and independent verification of competence to practise as engineering professionals. IPENZ Members also have access to a range of carefully selected professional development opportunities, including courses, webinars, presentations and site visits, as well as access to engineering knowledge. In addition, Members are encouraged to contribute to the profession and society in general through personal

involvement in setting professional standards, public policy, engineering practice, Branch and technical group programmes.

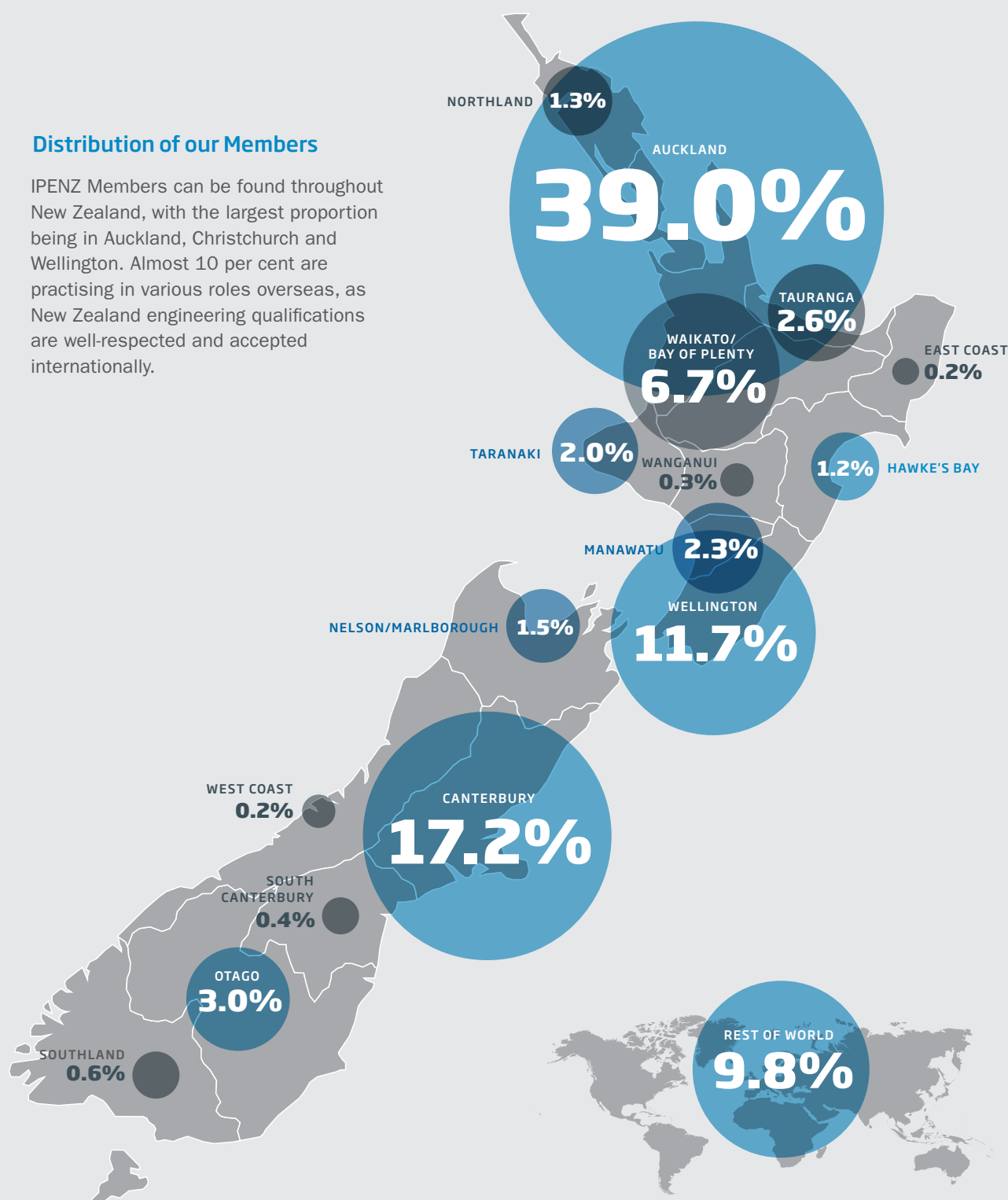
Further opportunities are provided for Members to connect and network with other engineering professionals, and to undertake personal development through positions on committees and boards.

Membership trends



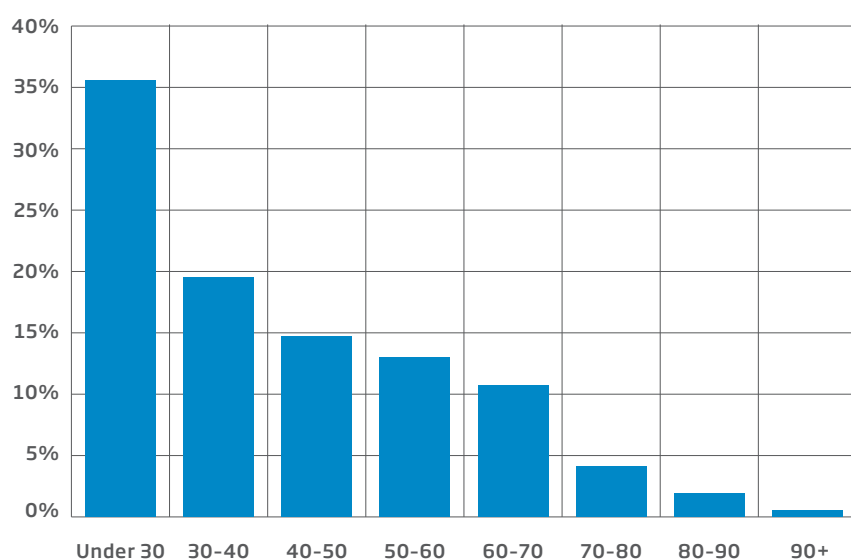
Distribution of our Members

IPENZ Members can be found throughout New Zealand, with the largest proportion being in Auckland, Christchurch and Wellington. Almost 10 per cent are practising in various roles overseas, as New Zealand engineering qualifications are well-respected and accepted internationally.

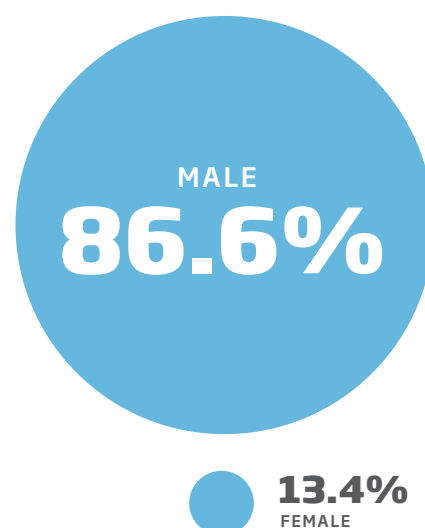


*This year the Membership roll was tantalizingly close to **15,000** – including about **4,000** Student Members and **11,000** in higher Membership classes*

Age Breakdown



Gender Breakdown



Membership Trends

Membership Class	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Distinguished Fellows	31	33	36	41	42	44	46	48	50	54
Fellows	658	667	675	670	674	683	702	708	730	735
Professional Members	4,487	4,473	4,503	4,595	4,659	4,696	4,729	4,856	5,023	5,109
Technical Members	122	117	122	130	141	158	171	186	190	194
Associate Members	250	233	230	228	222	221	217	237	255	287
Competence-graded Members	5,548	5,523	5,566	5,664	5,738	5,802	5,865	6,035	6,248	6,379
Graduate Members	1,808	2,015	2,301	2,613	2,995	3,328	3,418	3,592	3,874	4,173
Companions	17	21	24	25	29	33	38	38	41	41
Affiliate Members	118	131	148	171	181	185	201	232	250	251
Honorary Fellows	15	14	15	17	17	18	21	21	19	20
Subscription-paying Members	7,506	7,704	8,054	8,490	8,960	9,366	9,543	9,918	10,432	10,864
Student Members	2,767	2,204	1,860	1,756	1,674	2,117	2,519	2,877	3,507	4,072
Total	10,273	9,908	9,914	10,246	10,634	11,483	12,062	12,795	13,939	14,936

President's Report

The release of the Canterbury Earthquakes Royal Commission report was a pivotal event during the last year. It concluded the systems in place to regulate engineering were generally appropriate, but suggested a number of improvements, some of which were directed to IPENZ as the Registration Authority for Chartered Professional Engineers.

We have taken aboard the recommendations directed to us: actions to increase the practice field information on the Register and to review the Code of Ethics are well-advanced. We continue to work with the Government on defining and implementing changes arising from other recommendations. This is important work to ensure the public continues to respect the profession and trust we will continue to act in their interests.

After the Commission's report was received, it was decided at a high level in the Government more change was needed. This would ensure if significant harm were to occur in the future through engineering failure, those engineers responsible could be held to account. The governmental review work is still in progress, but could bring profound change to the profession. Your Board, our senior staff and I, as President, have worked hard to ensure the outcome will both serve New Zealand, and be practical for the profession.

In addition to this review of occupational regulation, it has been a challenging year in operating the sanctions systems we already have in place. There were a record number of complaints received and the public is looking with interest at how we apply our powers. That means it is vitally important that what we do is both procedurally correct and done in a robust manner that can withstand external scrutiny. The costs of operating in such a manner are not insignificant, but the Board has been resolute that the cost of professional self-regulation has to be accepted. It has had a significant impact on the financial result for the year.

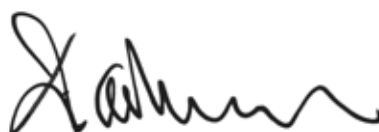
During year, IPENZ commissioned the most comprehensive survey of the Membership, other engineers and the public for some time. The results are of high quality and show the three main drivers for Members are that IPENZ is the voice of the profession, ensuring engineers are listened to, trusted and valued for what they do; ensures all Members of the profession consistently work to the high standards our Members believe are important; and supports Members in developing their engineering careers.

In parallel to this activity, the Board conducted a strategic review utilising a process of foresighting and backcasting. The nature of a professional body in 2040 was envisaged, and then the necessary steps to be taken to achieve that ideal body were defined. Putting that work together with the survey results creates a rich resource for the Board to plan what IPENZ will be doing in the first year of its next century – with the IPENZ Centenary celebrations to begin in March 2014.

I believe the Institution is in good heart going into its centenary year.

If there is one lesson from the last century, it is "never to rest on one's laurels, but to lead constructive change."

It has been a privilege to play a leadership role in the profession at what has been a challenging time. I wish to close by thanking the Members, staff and my fellow governing Board members, whose commitment has made my role a pleasure during the year I have served you.



Derrick Adams

President

Our Governing Board

The democratically elected IPENZ governing Board is responsible for the Institution's governance and strategic direction.

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Derrick Adams
President



Kevin Thompson
Deputy President



Andrew Read
Vice President



Carol Boyle



Geoffrey Farquhar



Ben Holland



Ron McDowall



Elena Trout



Glen Mitchell



Richard Muggleston



Graham Darlow
Immediate Past President

Chief Executive's Comment

The official roll of IPENZ Members is counted on 30 September. This year the roll was almost 15,000 – including about 4,000 Student Members and 11,000 in higher Membership classes. This is very different from the turn of the millennium when there was only about half that number. Growth is important: it grows the subscription revenue of the organisation and signals the Institution's increasing representation of the profession. Nevertheless, we have a way to go – the proportion of civil engineers in our Membership for example, is still greater than the proportion graduating in that discipline.

Our Membership survey conducted in the middle of the year indicated that Members want us to do more to improve international acceptance of their engineering qualification so they can gain employment overseas. It was thus pleasing that during the year we successfully joined the Dublin Accord, which is of particular benefit to holders of the New Zealand Diploma in Engineering. In addition, we successfully passed the six-yearly reviews that enable us to continue to operate the New Zealand section of the International Professional Engineer and the APEC Engineer Registers. We also signed an Admission Pathways agreement with Engineers Australia. This will simplify the admission and registration process for Members working in Australia and for Australian engineers wishing to work in New Zealand. This will not be a perfectly symmetrical arrangement due to differences between the occupational regulation systems of our two countries, but it has benefits in practice.

To increase the pipeline of engineers, the Government is seeking an additional 500 graduates per year from 2017; significant new funding has been provided for this purpose. The Government also recognizes the need to improve the pathway between secondary school and tertiary study. As a consequence, IPENZ has signed a new contract with Callaghan Innovation to continue Futureintech in schools until 31 December 2014. Since the Futureintech programme began in 2003, we have received more than \$13 million from the Government, and have been supported by over \$5 million of volunteer time from young engineers and technologists who are generously released by their employers to deliver the programme.

The Institution's financial performance has been a concern. During the past 12 years we have progressively rebuilt IPENZ's uncommitted reserves from about \$700,000 to \$4.6 million. Of this, \$500,000 was consumed during the present year. A significant part was for legal costs for upholding professional standards through the complaints process. We also undertook work towards re-investing in a new generation of information technology systems to support the Membership. We have also invested in Membership research to know what present Members want and to develop a view on what future Members might like. Other significant investment has been spent in documenting and then re-engineering our core processes, including those we use for maintaining important data such as our Membership, assessment and registration records. In addition, we have allocated \$300,000 to the Institution's Centenary celebrations which commence in March and run through to November 2014.

There is more to come: to have the systems we think are needed to modernise the Membership experience we expect to invest over \$2 million over the next few years.

In closing, I want to thank our hundreds of volunteers, who have continued to give to the profession.

This is appreciated, especially when the demand on engineers to deliver quality engineering services to their clients and employers is high. We value our volunteers' continued support – they are the lifeblood of a healthy profession.



Andrew Cleland
Chief Executive

Our Staff

IPENZ staff roles are divided into six primary functions, with each section headed by a Director who is part of the IPENZ Management team.

Chief Executive and Directors

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Andrew Cleland
Chief Executive



Nicki Crauford
Deputy Chief Executive



Tina Norris
Director – Member Services



Tim Davin
Director – External Relations



Susie McCutcheon
Director – Operations



Brett Williams
Director – Learning and Assessment



Angela Christie
Director – Schools

“Staff working for the Institution add as much value as possible to support the commitment of our many engineers.”

ANDREW CLELAND Chief Executive

The Teams

Chief Executive's Office

Andrew Cleland Chief Executive	Tina Norris Director – Member Services
Karen Cooper Executive Assistant to the Chief Executive	Jackie Treweek Boards' Secretary
	Kim Willcox-Lee HR Advisor

Engineering/Deputy Chief Executive's Office

Nicki Crauford Deputy Chief Executive	Cameron Smart Engineering Projects Manager
Rebecca Barrow Complaints Administrator/Personal Assistant	Charles Willmot Manager – Investigation and Discipline
Graham Dilks Engineering Practice Manager	Matthew Winthrop Editor – Member Communications
Angeli Hudson Graphic Designer	Brian Worboys Technical Secretary
Leanne Molloy Design Manager	
Juliet Palmer Managing Editor	

External Relations

Tim Davin Director – External Relations	Kavita Kansara Marketing Manager
Karen Astwood Heritage Advisor	Dionne Needham Awards and Projects Co-ordinator
Tracey Ayre Policy Advisor and Project Manager, Women in Engineering	Michelle Sutton Communications Manager
Tonya Jones Conference and Events Manager	Cheryll Wagener Events Co-ordinator

Operations

Susie McCutcheon Director – Operations	Walter King Sales and Sponsorship Manager
Michele Boniface Membership Officer	Fiona McLean Service Centre Manager
Brittany Brack Membership Administrator/Receptionist	Lyn Patterson Financial Accountant
Beau Broadhead Web Programmer/Analyst	Lynn Pole General Accounts Administrator
Renee de Boer Technical Groups Officer	Deborah Toala Meeting Room/ Membership Assistant
Alexandra Jackson Accounts Receivable/ Membership Administrator	Curtis Vertongen Database and Systems Administrator
Rohin Joyce IT Support Administrator	Linden Williams Branch Facilitator

Learning and Assessment

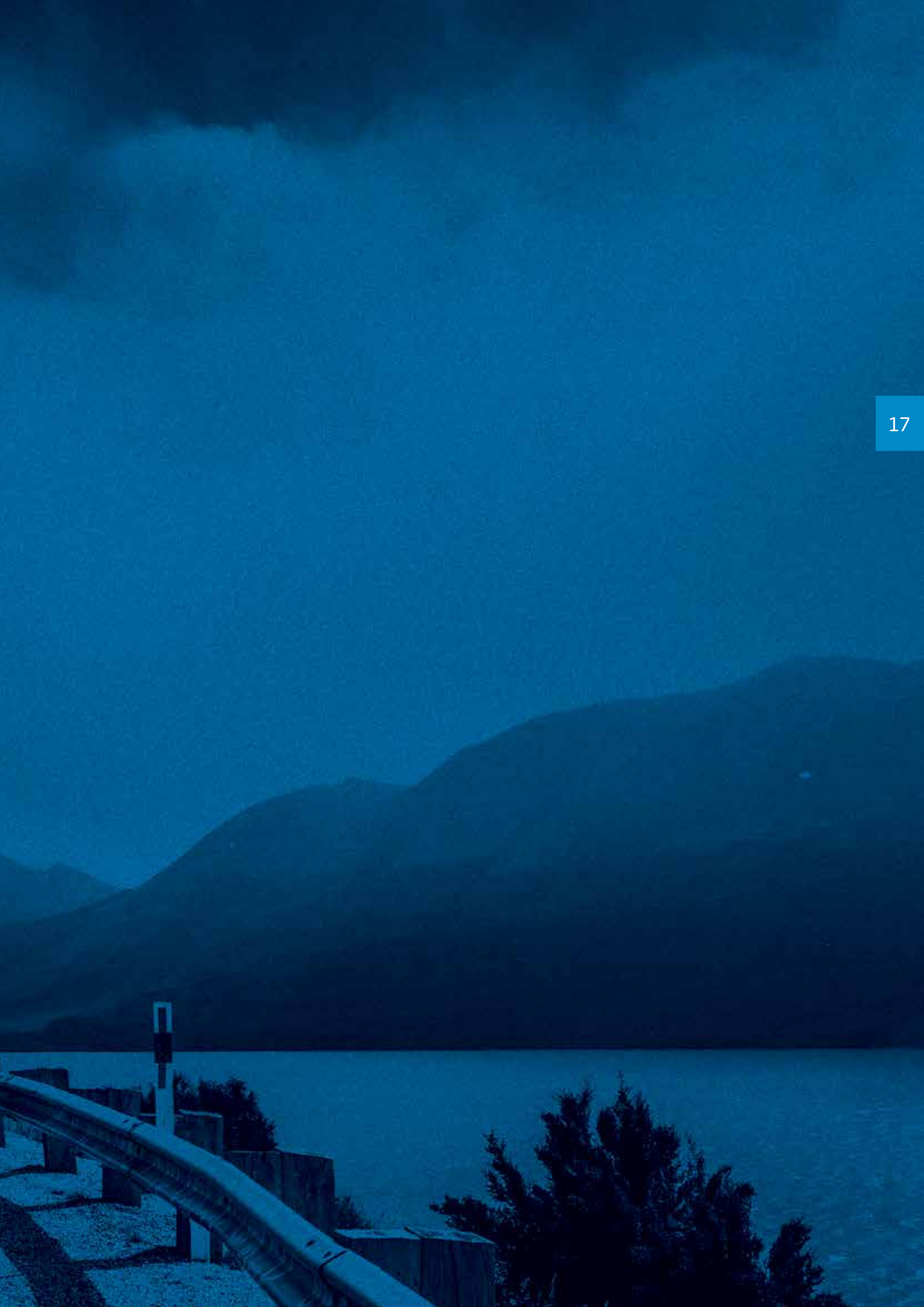
Brett Williams Director – Learning and Assessment	Bub Konia Senior Competence Assessment Administrator
Shannon Davidson Continuing Professional Development Advisor	Rachel McKeag IEA, NZBED and CETENZ Secretariat
Margaret Dawson Professional Development Manager	Catherine Novak Learning and Development Advisor
Andrew Drummond Administrative Assistant	Charlie Strivens Competence Assessment Quality Co-ordinator
Ezra Fermanis Learning and Assessment Team Administrator	Jeff Wastney Registrar
Christopher Johns Competence Assessment Administrator	

Schools

Angela Christie Director – Schools	Madeleine Rashbrooke Futureintech Writer/Researcher
Rod Hare Futureintech Facilitator	Megan Rodden Futureintech Writer/Researcher
Kristal Kitto Administrator/Hub Co-ordinator	Catherine Smith Futureintech Facilitator
Alison Lawrie Futureintech Facilitator	Laura Stockton Futureintech Facilitator
Glynn McGregor Techlink Project Co-ordinator	Gay Watson Futureintech Facilitator
Lynne Newell Futureintech Facilitator	Susan Weekes Futureintech Facilitator

Making our Vision a reality

The IPENZ Strategic Plan describes the way the Institution will achieve its Vision. We have set five strategic objectives along with supporting activities to help us make our Vision a reality. The following sections provide an overview of our progress during the past year against each of these objectives.



OBJECTIVE 1

Professional Standards

Set and enforce internationally benchmarked educational, competence and ethical standards.

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Activities

- Accredited or recognize engineering qualifications to Washington, Sydney and Dublin Accord standards
- Undertake competence assessments benchmarked to the professional competence exemplars of the International Engineering Alliance
- Ensure all relevant regulators use the IPENZ-managed national engineering registers
- Educate engineers on their professional responsibilities and deal with poor performance through a disciplinary process
- Support the development and enforcement of professional standards across the South Pacific region.

Indicators of Success

- Continued signatory status of the Washington and Sydney Accords and after acceptance, as a signatory of the Dublin Accord
- Continued authorised membership of the Engineers Mobility Forum, APEC Engineer and Engineering Technology Mobility Forum Agreements
- Positive affirmation of IPENZ's statutory role by the Chartered Professional Engineers Council
- Consistent uptake and use of competence registers by regulators.

Outcomes

- At the International Engineering Alliance meetings in Seoul, Korea in June 2013:
 - IPENZ's status as a signatory to both the Washington and Sydney Accords was confirmed for a further six years following a process of continuing review by an international review panel over the previous six years
 - IPENZ was accepted as a signatory to the Dublin Accord following a visit by an international review panel late in 2012
 - IPENZ was confirmed as an authorised member of the International Professional Engineer Agreement and APEC Engineer Agreement for a further six years following a review of our competence assessment processes by an international review panel in early 2013
- The Chartered Professional Engineers Council remarked in their annual report for the period 1 January to 31 December 2012 on the performance of the Registration Authority (RA), which is defined in the Act as IPENZ: "The RA continues to administer the New Zealand CPEng scheme in a manner that garners international respect for all of its country's Chartered Professional Engineers"
- A current competence register for Engineering Geologists – Professional Engineering Geologist (PEngGeol) – was opened during the year following a development

process led by the New Zealand Geotechnical Society. The register has been referenced in Ministry of Business, Innovation and Employment guidelines relating to the redevelopment of TC3 land in Christchurch

- An Admissions Pathways Agreement was signed with Engineers Australia setting out membership and registration admissions pathways between Australia and New Zealand. The agreement documents pathways for professional engineers, engineering technologists and engineering technicians
- Three-hundred-and-thirty-five applications for competence assessment were received from engineers or engineering geologists seeking admission to a current competence register and/or competence based IPENZ Membership class
- AUT University was successful in having accreditation for its Bachelor of Engineering (Honours) and Bachelor of Engineering Technology programmes accredited for a further five-year period. AUT University offers engineering programmes in mechanical and electrical and electronics engineering
- Institutions of Technology and Polytechnics (ITPs) offering the New Zealand Diploma in Engineering (NZDE) gained provisional accreditation. This followed an accreditation panel review of the NZDE curriculum and the national quality assurance processes operated by the qualification owner, the New Zealand Board for Engineering Diplomas. Two ITPs,



South Pacific engineers meet aid donors in Fiji.



Arama Prime (left) receives an accreditation certificate on behalf of Unitec Institute of Technology from Graham Darlow.



Federico Monsada (Philippine Technological Council President) speaks at the IEA Conference in Seoul, Korea.

*IPENZ was accepted as a signatory to the **Dublin Accord** following a visit by an international review panel late in 2012*

Unitec and Western Institute of Technology at Taranaki (operating as the New Zealand Institute of Highway Technology) subsequently gained full accreditation for the NZDE following on-site accreditation visits

- During the year, IPENZ received or had in progress 89 complaints, either against Chartered Professional Engineers, where we are the Registration Authority, or against IPENZ Members, for whom we are the incorporated society. Of these, 52 have been closed (either dismissed or resolved). At the end of the year there were 37 active complaints at varying stages in the disciplinary process
- Formal engineering institutions were established in Tonga and the Cook Islands, with support from IPENZ. The South Pacific Engineers Association agreed to the formation of a seventh chapter, in the Solomon Islands. Mentoring engineering education providers in the South Pacific region continued in association with Engineers Australia.

Standards and Accreditation Board

The Standards and Accreditation Board is responsible for setting and maintaining minimum standards for entry to the profession. These are applied through qualification accreditation and recognition. It is also responsible for developing professional competence standards. These are applied through assessing individuals for competence based Membership and registration. These standards are central to a self-regulating profession's operation.

Standards and Accreditation Board Members

Simon Lovatt (Chair)	Gordon Mallinson
Carol Boyle	Roger Nokes
Kieran Devine	Dirk Pons
Tiina Hall-Turner	Basil Wakelin
Debbie Hogan	

Disciplinary and Investigation Committee Chairs

Investigating Committee Chairs

Cliff Boyt	Jeff Jones
David Bunting	Peter McCombs
Colin Hickling	Andrew McMenamin

Disciplinary Committee Chairs

Alan Bickers	Brian Hasell
Jennifer Culliford	Peter McCombs

The following Members served on Investigating or Disciplinary Committees during 2012/2013

Adam Thornton	Peter Wastney
Alan Moule	Robert Davey
Alistair Chambers	Rod Hutchison
Bob Gray	Shane Speight
Carol Caldwell	Stephen Jenkins
Carron Blom	Ted Wilson
Chris Harrison	Terry Kayes
Dale Turkington	Wayne Raymond
David Jennings	Barry Brown
Deane McNulty	Bill Cassidy
Desmond Bull	Bill Darnell
Alexei Murashev	Bob Nelligan
Graham Ramsay	Bryce Coulter
Kelvin Walls	Chris Marks
Roger Feasey	Clive Sligo
Duncan Hall	Craig Cooper
Fraser Henderson	Graham Frost
Graham Chapman	Graham Voysey
Grant Wilkinson	Michael Newby
John Syme	Joanna Saywell
Jonathan Hill	John Hare
Kelvin Barclay	John Reynolds
Martin Feeney	John Stark
Matt Harris	Jon Ewer
Mike Cathie	Keryn Kliskey
Murray Milner	Mark Apeldoorn
Neil Rogers	Matt Harris
Noel Chandler	Peter Mathers
Noel Hanham	Richard Brand
Peter Boardman	Rob Jury
Peter Geddes	Stewart Hobbs
Peter Mathers	Tim Sinclair
Peter Smith	

OBJECTIVE 2

Engineering Leadership

Lead the development and promote the application of good engineering practices.

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Activities

- Identify and manage emerging engineering practice issues
- Provide a portfolio of practice documentation
- Enhance Member access to the up-to-date codes of practice and standards
- Promote learned society activities for Members to gain new engineering knowledge
- Advocate for New Zealand to have a regulatory environment supporting effective, efficient, ethical and innovative engineering practice
- Facilitate and co-ordinate the views of the engineering profession on practice issues.

Indicators of Success

- IPENZ is recognized as a leader in resolving engineering practice issues
- IPENZ is recognized within the engineering community as the co-ordinator of technical leadership
- IPENZ services are used to access new or codified engineering knowledge
- Increased coverage of different engineering disciplines.

Outcomes

- IPENZ continues to play a pivotal role in assisting the Ministry of Business, Innovation and Employment respond to the recommendations of the Canterbury Earthquakes Royal Commission. IPENZ chairs the Engineering Reference Group and participates on a number of stakeholder groups and collaborates with technical groups. In particular, IPENZ has led the responses to three key recommendations:
 - A review of the IPENZ and Chartered Professional Engineers codes of ethics. This specifically considers the obligation on engineers to report matters where they perceive a situation where people or property are at risk (for example, where a building or structure presents a risk to health and safety).
 - Closer collaboration and information sharing between structural engineers and architects. IPENZ has formed a working group with representatives from the New Zealand Institute of Architects, Ministry of Business, Innovation and Employment, New Zealand Registered Architects Board, the New Zealand Society for Earthquake Engineering and the New Zealand Structural Engineering Society.
- Consultation on options to publish information on the Chartered Professional Engineers register was completed and a proposal agreed by the Registration Authority Board. This will provide information on the register that is readily understood by lay persons and useful to members of the public and regulators.
- The engineering practice components of the IPENZ website have been revised and updated, with a particular focus on guiding members of the public when seeking the services of an engineer
- A number of new Practice Notes have been published, and existing ones reviewed and updated
- Submissions in close collaboration with the Association of Consulting Engineers, New Zealand Structural Engineering Society, New Zealand Society on Large Dams, and New Zealand Society for Earthquake Engineering were made on the following issues: joint and several liability; earthquake-prone buildings; delivery of standards; regulation of engineers in the mining sector; health and safety in the workplace; amendments to the Building Act; the Construction Contracts Act.



Professor John Uff QC (front) and John Hare view earthquake damage in Christchurch. Professor Uff was a guest keynote speaker at the 2013 Engineering Professions Forum, leading discussions around "Engineering and Ethics".

Engineering Practice Advisory Committee

The Engineering Practice Advisory Committee's purpose is to advise the IPENZ governing Board on matters arising in or affecting engineering practice that could have a major impact on the engineering profession, its reputation with stakeholders, or IPENZ.

Committee Members

Andrew Read (Chair)	Ron McDowall
Steve Abley	Hamish McKenzie
Geoffrey Farquhar	Arthur Park

IPENZ continues to play a pivotal role in assisting the Ministry of Business, Innovation and Employment respond to the recommendations of the Canterbury Earthquakes Royal Commission

OBJECTIVE 3

Informed Engagement

Provide a respected voice to inform and influence leaders and decision-makers on national and community issues.

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Activities

- Provide an engineering perspective that helps reframe the public debate on important national and community issues
- Submit to Parliament and government agencies on behalf of the engineering profession to influence policy decisions
- Engage leading engineering organisations to provide a collective voice for the profession on critical public policy issues.

Indicators of Success

- Changes of public policy over a period of time increase alignment of government policy with IPENZ think pieces
- Submissions on specific issues lead to pertinent changes in policy, legislation or regulation
- Business and government leaders and senior government officials value think pieces and policy submissions from the profession.

Outcomes

- IPENZ made 17 submissions on public policy issues, and in five cases made presentations to the relevant Select Committee. The Canterbury Branch and the Auckland Branch were also supported in making their respective submissions about the Transport Plan and the Unitary Plan
- Informal feedback from senior government officials indicated that IPENZ's views are well respected, although generally it is not feasible to identify whether IPENZ has solely and directly influenced change. Nevertheless, aligning our submissions with government decisions influenced government policy on the establishment of Callaghan Innovation, the development of earthquake-prone building policies, and impending changes to the Resource Management Act and the Local Government Act relating to natural hazards.

*IPENZ made **17** submissions on public policy issues, and in **five** cases made presentations to the relevant Select Committee*

OBJECTIVE 4

Enhanced Understanding

Enhance public understanding of the critical role engineering plays in modern society.

Activities

- Record and present stories of historic engineering achievement to the public of New Zealand
- Recognize and explain contemporary engineering achievement to stakeholders in business, government and the community
- Inform the public of advances in engineering innovation likely to impact on the way of life for New Zealanders
- Provide the public of New Zealand with an informed engineering perspective on issues impacting their communities.

Indicators of Success

- Public, business and government perceptions of the role of engineers in developing society are improved
- 2014 Centenary and the on-going engineering heritage programme bringing the role of engineering into the public view.

*Three public discussion panels were held on the impacts of technology in the **music**, **health** and **food** sectors*



Panellists Dave Dobbyn, Martyn Pepperell, Simon Grigg and Dougal McKinnon share their views on changes and future trends in the music industry at the inaugural Technology Challenging Society panel discussion.

Outcomes

- The role of engineers in society was highlighted through the Pickering Lecture Series on inductive power transfer with 800 people from across the country attending the series
- Eight media releases received coverage after the New Zealand Engineering Excellence Awards
- Three public discussion panels were held on the impacts of technology in the music, health and food sectors
- Engineering heritage outcomes included four items being added to the Engineering Heritage Register, two plaques being unveiled, and participation in a television documentary on the development of the rail network
- Media interest in the Institution and the profession increased and included coverage by national newspapers and television on issues including earthquake-prone building policies, disciplinary matters and shortages of engineers.

OBJECTIVE 5

Enduring Capability

Foster the development of a capable and diverse engineering community sufficient to meet future needs.

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Activities

- Increase and support the participation of young people in secondary and tertiary study pathways towards careers in engineering and technology
- Provide Members with access to a range of support services and continuing professional development opportunities
- Facilitate collegiality and networking through Branch and other events
- Support and recognize engineering employers providing good quality professional development and support environments
- Provide programmes tailored to the needs of groups of Members such as young engineers, student engineers, women, Māori and Pasifika.

Indicators of Success

- Tertiary involvement in engineering, information and communications technology (ICT) and science show positive trends
- Participation in a range of support services and continuing professional development opportunities increases year by year
- The majority of major engineering employers participate in the Professional Development Partner (PDP) scheme
- The programmes tailored to groups such as young engineers, student engineers, women, Māori and Pasifika meet their objectives
- The programmes enhance the engagement of “new economy” innovative businesses.

Outcomes

- The Futureintech project met all its contractual obligations in 2012. Ambassadors made 2,598 visits to primary, intermediate and secondary schools, which gives a conservative estimate of 6,493 donated hours with an approximate value of \$973,950. Ambassadors presented to over 50,000 students at least once, and Callaghan Innovation extended funding for the Futureintech project until (at least) December 2014
- A Techlink Pathways Project was initiated to establish pathways for students through well-chosen senior secondary school programmes of study to meaningful tertiary study and then to employment in engineering and technology-related sectors
- Transpower Neighbourhood Engineers Awards were made to 20 schools
- Tertiary enrolments in engineering, ICT and science continued to show positive trends in 2012
- One-hundred-and-four continuing professional development courses were delivered, attracting 1,635 attendees
- A review of the PDP policy was completed and two new employers were recognized as PDPs during the year. Seventeen existing PDPs were successful in having their status confirmed for a further period following reviews against our PDP recognition criteria.

Women in Engineering

- A survey of engineering employers was undertaken to understand the status of women in engineering and the policies and practices in place. Thirty organisations voluntarily participated and the findings were published in *Women in Engineering: Snapshot 2013*.
- *Women in Engineering: An Update on Progress in 2013* was published to set out the programme's achievements since its launch in 2011, and its future plans
- IPENZ continued to use its networks and influence to encourage engineering employers to take action to support diversity in their organisations
- IPENZ, with the National Association of Women in Construction and the Institution of Civil Engineers (New Zealand Branch) delivered Connect networking events to support female engineers. Cross-profession events were also held to enable engineers to engage with female accountants and lawyers

104 continuing professional development courses were delivered, attracting 1,635 attendees



Futureintech Ambassador Andre Cowan GIPENZ shows students at Freemans Bay School in Auckland how to measure sound with a sound level meter.

- The IPENZ Women in Engineering programme's progress was promoted through presentations to the Asia Pacific Nation Network, the World Federation of Engineering Organisations' Women in Engineering Committee and to the New Zealand Petroleum Summit.

Student Engineers New Zealand (SENZ)

- The number of Student Members has increased by 16 per cent over the past year, with 4,072 members
- SENZ funding has been used by student engineering chapters at both universities and institutes of technology to increase engagement with industry and IPENZ Branches through a variety of events. These include practising planning and organisation, communication, networking and leadership skills
- The SENZ Council met in December and March to discuss policies, procedures and best practice.

Engenerate

- The number of Graduate Members has increased by 7.7 per cent over the last year to 4,173

- The "voice" of the graduate engineer has been heard through a closer works arrangement with the IPENZ governing Board during 2012/2013. Members of the Emerging Professionals Council had significant speaking roles at the Engineering Professions Forum in March 2013, to widen the understanding of the issues faced by emerging engineers
- The regional Engenerate teams organised a mix of social and professional events to practise skills including event management, leadership, communication and time management, and to gain a greater understanding of the pathway towards professional recognition
- The Engenerate programme enabled many graduates to gain friendship and support, which has been especially important to Members when they move to a new region following their tertiary studies
- The Emerging Professionals Council met in October and March to discuss policies, procedures and ways graduate engineers could engage with industry and achieve professional recognition.

*The number of
Graduate Members
has increased by
7.7 % over the last
year to 4,173*

Professional Development Partners

Strong partnerships with engineering employers, through the PDP scheme, are a key mechanism for providing support to Members' professional development.

New Professional Development Partners

Cardno	Electrix
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IPENZ now recognizes 41 PDPs.



Derrick Adams gives his address at the 2013 Stakeholders' Function.



Professional recognition seminar in Canterbury.



Guests at the 2012 New Zealand Engineering Excellence Awards, held at the Langham Hotel in Auckland.



Representatives of the Emerging Professionals Council attended the 2013 Engineering Professions Forum. From left: Thanura Rabel, Royce Finlayson, Jenna Voigt, Peter Freeman, Rachel Blewden, Morgan Chalmers and Natasha Jokhan.

*The Event Management team provided services to **15** events, and for several customers and Technical Interest Groups*

SUPPORTING ACTIVITIES

Behind the Scenes

IPENZ National Office undertakes a number of activities which support the five strategic objectives.

These activities involve providing support to Branches, Special and Technical Interest Groups and Collaborating Technical Societies, publications and web services. We also undertake Membership recruitment and offer event management and secretariat services.

Outcomes

Active facilitation to help all Branches run worthwhile programmes, including liaising with other engineering bodies to promote joint activities

Six issues of *Engineering Insight*, 11 issues of *Engineering Dimension* and 47 issues of *Engineering Direct* were published, as well as four issues each of *Electryon* and *Alchemy* for people interested in electrical and chemical engineering. One learned paper was added to the Institution's peer reviewed journal, *IPENZ Transactions*.

An increased emphasis on promoting advertising opportunities led to improved advertising revenue. A range of administrative activities was undertaken to support the functioning of Technical Interest Groups. Other work included improving website content and usability. The Event Management team provided services for 15 events, and for several customers and Technical Interest Groups. This work included managing registrations, and full event management and support services.

Secretariat services were contracted to the International Engineering Alliance, the Council for Engineering Technician and Technologist

Table 1: Greenhouse Gas Emissions (tonnes CO₂-e)

	2008	2009	2010	2011	2012	11/12 Change
Taxi's, cars, petrol	33.3	37.7	40.2	45.3	43.1	-2.3
Electricity	27.2	23.3	19.0	20.1	20.9	0.8
Domestic air travel	92.8	89.9	93.9	110.8	127.2	16.4
International air travel	23.4	26.5	43.7	31.8	27.8	-4.0
Waste to landfill	7.8	7.7	7.8	7.8	7.8	0
Totals	184.3	185.1	204.5	215.7	226.6	10.9

Table 2: Paper used (tonnes)

	2008	2009	2010	2011	2012	11/12 Change
<i>Engineering Insight</i> magazine and <i>Engineering Dimension</i>	10.1	13.0	11.7	12.3	6.9	-5.3
Other papers printed	4.7	2.4	0.9	0.3	0.3	0
Photocopy paper	4.4	4.2	3.4	2.9	4.4	1.5
Totals	19.2	19.6	15.9	15.5	11.7	-3.8

Education, the New Zealand Board for Engineering Diplomas, the Cadastral Surveyors Licensing Board and the Construction Industry Council.

Resource Intensity Statement

IPENZ used the Ministry for the Environment's guiding document (which provides a standard scope, procedure and the emission factors to be used) to estimate IPENZ National Office's greenhouse gas (GHG) emissions.

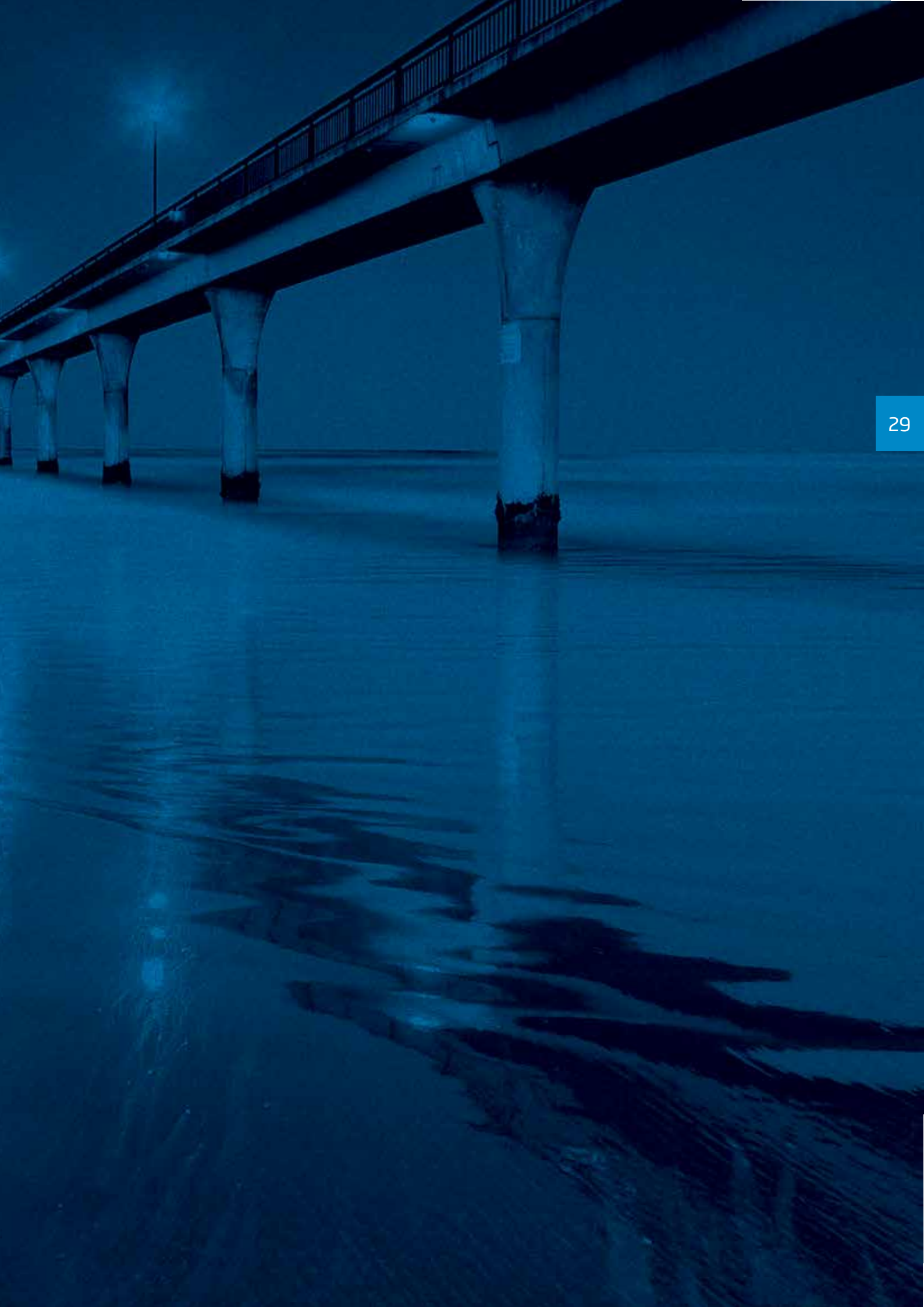
IPENZ GHG emissions, carbon dioxide equivalent (CO₂-e) tonnes year to 31 December

Overall, the 2012 year showed a six per cent increase of emissions over the previous year. This is predominantly in the area of domestic air travel. Contributing factors to this increase in the need for air travel include increasing workload in the areas of complaint investigation and competency assessment.

National Office's paper use in 2012 shows a general decrease on previous years.

Associated Reports

IPENZ is the Registration Authority for Chartered Professional Engineers. A number of subsidiary entities and Collaborating Technical Societies undertake a range of activities to support the profession.



Registration Authority

Under the Chartered Professional Engineers of New Zealand Act 2002, IPENZ is the Registration Authority.

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Current competence is defined as having successfully undertaken a competence assessment against the competence standard for the relevant Membership class within the last six years.

Chartered Professional Engineer

Chartered Professional Engineer (CPEng) is the most important quality mark attesting to the current competence of a professional engineer in New Zealand. It is a statutory title under the Chartered Professional Engineers of New Zealand Act 2002. Registration is gained by demonstrating competence to the standard required by the CPEng Rules and is reassessed for currency at intervals not exceeding six years. The CPEng Register is an electronic register available at all times to the public. It includes the date each registrant's next competence assessment is due.

A total of 265 assessments for admission and 690 submissions for continued registration for CPEng were received.

There were 234 new registrants added to the CPEng Register during the year, bringing the total number on the Register to 3,239. They included

39 Category A Recognised Engineers¹ and 18 Design Verifiers². There were 22 applications for assessment for admission to CPEng which were declined; four registrants died and 24 were removed (either for non-payment of fees or for not meeting the standards for continued registration). Thirty-nine registrants resigned and 20 were suspended (either for failing to pay fees or for failing to submit a portfolio of evidence for continued registration). There were no requests for procedural review and no appeals lodged in relation to any assessment decisions.

IPENZ, in its role as the Registration Authority, submitted an annual review on its Registration Authority activities for the year 2012 to the Chartered Professional Engineers Council in March 2013. After accepting the review, the Council reported to the Minister of the Crown responsible that IPENZ had met its Registration Authority obligations for 2012. A levy of \$70,000 was paid to the Council to fund its activities under the Act.

Competency Assessment Board

The Competency Assessment Board moderates assessments to ensure standards of competence are consistently applied. It is the final decision making body for all

*A total of **265** assessments for admission and **690** submissions for continued registration for CPEng were received during the year*

competence assessments – for entry into one of the competence graded Membership classes or admission to or continuation on one of the registers of current competence.

Competency Assessment Board Members

Craig Price (Chair)	Peter Millar
Ben Holland	Sulo Shanmuganathan
Gordon Hughes	Geoff Thomas
David Hutchison	Jeffrey Wilson
Stephen Jenkins	

1 Category A Recognised Engineer as prescribed in the Building (Dam Safety) Regulations 2008.

2 Design Verifiers are approved in one or more of three categories of equipment – pressure equipment, cranes and passenger ropeways – as prescribed in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.

Members passing competence assessments at the Chartered Professional Engineer (CPEng) level

Northland

Bon D P	Wilson N J
Davey L A J	

Auckland

Abbott M G	Kwok M W T
Al-Afaghani Y I	Lawrence S
Al-Saleem H I	Le Grice A M
Bargh L S	Linehan D E
Bennett H E	Lucic A J
Bialik M	Mahoney R K
Bolland J D	Mannes R J
Brooke N J	Mason S A
Cameron L E	McGowan M
Cassidy G M	Mercer R D
Chand M M	Millican R P
Chapman-Smith S R	Milne A J
Colibaba A C	Morley-John R M
Concannon C K	Morrice N
Cribb C G	Mountfort C D
Dempsey N J	Mouravlev D A
Duncan C C	Narro J G D
Dunselman J R	Newcombe M P
Dwyer S M	Newham N
Dyer J T	Norfolk P D
Fisk E A	Norrington M A
Fitzgerald J P	O'Leary P A
Gong J A	Pain B T F
Green B K	Peters D
Gribben G W	Petrovic A J
Haagh J J	Pino Merino D A
Hassall D S	Powell J A
Hatley C P	Rankin S B
Hay T R M	Reddish J
He J	Rupasinghe H P J
Hillier S A	Shortt C G
Horsfield J N	Simpson A M
Hudson C G	Singh A K
Johnson K	Singh H P
Jones S B	Stopford G E
Jones M I	Strayton G
Jonkers I M	Suffiad J
Kaye J P	Syed R U
Kearney M A	Thomas C S
Kerr J W	Tomasi N
Kilduff M	Valabh R
Kuo C-Y S	Vietri A

Vincent S A	Wood L A M
Wang T K	Worth J R
Willey P	Yeo K W
Wilson S M	Zhang H

Waikato-Bay of Plenty

Bennett D R	Hu Z B B
Blakemore A	Kinghorn J M
Cox J B R	Makinson J V
Erstich S R G	McDonald P J
Fletcher L G	Rossouw A de W

Tauranga

Chye C	Manktelow C D
Harbutt D S	Pearse-Danker H
Keehan A K	Reuther S F
Krause F J	Soliman K
Ladyman R L	West P M

Taranaki

Lockhart H S	Taylor D P
Steele I D	Taylor M K

Hawke's Bay

Eivers G W	Gerbrandt R C
Ellison B S	O'Connor G

Manawatu

Allen S M	Stewart B J
Jones J R	

Wellington

Ayan F A	Lim S-T
Baxter S L	Martindale A B
Cameron A C	McDermott C J
Davies M E	McNaughton J A
Eaton B R	Moes T J B
Faulkner S A	Pathirage I U
Gribble M A	Reller C
Juno W J	Stephenson L G
Krall J R	Welby M R
Lauchlan D S	White J G
Lawson A J M	Wood D R

Nelson-Marlborough

James A K	McEwan A S
Jeffries M J	Pawson C E
Jones M W	Szrot R B
Lester R T	Whyte S D
Manhart E L K	Young D B

Canterbury

Ballinger G N	Leaman M H
Bannock A J	Lee S J
Bellamy M W	Leslie B J
Blyth M B	Lester J R
Boiser Jr A M	Lobendahn V
Brents R A	Muruges D
Charters N J	Nasralla N
Collie K J	Nowak P B
Cosgrove B W	Pietra D
Cotiga A	Povall J
Curd D G	Robinson E J
Davis L J	Roufail R K
Domigan I R	Serrano Lopez M D M
Duncan A M	Simeone E
Fletcher D A	Thompson O
Fletcher J D	Toulmin S H
Fletcher N A	Walker A F
Froggatt I J	Watkins W G
Gatdula E R F	Wentz F J
Gregory C M E	Wetzel N
Hill G R	Wiley M L
Hoffmann R J	Wilkins P R
Hurst C J W	Wilson D T
Hutchison G J	Wylie K J
Kruyshaar J	

Otago

Glasner U W	North G A
Hodgkinson E J	Qi Z T
Ismail N	Rollason S J
Krause J R	

Australia

Boyes J W	Smith M D
Gatland A H	Utting P W
Johnstone A L	Ward M R
Sami A K	

Canada

Kolper A J	Sherriff B J
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South East Asia

Leung L

United Kingdom

Duff L T	Kunkel E S
Garvey J P	Yates B W

United States

McVitty W J	Tolcher M P
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Practice College

In line with the Rules of the Institution, all IPENZ Members who have been assessed as being currently competent are Members of the Practice College.

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As at 30 September 2013, there were 3,372 Members of the Practice College, including 3,198 Professional Members, 70 Technical Members and 104 Associate Members.

Members passing competence assessment for registration at the engineering technician level

Auckland

Allsopp-Smith T J	Lamason S A
Cook A R	McDermott A J
Herring J	Mohammed I
Holmes S	

Waikato-Bay of Plenty

Chittenden H W	Martin N R
Crow C T	Pully N C J
Hight L J	Walker D
Kershaw N C	

Tauranga

Ironside H K

East Coast

Tilley J L

Hawke's Bay

Chapman C M	Patterson-Horner A M
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Manawatu

Hodgson R J	Webster J M
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Wellington

Alekna K J	Morris D J
Loach M	

Nelson-Marlborough

Boyd B A	Parker S J
McArthur D R	Shearer D F

West Coast

Fraser D M	Hofman E
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Canterbury

Gane T E	McLean U
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South Canterbury

Ritchie B M R

Otago

Burdon C A	Payne S R
Donovan C M	Rowley P J
Duncan K R	Scott M D
Duncan B J	Snyder J
Hardy J A	Vorgers S J
Lanauze S H	Waters D

Southland

Bunting S	Verheul S M
Smith A M	

Members passing competence assessment for registration at the engineering technologist level

Northland

Reiher D S

Auckland

Abraham L C	Plimmer A P
Hooker B B	Rumble W J
Newton G M	

Waikato-Bay of Plenty

Teesdale G B

Wellington

McBride C

Nelson-Marlborough

Dupre S C G

United Kingdom

O'Sullivan G P

Branches

Branches provide services to Members that are best delivered locally, with presentations on topical and technical issues, site visits and opportunities for networking.

Branches offer career development and mentoring support where possible, and create opportunities for engineers to provide input on local and community issues.

Auckland

Chair: David Fehl
Membership: 5,832

Budget	Actual
\$54,000	\$57,717

Branch activities included presentations and discussions on Public Private Partnerships, the Auckland Unitary Plan and the Canterbury Earthquakes Royal Commission: Findings and Response. It hosted the Presidential Address event at which the Arthur Mead Award was presented, and the Chairs Reception – City Rail Link.

The Branch arranged several site visits. These included trips to Core Composites – Oracle Racing's building facility, Fletcher Building – reinforcing steel, CSP Coating Systems, AMETI and the Ngaruawahia Bypass.

The Branch also provided support to a range of projects and activities, including the GT Murray Award, the Mega-Science Projects, the KiwiRail AK Class Passenger Carriage, Printing the Future – 3D Printing, and the Martin Jet Pack.

Canterbury

Chair: Chris Maguire
Membership: 2,577

Budget	Actual
\$21,000	\$17,036

The Branch organised and supported over 40 events. It co-hosted the annual Hopkins Lecture with the University of Canterbury in which David Caygill (a Commissioner at Environment Canterbury) gave an overview of the Canterbury Water Management Strategy. Another event focused on the innovations around seismic resilience being developed in the Stronger Christchurch Infrastructure Rebuild Team. In addition, the Branch supported multiple events encouraging members to aim for professional recognition and held a number of presentations for overseas engineers wishing to gain CPEng. It co-hosted events with the New Zealand Institute of Building on Building Information Management and with the New Zealand Institute of Architects Inc on Green Building – connecting with partner organisations in the construction industry. The Branch hosted Neville Jordan, who delivered the 2013 Pickering Lecture, and held a combined event including both the Presidential Address and the CPEng achievement celebration.

The Branch arranged site visits including a visit to the Transitional Cathedral while it was being constructed, and to *The Press* newspaper print works. A visit to Synlait's milk

processing plant gave a great insight into one of Canterbury's economic drivers. Other trips were to see the restoration of the Arts Centre and to the new Pines wastewater treatment plant at Rolleston, which includes a rare solar sludge drying hall.

The Branch provided support to the Eureka Symposium – the Sir Paul Callaghan Young Orators competition, promoting good communication and public speaking in the industry. It also provided support to the University of Canterbury and Christchurch Polytechnic Institute of Technology student organisations, and co-funded an IPENZ Foundation Scholarship for a local student to study engineering.

The Branch established a Diversity Champion, who is responsible for ensuring the Branch promotes and encourage the diversity of our membership.

East Coast

Chair: John Wells
Membership: 31

Budget	Actual
\$3,000	\$1,516

Branch activities included a visit to the Inner Harbour Wharf Refurbishment and hosting the Vice President, Andrew Read, who delivered the Presidential Address. The Branch also judged at the annual Schools' Science Fair, and presented the IPENZ East Coast Branch prize for the "Best Engineering Oriented Exhibit".

Hawke's Bay

Chair: Guy Lethbridge

Membership: 192

Budget	Actual
\$4,500	\$4,189

Branch activities included a joint meeting initiative, to which we invited several other organisations: the New Zealand Contractors Federation, New Zealand Institute of Architects, Architectural Designers New Zealand, the Association of Consulting Engineers New Zealand, the New Zealand Master Builders Association and the Certified Builders Association of New Zealand to develop a programme of joint meetings when relevant topics arose. The Branch Chairman made a presentation to the Rotary Club of Hastings about Initial Evaluation Process Assessments of Earthquake-prone Buildings, made a presentation to the Ministry of Business, Innovation and Employment and attended a workshop for earthquake strengthening consultation.

A pub quiz night was a joint meeting initiative, with invitations extended to the New Zealand Contractors Federation and local territorial authorities. The Presidential Address was made at an event at which the CPEng Awards were presented to local recipients.

Site visits included trips to the ABB Building, the Cosmopolitan Club rebuild to look at the seismic strengthening and Fibre Reinforced Plastic wrapping, and Napier City Council's Marine Parade Stormwater Upgrade. The Branch met jointly with quantity surveyors for a presentation on Mega Projects – Mega Disasters.

The Branch supported a science fair by providing judges and prizes, attended council co-operation meetings, represented IPENZ at the Hastings District Council Forum meetings, attended the Royal Society Hawke's Bay Branch showing of *Switch*, a movie about our energy future, and advocated to the regional and territorial councils to initiate a detailed study of earthquake liquefaction potential in Hawke's Bay.

Manawatu

Chair: David Bridges

Membership: 336

Budget	Actual
\$4,500	\$4,392

The Branch placed a strong emphasis on engaging with its younger members and students. Activities included a barbeque, with guest speaker Carl Whittleston presenting the "Sharing the Let's Go Experience" about shared road space. There were presentations by Scott Blain and

John Silvester (Silvester Clark), and a video link to Glenn Hendricks (Massey University, based at the FoodBOWL, Auckland) on "Fonterra Darfield – Structures and Processes for Milk Processing Plant".

Other speakers included: Ian Lowe (Group Manager, Civil Defence Emergency Management, Horizons Regional Council) and Jonathan Procter (Institute of Agriculture and Environment, Massey University) who presented on the Mt Ruapehu lahar modelling – focusing on volcanic risks; Jim Jones, Professor of Biochar and Bioenergy Pyrolysis Engineering, Massey University, gave a presentation on the "Potential and Challenge of Biochar for Soil Conditioning and Climate Change Mitigation". Mark Ward, General Manager, Riddet Institute gave a presentation on "Food HQ and Associated Developments – a World-leading Food Innovation in Manawatu".

Site visits for members, included one to the DB Tui Brewery (a joint Branch/student event) and another to view the Wet Oxidation Plant being piloted for sludge treatment at ETech Engineering, hosted by Trevor Douglas.

Support was provided to the Manawatu Science Fair. A joint activity with the Wanganui Branch viewed Brendan Deere's restored Spitfire at Ohakea. The Branch supported SENZ through a speed interviewing programme, which aims to help students develop and hone their interview skills, and a student quiz night.

Nelson/Marlborough

Chair: Mark Jones

Membership: 226

Budget	Actual
\$5,000	\$3,165

The Branch activities included Peter Sutherland from Tensar International presenting on reinforced soil retaining structures and Geogrid products, and a lecture by Rolando Orense for



Hawke's Bay Branch members visit the Cosmopolitan Club rebuild to see the seismic strengthening.

Nelson members on the “Effects of Water and Earthquakes on Slope Stability”. The Presidential Address was delivered by Chief Executive, Andrew Cleland; the Branch also hosted the Pickering lecture and visited the Roman Machines exhibition at the Nelson Museum.

Site visits for members included a tour of the Gibbons pre-cast plant in Tahunanui, and a bus tour to view the 600-centimetre-diameter, concrete lined, spiral welded, steel water pipeline in the Matai Valley. Another visit was to the Matua Winery in Marlborough. This major expansion project includes additional storage tanks, a new car park, power upgrade, and a new wastewater treatment plant. Members also saw progress of the Picton Marina inner basin developments. Gavin Beattie from Port Marlborough and Jonathan Duffy of Shearwater Consulting (ex-Port Marlborough) outlined the Marina’s history and the progress of the staged development over the past decade.

The Branch also supported the Nelson regional Careers Roadshow.

Northland

Chair: Derek Bon

Membership: 202

Budget	Actual
\$4,000	\$4,156

The Branch activities included a presentation from the NZ Transport Agency on the motorway extension from Puhoi to Wellsford, and a presentation from Refining NZ on the Marsden Point Oil Refinery expansion. Other activities included a presentation for Branch members on the electric car (hosted by Northpower), attending a presentation on global warming and renewable energy, and hosting Kevin Thompson, the Deputy President, who presented the Presidential Address.

Site visits included a second visit to Te Matau a Pohe Bridge (Lower Hatea crossing) for an

update on construction progress, a presentation about Opua’s low pressure wastewater network and contractual agreement, a visit to the Kaiwaka renewable house and a tour of the Duracrete yard to look at the construction process.

The Branch supported the Far North Science Fair and the Central Northland Science Fair by assisting in judging and providing prize money. Four local school leavers who are beginning tertiary level engineering studies were awarded \$500 scholarships. The Branch worked with Northtec to support its goal to deliver the New Zealand Diploma of Engineering.

Otago

Chair: Jon Visser

Membership: 445

Budget	Actual
\$7,000	\$5,101

Branch activities included a guest lecture by Susan Krumdieck on “Transition Engineering”, as well as the Presidential Address, and a session on “Advancing Professional Recognition” – both of which were delivered by Chief Executive, Andrew Cleland. The Pickering Lecture was hosted and a site visit to the Otago Polytechnic was arranged.

The Branch provided support over the past 12 months to Otago University by acting as the “client” for a 300-level engineering design paper that involved students developing activities and events for the upcoming 2014 IPENZ Centenary celebrations. The Branch provided an engineer to the Dunedin City Council Heritage Earthquake Strengthening Awards. Other support included a financial contribution to the Aurora Science Fair. Branch members assisted students with project work for the Transpower Neighbourhood Engineers Awards, which resulted in the students receiving a number of awards and recognitions.

Southland

Chair: Robin McNeill

Membership: 92

Budget	Actual
\$3,000	\$717

Branch activities included hosting the Pickering Lecture, and a Christmas networking event with Architectural Designers New Zealand and the New Zealand Institute of Architects. Members also attended a talk by Jean-François Kaufeler, in association with Venture Southland and the European Space Agency, about all aspects of getting a rocket into space. Monsieur Kaufeler also visited Southland schools to inspire students about science, mathematics and engineering opportunities. Chief Executive, Andrew Cleland, delivered the Presidential Address.

The Branch provided support to the Southern Institute of Technology in regard to its application to the New Zealand Qualifications Authority to provide the New Zealand Diploma in Engineering in Mechanical and Civil Engineering from 2014.

South Canterbury

Chair: Andrew Dixon

Membership: 56

Budget	Actual
\$3,000	\$3,168

Branch activities included a presentation by representatives from a local company, Aeromarine Industries, on their developments, technology and new products in fibreglass and composites, and a presentation by a Fulton Hogan representative from the Stronger Christchurch Infrastructure Rebuild Team. The talk focused on the challenges and progress with the rebuild of Christchurch’s horizontal infrastructure. Another presentation was made by representatives from

Chorus and Downer EDI on Timaru's Ultra Fast broadband installation. The Presidential Address was delivered by Chief Executive, Andrew Cleland, who also presented a professional recognition seminar for members working towards and seeking recognition as CPEng or MIPENZ. The Branch also visited the new Washdyke steam generation plant.

A pizza evening provided an opportunity for members to network. Many attended the Branch AGM and Annual Dinner. The Branch provided input into planning a 2014 local museum acknowledging IPENZ's Centenary, based on the theme of engineering shaping South Canterbury. Branch members helped find Ambassadors for the Futureintech programme.

Taranaki

Chair: Fatima Leung-Wai

Membership: 304

Budget	Actual
\$5,500	\$4,164

Branch activities included hosting the Pickering Lecture, a presentation on the Wairakei Bioreactor and joining with the New Plymouth District Council's "Bike Wise, Let's Go" tour. The Branch visited the New Plymouth Power Station, Vector Gas Storage and joined the Taranaki Engenerate Whareroa Site visit. Another visit was to Chris Beath's engineering workshop.

Other activities and presentations included a quiz night, the Presidential Address (by Vice President Andrew Read), a presentation on process safety, the launch of Women In Engineering at a "Meet and Greet" occasion, a presentation on a wastewater treatment plant and a graduates' presentation competition.

The Branch supported IPENZ Foundation Scholarship winner, Mark Houwers, who is from Taranaki.

Tauranga

Chair: Peter Clark

Membership: 386

Budget	Actual
\$7,000	\$4,971

Branch activities included a presentation by Richard Sharpe on "Seismic Design of Structures", which covered lessons learnt over the past two years including placarding, and initial evaluation procedures. Branch members attended a movie, *Extraordinary Kiwi Inventions*, and attended the Presidential Address presented by Deputy President, Kevin Thompson.

The Branch arranged several site visits to the Port of Tauranga Wharf Extensions and the Tauranga Eastern Link, where the construction of over 20 kilometres of a four-lane highway, plus bridges, is underway. Other site visits were to the new Tauranga Police Station, and another to the state of the art 35MW n-Pentane geothermal power plant at the Norske Skog plant in Kawerau. The Branch visited the Lawter Industrial site, where chemicals, with the potential to become serious pollutants, are recycled into useful materials needed in everyday life.

The Branch hosted the Pickering Lecture and awarded a scholarship to a local engineering student studying in Biomedical Engineering at The University of Auckland. The Branch once again supported Tauranga Intermediate School in its school science fair endeavours.

Waikato/Bay of Plenty

Chair: Peter Wilding

Membership: 842

Budget	Actual
\$12,500	\$9,414

Branch activities included hosting the Pickering Lecture, a presentation about "Transpower Mission Control", and the Annual Dinner presentation by Ray Stark in Rotorua. There was also a presentation on Fonterra about the Darfield 2 project.

Site visits included trips to the Good George Boutique Brewing, Ngaruawahia and to the Kawerau Geothermal Power Station jointly with the Tauranga Branch.

A Speed Networking Night was held for Student Engineers New Zealand, and the Branch awarded the WINTEC Scholarship, Waikato University Student Prizes, and Young Engineers' presentations and awards, and sponsored the Secondary Schools' Science Award.

Wanganui

Chair: Hamish Peters

Membership: 44

Budget	Actual
\$3,000	\$1,519

Branch activities included presentations by Graeme Blick about national survey marks, Rod Calder about his experiences working in Fiji inspecting bridges, and Tony Moran about past and present work at the Bastia Hill water tower. In addition, three presenters from the local council spoke on local earthquake-prone building issues. Ian Johnson, a Consulting Engineering Advancing Society (CEAS) board member, spoke on liability issues affecting consulting engineers and gave a brief overview of professional indemnity insurance, general risk management, the claim

process and CEAS insurance. Other activities involved the annual Golf Tournament with the Manawatu and Hawke's Bay Branches, and hosting the IPENZ Vice President, Andrew Read, who delivered the annual President's Address.

Site visits included trips to the Water Softening Plant, a joint Engenerate Wanganui and Taranaki visit to Fonterra Hawera, and a joint visit with the Manawatu Branch to Ohakea airbase to view a Grumman Avenger plane.

Wellington

Chair: Sam Kilkenny-Brown

Membership: 1,743

Budget	Actual
\$23,000	\$23,578

The Branch focused on improving relationships with the engineering community and affiliated groups to deliver a diverse offering to our members. Activities during the year included a talk by Water New Zealand's Murray Gibb, who spoke on the future of water policy in New Zealand, and a presentation from Transpower's Demand Response Manager, Quintin Tahau, who introduced the innovative future of real time dynamic asset management. Tye Husher, Chief Executive of the high-tech manufacturing company HTS-110, presented to the Branch on the future of manufacturing in New Zealand, and Nicholas Davidson QC, counsel to the Pike River families, spoke about health and safety as an individual and the collective responsibility, while exploring the role of deregulation of industry in New Zealand. Other activities included a National Library Big Data exhibition special viewing, a trip to Palmerston North to see the Roman Machines Exhibition at Te Manawa and a presentation by Professor Barry Clarke (the President of the Institution of Civil Engineers) on international challenges to engineering.

The Branch supported students and Engenerate through a networking evening with speaker Ian Mills, who is the Chief Executive of the innovative start up company Tekron International. Other support for these groups was provided through the Speed Interviewing Night, which provided Victoria University and WelTech engineering students with support and industry engagement, a Lego Mind Storms robot building competition, through the Victoria University Department of Engineering, and annual student barbeques at the WelTech and Victoria campuses.

The Branch sponsored and judged two prizes in the annual secondary schools science fair, celebrated the achievements of members passing their initial competence assessment at a Wellington regional professional recognition event and, along with the Auckland and Canterbury Branches, was a sponsor for the 2013 Eureka Awards. In these awards, 12 of New Zealand's best and brightest students made presentations on science, engineering, technology and innovation.

West Coast

Chair: Stuart Challenger

Membership: 30

Budget	Actual
\$3,000	\$747

Branch activities included monthly meetings in Greymouth, Hokitika or Kumara, a presentation on the Haast-Hollyford Road proposal and hosting the Presidential Address, which was delivered by Chief Executive, Andrew Cleland.

The Branch arranged several site visits to the Amethyst Hydro Scheme, the Erosion Protection Works at Hokitika Beach and a bridge and construction inspection of the new West Coast Wilderness Trail/Cycleway.

United Kingdom

Chair: Kelvin Smith

Membership: 197

Budget	Actual
\$5,000	\$5,100

The Prestige Lecture was a fascinating insight by Andrew Delugar into the political and technical challenges in the oil and gas industry in the Caspian. Other presentations were from Dan Turner of Hovertrans, who discussed unique ways of moving very heavy equipment in challenging terrain on a cushion of air, and another was "Powering the Games" presented by Brian Stratton of UK Power Networks, who had to wait until after the Olympic Games to make his presentation because of some sensitive security information in the presentation. Nicki Crauford, Deputy Chief Executive, presented the findings of the Royal Commission of Inquiry into the Pike River Mine Tragedy and the Canterbury Earthquakes Royal Commission.

The Branch visited the Crossrail Canary Wharf Station to see two tunnel boring machines as they traversed the platform level to recommence tunnelling. Branch social events included the annual barbecue at Henley, and entering a team into the London Triathlon, which raised about £350 for the University of Canterbury's Digital Archive (CEISMIC). Other social events included our Christmas Soirée, hosted by Engineers Australia, and the annual ANZAC Test against Engineers Australia.

Special and Technical Interest Groups

IPENZ supports more than 30 Technical and Special Interest Groups representing a wide range of engineering fields.

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Special Interest Group

Special Interest Groups operate at a national level, providing services of interest to targeted cross-sections of the Membership.

Special Interest Group for Immigrant Engineers

Chair: Zaid Essa

Membership: 176

The Group aims to facilitate immigrant engineers' settlement into meaningful professional employment in New Zealand. Its activities include training, professional development, employment and career counselling, and social and professional networking opportunities.

The Group held meetings with the Auckland Chamber of Commerce and the Auckland Regional Migrant Services to establish and maintain a joint venture programme assisting immigrant engineers. It agreed to an implemented co-operation process that targets immigrant engineers seeking professional assistance.

Events included 19 one-on-one sessions for members to evaluate and discuss their individual development, an interview skills and *curriculum vitae* preparation workshop and a session on overcoming barriers for immigrant engineers.

Technical Interest Groups

Technical Interest Groups provide programmes of activities and services associated with a particular engineering speciality or discipline on a national basis.

Australasian Association for Engineering Education (joint with Engineers Australia)

Chair: Lyn Brodie

Membership: 923

The Australasian Association for Engineering Education (AAEE) aims are to improve the quality, relevance and performance of engineering education in Australasia.

Major initiatives included continuing the programme for the Associate Deans of Teaching and Learning which allows free exchange of ideas, discussion of changes in curriculum and delivery, and identifying the challenges facing engineering academics at an annual meeting. The website was shifted and redeveloped. It is now hosted by Engineers Australia. Papers presented at past conferences are now searchable, making it easier to access information. The Association further developed the Champions programme aiming to have a champion in each of institutions that have AAEE members. Planning with Otago Polytechnic and Massey University, which will jointly host the 2014 AAEE conference, continued. The 23rd annual conference was themed around

"The Profession of Engineering Education: Advancing Teaching, Research and Careers". The AAEE held the final set of two workshops "Closing the Loop – Good Practice to Good Research to Good Practice".

Australasian Tunnelling Society

New Zealand Representative:

Evan Giles

The Australasian Tunnelling Society is jointly sponsored by IPENZ, Engineers Australia and the Australasian Institute of Mining and Metallurgy. It is a non-profit organisation uniting members of the engineering and scientific professions, along with tunnellers, miners and suppliers in its membership. It aims to provide programmes of activities, technical conferences, symposia and meetings designed to stimulate, educate and inform those with an interest in the field.

Electrotechnical Group

The Electrotechnical Group provides a co-operative forum for electrical and electronic engineering activities. It draws membership from New Zealand-based electrical and electronic engineers. By affiliation, members of the Institution of Engineering and Technology in the United Kingdom and the Institute of Electrical and Electronic Engineers in the United States are also connected to the Group.

The Electrotechnical Group is in recess at present.

Maintenance Engineering Society of New Zealand

Chair: Karl Hayward

Membership: 325

The purpose of the Maintenance Engineering Society of New Zealand (MESNZ) is to inform its members on important national and international developments and issues, contribute to knowledge development, support the identification of good engineering practice, prepare informed comment on public policy issues and create a national network amongst members with similar technical interests by regular communication.

Major initiatives included a mechanical engineering qualifications' review, to support the Government's targeted review of qualifications, an apprenticeship review, establishing a counterfeit and sub-standard goods working group, a review of machinery safety standard and providing advice to the Ministry of Business, Innovation and Employment about the new health and safety model proposed by the Government.

Events included the National Maintenance Engineering Conference, and three networking evenings.

Mechanical Engineering Group

Chair: Tim Lynch

Membership: 424

The Mechanical Engineering Group has strong links and support from the Institution of Mechanical Engineers, London. The Group's aims are to encourage social and technical liaison between engineers of all levels who have an interest in mechanical technology. The Group, which is currently active in Auckland and Wellington, holds regular meetings of technical interest, and arranges visiting speakers to talk to the Group, as well as visits to works and projects of specific mechanical engineering interest.



The Waikato University Formula SAE team with their completed car. From left: Brad Webb, Ben Jackson, Michael Hoogendoorn, Isaac Hayes, Daniel Lamb, Kevin Duncan, Avinash Chavda and Samuel Brien.

A major initiative was a tour of New Zealand by Ken Tushingham, the Oceania Region Chairman of IMechE.

Events during the year included presentations on "Southern Spars – the Design Process", "3D Printing – Where to for the Future?", "The Hamilton Jet, from Rivers to Oceans", "The Future use of Marine Energy in New Zealand", the Auckland and Waikato University Formula SAE competition, and a presentation on the final year mechanical engineering projects from The University of Auckland. The Group hosted a presentation on the Martin Jetpack and Buckley Systems. Other activities included site visits to Windsor Engineering and to the New Zealand Steel Melter Tapping Equipment.

New Zealand Coastal Society

Chair: Deirdre Hart

Membership: 367

The New Zealand Coastal Society (NZCS) promotes and advances knowledge and understanding of the coastal zone. It provides a forum for those with an interest in the coastal zone to communicate amongst themselves and to the public. The multi-disciplinary nature of coastal management in New Zealand means many of our members are from areas other than engineering.

Major initiatives included a complete website overhaul and upgrade. The Society introduced the inaugural Coastal Champion Awards – with the national award valued at \$1,000, plus regional runner-up awards to target coastal "good-sorts". Another innovation was the inaugural Professional Development Award – valued at up to \$10,000. This is for professional NZCS members to improve understanding and the sustainable management of New Zealand's coastal marine environment. NZCS completed a major review of its financial structure and is currently implementing strategic financial management changes.

Events included the 20th annual conference which had high attendance, and at which a wide range of high quality presentations and keynote addresses were given. A review of NZCS's past and future directions, and the launch of several new community, professional and financial management initiatives, were announced. In addition, several regional events comprising talks and workshops were held in the regional chapters.



Australian and New Zealand certifiers and regulators and IPENZ staff at AJ Hackett Bungy's Nevis Arc giant swing access walkway.

The Sustainability Society

Chair: Carol Boyle

Membership: 222

The Sustainability Society fosters the development of sustainability engineering and science in New Zealand. The Society takes a complex systems' approach to sustainability, recognizing that human and natural systems are increasingly interconnected. It generates new sustainability thinking and practice through workshops, seminars, forums and international conferences that address the different facets of sustainability engineering. The Society also actively contributes to the processes through which sustainability is integrated into public strategy and activity.

Major initiatives included making submissions to the Auckland Plan and subsequent Unitary Plan consultation processes, and continuing to participate in the Auckland Council Energy and Climate Change Mitigation Steering Committee. The Society delivered a Green Infrastructure workshop at the New Zealand Planning Institute conference to

further develop the relationship with the planning community, and hosted the Infrastructure Sustainability Council of Australia's visit to New Zealand. It facilitated a number of meetings with key infrastructure stakeholders. In addition, a representative presented at the Institute of Public Works Engineering Australia 2013 conference in Darwin, and contributed an article for the World Federation of Engineering Organisation's newsletter offering a perspective on sustainability and engineering in New Zealand.

Events included the continuing Auckland Forum series on "Transport, Energy and Urban Form", "Visions of a Liveable City", "Sustainability Costs, Measurements and Returns" and "Green Infrastructure". The Society hosted the inaugural Sustainability Society Awards where life membership was awarded to four outstanding contributors to the engineering profession: David A. Thom, John Duder, Norm Firth and John Peet. It hosted international visitor, Sara Parkin from Forum for the Future in the United Kingdom, who presented evening seminars

in both Auckland and Christchurch, facilitated a one-day workshop and spoke to various media. The Society partnered with a Transforming Cities Research Initiative at The University of Auckland to host Sean Audain from Wellington City Council who presented his work in modelling Wellington City. The Society also hosted a Green Infrastructure Research workshop which brought together experts from across New Zealand, Australia, Asia and the United States to discuss current activity and of issues that need to be addressed in the future.

Heavy Vehicle Engineers

Chair: Michael Eccles

Membership: 68

Members of the Heavy Vehicle Engineers (HVE) Group are involved in the design, specification, modification, repair and certification of heavy motor vehicles. The HVE provides a learned forum for its members to support and mentor each other, share and discuss information, submit for changes in legislation and to work with the NZ Transport Agency (NZTA) and keep it

informed of trends and issues within the industry.

Major initiatives included advancing the Heavy Vehicle Engineering Council, an initiative to facilitate a group representative of the Heavy Vehicle industry, which embraces NZTA, the Road Transport Forum, the Motor Industry Association of New Zealand and HVE. The purpose is to represent the interests of the industry and to develop codes and best practice to bring consistency and innovation in the industry. The group initiated initiation and financed the production of a commentary on New Zealand Standard “NZS 5446: Heavy vehicle towing connections – Drawbeams and drawbars” to assist members.

Other major initiatives included updating “Welding in the Transport Industry”, which NZTA distributed as a technical bulletin in February, and disseminating information to keep members professionally informed, encourage consistency and provide opportunity for proactive involvement in relevant issues.

A mini conference was held in April and the Annual General Meeting/Conference in September.

New Zealand Society on Large Dams

Chair: Peter Amos

Membership: 183

The New Zealand Society on Large Dams (NZSOLD) brings together the owners, users, designers and builders of dams and represents their interests on the national scene. It is the New Zealand national committee on the International Commission on Large Dams (ICOLD) actively sets industry standards.

Major initiatives included a detailed review of the “Dam Safety Guidelines”, which was closely linked to the Dam Safety Regulations that are due to come into force in July 2014, once amendments to the Building Act are passed into law. The Society maintained an active involvement in the legislation's development and

provided responses to the Select Committee and questions from government officials. The Society's annual prize of \$3,000 was awarded to top engineering students in water related subjects at the Universities of Auckland and Canterbury.

Events during the year included a Dam Safety Building Consenting Road Show in Hamilton, and a conference in Perth with our sister group in Australia (ANCOLD). The Society sent representatives to the ICOLD 81st General Assembly in Seattle, United States of America. NZSOLD members are actively involved in three ICOLD technical committees.

Railway Technical Society of Australasia

Chair: Barry Fryer

Membership: 1,061 members across Australasia (75 in New Zealand)

The Railway Technical Society of Australasia (RTSA) is a joint technical society of IPENZ and Engineers Australia which promotes the practice and advancement of railway technology and management.

Major initiatives included two short courses, “Insight into Rolling Stock Engineering”, and “Insight into Track Engineering” which were developed and delivered at two locations in Australia. The RTSA awarded a number of scholarships and awards to recognize and encourage continued contributions to the industry.

Events included the New Zealand Chapter's technical presentations in both Auckland and Wellington. These occurred on an almost monthly basis to help promote the latest advancements in railway technology and management

Recreation Safety Group

Chair: Kelvin Barclay

Membership: 30

The Recreation Safety Group (RSE) facilitates the work of Chartered Professional Engineers who routinely certify amusement devices and rides.

The RSE aims are to continuously improve the safety of public recreational activities by providing independent professional advice and inspection services, and to advocate for engineering safety across a broad range of recreational activities.

Major initiatives included advocating for regulation of land and waterborne inflatable devices, and contributing to the Activity Specific Guidelines for the safe operation of all terrain vehicle and abseiling adventure activities. The Group advocated for changes to the Amusement Device Regulations 1978 in respect of devices powered by gravity and other energy sources, facilitated dialogue between the NZ Transport Agency, Local Government New Zealand, Maritime New Zealand and the Ministry of Business, Innovation and Employment on matters relating to recreation safety. It also continued to interact with Engineers Australia and Standards Australia's ME51 committee.

Rivers Group

Chair: Mark Pennington

Membership: 238

The Rivers Group aims to bring policy-makers, practitioners, and community interests together to promote a multi-disciplinary approach for river management that reflects cultural and societal diversity in an integrated and holistic manner.

Society of Fire Protection Engineers

New Zealand Chapter President:

Debbie Scott

Membership: 206

The New Zealand Chapter of the Society of Fire Protection Engineers (SFPE) was established in 1994 in response to the introduction of performance-based legislation. The Society aims to lift the level of professionalism and knowledge of all parties involved in fire safety engineering.

Technology Education New Zealand

Chair: Dr Wendy Fox-Turnbull

Membership: 576

Technology Education New Zealand (TENZ) is a professional network with individual and institutional membership spanning the early childhood, primary, secondary and tertiary sectors. Its mission is to “provide professional leadership in the promotion and support of the technology learning area in the New Zealand curriculum”, and its vision is for “seamless transitions in technology education supporting a national culture of innovation”.

Major initiatives have included: restructuring the TENZ National Council, upgrading the website, restructuring the Techlink website, focusing on regional cluster development and launching the new Australasian *Journal of Technology Education*. TENZ was active in the technology education subject association coalition (TESAC), with the other three major technology associations (Home Economics and Technology Teachers' Association of New Zealand; New Zealand Graphics and Technology Teachers' Association; and the New Zealand Association for Computing, Digital and Information Technology Teachers) to foster the development and promote the nature and value of the technology learning area. TENZ provided programming and logistical

support for the inaugural Technology Education Subject Associations Coalition national technology education conference.

Events during the year included professional gatherings held in the Auckland/Northland, Waikato/Bay of Plenty, Wellington, and Northern and Southern South Island regions. Eight planned issues of the national *t-news* electronic newsletter were published.

IPENZ Transportation Group

Chair: David Wanty

Membership: 1,200

The object of the IPENZ Transportation Group is to advance the art and science of road traffic and transportation engineering practice and to provide a focal point for those working in the profession. Major initiatives included improving relationships and liaison with the NZ Transport Agency and the Ministry of Transport regarding key elements of the Transportation Group's Strategic Plan 2013-2016. The NZ Modelling User Group (NZMUGS) developed updated Transportation Modelling Guidelines, and reinvigorating the Signals NZ User Group (SNUG) activities and the Group's research sub-committee.

The Trip Database Bureau is proceeding with undertaking and collecting additional trip rate surveys, and the Group's National and Branch Committees developed submissions

on several proposed regulatory changes by the NZ Transport Agency.

Events included organising the Group's annual conference, and attending the NZMUGS annual conference and the SNUG annual workshop. Various activities were held by each of the five Group branches, including co-hosting a national speaking tour by Todd Litman, of the Victoria Transport Policy Institute, Canada.

Urban Design Forum

Chair: David Mead

The Urban Design Forum (UDF) is a joint Technical Interest Group with the New Zealand Planning Institute, New Zealand Institute of Architects, New Zealand Institute of Landscape Architects and the New Zealand Institute of Surveyors.

The purpose of the UDF is to promote cross-disciplinary understanding of urban design, to raise awareness at national and local levels of the benefits of urban change and to provide a forum for discussing design-based approaches to developing and managing New Zealand towns and cities. Membership is open to anyone interested in urban design and includes planners, architects, landscape architects, engineers, surveyors and other professionals, together with politicians, academics and developers.

“Engaging with IPENZ provides a tremendous opportunity ... you get out well in excess of what you put into it.”

MARK APELDOORN IPENZ Transportation Group

Collaborating Technical Societies

These societies are self-supporting and self-governing. They operate as separate legal entities, working alongside IPENZ.

Aircraft Engineering Association of New Zealand

Chair: Don McCracken

The Aircraft Engineering Association of New Zealand (AEANZ) formed out of the engineering division of the Aviation Industry Association. The main purpose for the restructure was to allow individual membership of the Association (previously, membership was restricted to companies). Other intended benefits were the greater sharing of knowledge, education and work experience and the professional development of aircraft engineers.

Civil Engineering Testing Association of New Zealand

Chair: Jayden Ellis

Membership: 126

The objectives of the Civil Engineering Testing Association of New Zealand (CETANZ) are continuous improvements to the standard of testing in New Zealand, through training and other means, and to advance the status of testing to the construction industry. CETANZ communicates changes in standards of technology to the testing industry, provides a code of ethics for its members and represents the views of the New Zealand Testing Services regulatory authorities. It promotes the benefits of high quality testing services to the construction industry, helps members develop suitable proficiency and inter-laboratory testing programmes and conducts activities such as meetings, conferences, and technical events. It promotes

civil engineering testing as a career, and supports and promotes the Laboratory Technician qualification for its industry.

Major initiatives included producing Scala Calibration Guide and Irregularity Reports and completing a review of NZS 4407: Test Methods of Sampling and Testing of Roding Aggregates. The Association produced a guideline for dealing with asbestos in recycled aggregate, reviewed the Cement and Concrete Association of New Zealand's "Sampling and Testing of Concrete Cores" guideline, and contributed to the Association of Geotechnical and Environmental Specialists working group for the "Electronic Transfer of Geotechnical and Geoenvironmental Data Guideline" document. CEANZ took part in the AS/NZS Committee CE006 – AS2891 Asphalt Testing, and contributed to a review of the NZ Transport Agency T/19, F/1, B/9, T/1 for the National Pavement Technical Group. It provided advice and information to the NZ Transport Agency regarding Polished Stone Value (PSV) Test and PSV Control Stone, completed a number of national testing proficiency rounds, made submissions on the review of the proposed structure of Standards New Zealand, took part in the review of the Civil Engineering Laboratory Technician and Senior Laboratory Technician qualification with InfraTrain and produced four newsletters.

Events included participating in four technical working group meetings and four careers' and events' working group meetings.

Concrete Society of New Zealand

Chair: Jason Ingham

Membership: 734

The Concrete Society of New Zealand (NZCS) encourages and supports the development of greater knowledge and understanding of all aspects of structural and architectural concrete.

Plans for a review of NZS 3101 Concrete Structures Standard were developed and material to assist the review collated. Early career resources for younger members of the Society were developed, with a view to growing NZCS's membership. A half-day seminar series, "Seismic Assessment of Residual Capacity of Existing Bridges – Lessons Learned from the Canterbury Earthquakes" was held, in conjunction with a two-day bridge conference. A seminar series was taken to seven venues on the topic of "Fundamentals of Reinforced Concrete Seismic Design". A Base Isolation 101 seminar was held in collaboration with the Cement and Concrete Association of New Zealand and a seminar series on "Specifications, Quality Assurance and Performance of Concrete" was also delivered.

The Society has planning underway for its 50th anniversary in 2014.

The Sandy Cormack Award was presented to Bridget Allan and Sheena Chen from The University of Auckland, for their presentation of a paper on "Experimental Testing of Precast Concrete Panel Connections", co-authored by Richard Henry and Jason Ingham.

The Concrete Prize winners for 2012 were Samuel Corney and Jeremy Wymer of The University of Auckland, Mohammad Soleymani Ashtiani of the University of Canterbury, and Ben Allnatt of Victoria University of Wellington.

The e-news was emailed to members quarterly to keep them informed on a regular basis and advise them of any key events in the concrete industry.

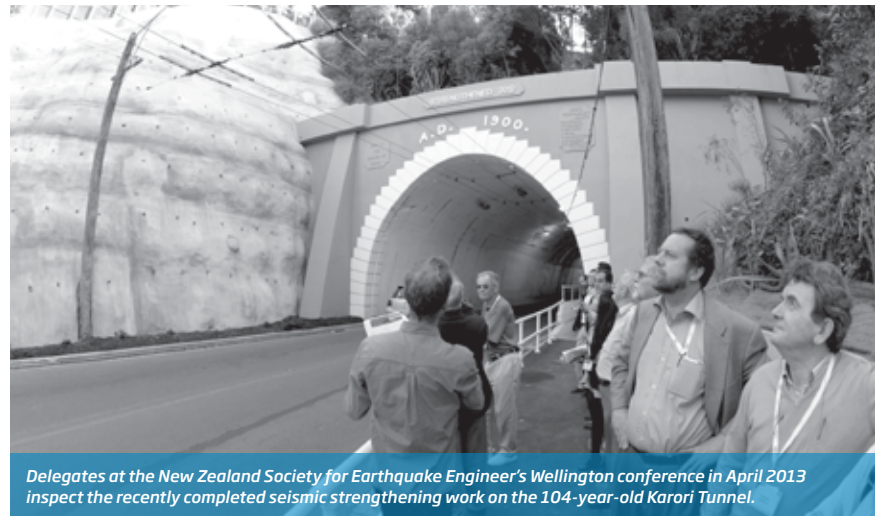
Energy Management Association

Chair: Priyani de Silva Currie
Membership: 350

The Energy Management Association (EMANZ) promotes the highest standards of energy management skills and competence to foster and facilitate the integration of sound energy management practices into all sectors of the New Zealand economy. EMANZ provides a forum for discussing energy management issues, skills and techniques to develop practical energy management policy proposals and represent these where appropriate.

EMANZ continued to train, accredit, develop and promote information to improve energy management awareness and decision making. It completed an energy audit standard for industrial refrigeration, which is now available on the EMANZ website. EMANZ contributed to the review of the Australia/New Zealand Energy Audit Standard, which is due for release by mid-2014.

The Association completed a "Best Practice Guide" for Commercial Lighting Retrofits with endorsement from the Lighting Council and the Illuminating Engineering Society. This Guide caps off a highly successful and comprehensive initiative by EMANZ for the Energy Efficiency Conservation Authority, raising awareness of the opportunities to save energy with commercial lighting upgrades. Another highlight was the strong take up of a new training and accreditation



course – Certified Measurement and Verification Practitioner. This course and accompanying exam recognizes competence in using the international protocol in Measuring and Verifying Energy Savings for commercial and industrial scale energy upgrade projects.

Institute of Public Works Engineering Australasia, New Zealand Division

President: Braden Austin
Membership: 950

The purpose of the Institute of Public Works Engineering Australasia, New Zealand Division (IPWEA NZ) is to be a leader in engineering and asset management for sustainable communities.

This year, a major initiative for INGENIUM involved merging with IPWEA to become its New Zealand division.

Events during the year included the IPWEA NZ Annual Conference, which was held in Dunedin, and the Local Government Asset Management and Engineering Directors Forum. In addition, we held 16 Branch meetings, facilitated the New Zealand Asset Management Advanced Asset Management Forum and supported the New Zealand Engineering Excellence Awards as an Awards Partner.

New Zealand Geotechnical Society

Chair: Gavin Alexander
Membership: 1,030

The Society aims to encourage study and research within the fields of soil mechanics, rock mechanics and engineering geology. This promotes advancing the practice and application of these disciplines in engineering, and implementing the statutes of the respective international societies that are applicable to New Zealand.

The Society won the inaugural Outstanding Member Society Award of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). The Society is particularly honoured by this, as a potential pool of 80 countries competed for the Award, which was presented in Paris at the International Society's four-yearly conference.

A major initiative was launching, with IPENZ, the Professional Engineering Geologist registration. Submissions were made to IPENZ in relation to the Chartered Professional Engineers Register and to the Ministry of Business, Innovation and Employment (MBIE) about building seismic performance. The Society contributed to MBIE's Engineering Reference Group, and continued to make progress on one existing and two new "Seismic Design Guidelines".

The first annual Student Poster Awards culminated in an awards' evening in Auckland, which was streamed live online. Twenty-five submissions for this Award were received from all over New Zealand.

In partnership with the Institution of Civil Engineers we organised the 51st British Geotechnical Association's Rankine Lecture, which was presented by Professor Scott Sloan. The Society published two *Geomechanics News Bulletins* and in May we admitted our 1,000th member to the Society.

New Zealand Institution of Gas Engineers

Chair: Nick Foster

Membership: 123

The New Zealand Institution of Gas Engineers (NZIGE) is an active and supportive network of gas professionals. It aims to enable communication and education for members, technicians and engineers.

Major initiatives included NZIGE's continued support of the development of standards in the gas industry, with members contributing to all current Gas Sector Standards' Committee projects. NZIGE continued to maintain good relationships within the evolving gas industry organisations, particularly with the LPGA, the Gas Association of New Zealand and the Ministry of Business, Innovation and Employment. The Institution furthered its longstanding commitment to improving gas industry competencies as members of the Specialist Matter Experts group advising the Skills Organisation on gasfitting qualifications.

Events included jointly, with LPGA, organising the annual Gas New Zealand Forum in Rotorua. This attracted over 130 delegates and 14 trade displays.

New Zealand Society for Earthquake Engineering

Chair: Stefano Pampanin

Membership: 713

The New Zealand Society for Earthquake Engineering (NZSEE) aims to foster the advancement of the science and practice of earthquake engineering. The Society promotes international co-operation among scientists, engineers and other professionals in the broad field of earthquake engineering through interchanging knowledge, ideas, research results and practical experience. This endeavour aims to mitigate the worst effects of earthquakes on our society.

Major initiatives included providing input into various Ministry of Business, Innovation and Employment (MBIE) stakeholder groups to assist with developing improved practice for building design and construction following the Canterbury earthquakes. NZSEE prepared a submission in response to MBIE's consultation document, "Building Seismic Performance: Proposal to Improve the New Zealand Earthquake-prone Building System", which was issued in December 2012, and led a major review of the NZSEE document "Assessment and Improvement of the Structural Performance of Buildings in Earthquakes", which was first published in 2006. The Society is undertaking this work in collaboration with the Structural Engineering Society New Zealand and the New Zealand Geotechnical Society, funded by MBIE and the Earthquake Commission. Four issues of the *Bulletin for the Society of Earthquake Engineering* were published and a Memorandum of Understanding was signed with the Earthquake Engineering Research Institute (EERI) of the United States of America to strengthen scientific and technical collaboration in relation to earthquake mitigation.

Events included the annual conference, which was themed "Same Risks – New Realities". The three keynote speakers also gave presentations in Auckland and Christchurch, and one also presented in Dunedin. The NZSEE website now provides a great range of material on earthquake engineering that is easier to navigate. Following the July Cook Strait and August Lake Grasmere earthquakes and their sequence of aftershocks, materials and links were uploaded onto the NZSEE website. This provided useful information for engineers carrying out building assessments in the Wellington central business district, Seddon and Blenheim areas.

Society of Chemical Engineers New Zealand

Chair: Brett Young

The objectives of the Society of Chemical Engineers New Zealand (SCENZ-ICHEME in New Zealand) are to advance the science and practice of chemical engineering. Its members include practising chemical engineers and those with a professional interest in related activities including biotechnologists and chemists.

Society of Materials New Zealand

Chair: Mark Jones

Membership: 28

The Society serves the needs of those involved in the technology and science of metals, polymers and ceramic materials. Membership is open to professional engineers, scientists, technicians, students and anyone else who has an interest in the fabrication, processing or use of engineering materials. The group holds regular technical meetings, organises seminars and site visits, supports students and holds a symposium every two years.

Major initiatives included co-sponsoring the New Zealand Conference on Chemical and Materials Engineering 2013. Our co-sponsors are the Society of Chemical Engineers in New Zealand and the Institution of Chemical Engineers. The Richard Henry Cooper Memorial Award, for outstanding contributions to metallurgical and materials engineering, was awarded in New Zealand for the first time since 2006. The Society awarded prizes to undergraduate students from The Universities of Auckland and Waikato.

Events included a presentation competition for postgraduate students. Professor Mark Taylor, from The University of Auckland and Director of the Materials Accelerator, presented a seminar entitled "Demand and Engagement Model for Materials and Manufacturing research in New Zealand". Dr Steven Matthews, from Massey University's School of Engineering and Advanced Technology presented a seminar on "Thermal Spraying: Industry Overview and NZ Research Summary".

Structural Engineering Society New Zealand

Chair: John Hare

Membership: 1,512

The Structural Engineering Society New Zealand (SESOC) vision is for "An enhanced built environment through structural engineering excellence". Its mission is to promote and advance the science, art and practice of structural engineering for the benefit of society, to uphold the profession of structural engineering, to provide leadership and structural engineering advice to society on key issues and to meet members' professional and development needs.

Major initiatives included preparing a draft discussion paper, following the recommendations of the Canterbury Earthquakes Royal Commission for members to consider the possible implications of a higher qualification (than the Chartered Professional Engineer qualification) for structural engineers. The Society participated

in the newly established Engineering Reference Group, providing advice to the Ministry of Business, Innovation and Employment, and is collaborating with the New Zealand Society for Earthquake Engineering to prepare an update to the Guidelines for the Assessment and Improvement of the Structural Performance of Buildings in Earthquakes. SESOC is also collaborating with the New Zealand Geotechnical Society to prepare guidance for foundation design, and with Engineers Australia to host the 2014 Australasian Structural Engineering Conference.

Events included a biennial (and highly successful) conference, which was attended by over 200 people. In addition, a major update to the SESOC soils design software was completed and two issues of the *SESOC Journal* were published.

Timber Design Society

Chair: Daniel Scheibmair

Membership: 380

The Society's purpose is to foster the advancement and dissemination of knowledge relating to the design of timber structures and elements.

Major initiatives included focusing on promoting the use of timber and assisting designers and engineers with information and networking opportunities. The Society published four copies of *The New Zealand Timber Design Journal* and strengthened its relationship with NZ Wood, through Wood Smart Seminars jointly hosted in Christchurch and Auckland. The Society supported the Timber Design Awards to showcase advances in timber construction and use and awarded two student scholarships to support ongoing timber research. The Society hosted a multi-disciplinary forum to discuss roadblocks and opportunities for use of timber in commercial and industrial buildings and is supporting and assisting in progressing the review of NZS 3603 – the standard for the design of timber structures.



SESOC President John Hare (left) presents the 2012 SESOC President's Award for Outstanding Services to Structural Engineering in New Zealand to Trevor Robertson.

Roll of Honour

IPENZ recognizes outstanding individual engineering achievements or contributions.

Recognition of Service

Distinguished Fellows

A Distinguished Fellow shall be a Fellow who is distinguished by work in engineering, technology and science or otherwise whom the Institution desires to honour.

David Brunsdon	John Raine
Nigel Priestley	Adam Thornton

Fellows

Fellows are elected in recognition of their contribution to the engineering profession or the Institution.

Noel Band	Peter Lipscombe
Robert Blyth	Gary Main
Peter Campbell	Robin McNeill
Howard Chapman	Rob Merrifield
Nigel Connell	David Prentice
Neil Cook	Howell Round
Robert Crosbie	Debbie Scott
Brian Duncan	Gary Williams
Jane Goodyer	John Wood
Graeme Hamilton	Simon Wood
John Hare	Alison Andrew
Michael Howat	Alex Baitch
Charles Jarvie	David Bull
Robert Kirkpatrick	Xun Xu
Jonathan Leaver	

Honorary Fellows

An Honorary Fellow shall be a person who is distinguished by work in engineering, science or otherwise whom the Institution desires to honour.

Geoff Shaw

Life Members

G K Alderton MIPENZ	B C Crisp MIPENZ
J C R Andrews MIPENZ	T R Cudby MIPENZ
D K Armstrong DistFIPENZ	G R Dunn MIPENZ
R G Bauld MIPENZ	M F Egan MIPENZ
G D Berry MIPENZ	J L Ennis FIPENZ
V J Bidwell MIPENZ	P M Farrier MIPENZ
G R Bowler MIPENZ	B C Gazzard MIPENZ
M A Brims MIPENZ	G R Goodman FIPENZ
J W Butterworth FIPENZ	J H Grayling MIPENZ
A J Carr FIPENZ	J R Greenfield MIPENZ
N J Castle FIPENZ	B Haisman MIPENZ
J N S Chalmers GIPENZ	J A Harper FIPENZ
J R Chivers MIPENZ	T N Harper MIPENZ
R B Clark MIPENZ	J I Hine MIPENZ
G M Cleghorn FIPENZ	R A Hodgson FIPENZ
I F J Coombe MIPENZ	W A Horne MIPENZ
R L Couch MIPENZ	W R Howie FIPENZ
R F Crimp MIPENZ	F J Irvine MIPENZ
	D Jenkins MIPENZ
	M Kwan MIPENZ

J C R Lander MIPENZ	J V Richards MIPENZ
R A Laybourn MIPENZ	G J Robertson DistFIPENZ
I D Leask MIPENZ	P Rushworth MIPENZ
I D MacGregor MIPENZ	E T Sainsbury MIPENZ
D W Mackenzie MIPENZ	A M Salek MIPENZ
A G Mair MIPENZ	G A Still MIPENZ
D L McGlashan FIPENZ	P N Sutton MIPENZ
A C McIntosh MIPENZ	J M Taylor MIPENZ
E L McKeachie MIPENZ	F T Teague MIPENZ
R F Meyer DistFIPENZ	J E Tulloch MIPENZ
W G Mitchinson MIPENZ	M D Turner MIPENZ
J L Morrison FIPENZ	D I Tyler MIPENZ
E M Murphy MIPENZ	G B Walford FIPENZ
W J Page MIPENZ	G R Walker FIPENZ
G Pallo FIPENZ	M J Walker FIPENZ
R D Pope MIPENZ	A T Watkins FIPENZ
L R Prebble FIPENZ	J F Webley MIPENZ
C R Preston-Thomas FIPENZ	R W L Wells FIPENZ
M J N Priestley DistFIPENZ	G H Wheeler FIPENZ
	R B Wilkinson DistFIPENZ
	D B Willmott MIPENZ
	J D Winter MIPENZ
	A W Wood MIPENZ

“The Fellows and Achievers Awards celebrate the achievements of our engineering peers and acknowledge their contributions to a diverse and rewarding profession.”

ANDREW CLELAND Chief Executive

Awards

Fulton-Downer Gold Medal - The President's Award

John Hare

Turner Award for Professional Commitment

Peter Millar

Supreme Technical Awards for Engineering Achievers

This award category is presented in eight engineering fields. The awards alternate annually, with four presented each year.

Freyssinet Award for Building and Construction

Pathmanathan Brabhakaran

Angus Award for Water, Waste and Amenities

John Crawford

Skellerup Award for Chemical, Bioprocess and Food

Paul Austin (Posthumous)

Evan Parry Award for Energy Systems

Ray Brown

Ray Meyer Medal for Excellence in Student Design

High Temperature Superconductor CFW Machine – Lachlan Clelland, BEngTech (Mechanical), Wellington Institute of Technology.

Supervised by Adrian Ferguson (Academic Supervisor), and Rod Badcock and Chris Bumby (Industrial Supervisors)

Recognizing our Volunteers

As a not-for-profit membership organisation, the continuing work of IPENZ relies heavily on its volunteers. National Office would like to thank all of those who have given their time and energy to support both IPENZ and the engineering profession. This includes (but is not limited to):

- Chairs and Committee members of Branches, Technical Interest Groups, Engenerate Chapters, and Heritage Chapters
- Practice Area Assessors
- Futureintech Ambassadors
- Mentors
- Policy paper reviewers and contributors
- Transpower Neighbourhood Engineers
- All those who assist in the preparation and review of practice notes
- IPENZ representatives on Standards Committees
- All those Members who support Branch activities

Recognition of Sponsors

- Opus International Consultants
- GHD
- Pacific Steel
- Fletcher Construction
- MAS

Obituaries

R E Hermans FIPENZ	M T Lush MIPENZ
T M Campbell MIPENZ	W H Mansell MIPENZ
P C Austin FIPENZ	B T Crossley MIPENZ
T N Chatterton MIPENZ	G J Ade MIPENZ
N Nadesanathan MIPENZ	O C Cundall MIPENZ
W J Rourke FIPENZ	R J Davies FIPENZ
N H McDougall MIPENZ	J L Fulton MIPENZ
A A M Loughnan FIPENZ	I W Black FIPENZ
C D Gamble FIPENZ	G K Lovatt MIPENZ
R J Adams MIPENZ	P A Williams AIPENZ
R H Peart MIPENZ	R A Watts MIPENZ
E D Hounsell MIPENZ	B G O'Donnell FIPENZ
P M Gillon MIPENZ	J B Bushell MIPENZ
D H James MIPENZ	A W Dickie MIPENZ
J W Built MIPENZ	H A Wily MIPENZ
L Tone MIPENZ	D Sinclair MIPENZ
J S Moore AIPENZ	R M Dickie FIPENZ
	W B Stilwell MIPENZ
	D F Fowlds MIPENZ
	C T Yap MIPENZ

IPENZ Foundation

The Foundation helps Members and their families who have suffered misfortune; it also undertakes a public good role on the profession's behalf.

The objectives of the IPENZ Foundation are to: encourage New Zealand school leavers into tertiary education in engineering and technology; educate New Zealanders on the role of technology and engineering in sustainable economic, environmental and social development, and on significant engineering and technological achievements that form part of New Zealand's national heritage. It aims to further, in New Zealand, the development and practical application of scientific knowledge in engineering or technology for the wider public good, and to assist New Zealand Members suffering hardship due to physical or mental sickness, disability or incapacity to participate in education or rehabilitation programmes that enable them to resume a career.

The Foundation, in conjunction with IPENZ Branches in Auckland, Taranaki, Tauranga, Canterbury, Wellington and Waikato, provided six scholarships for students commencing engineering study at a tertiary level.

In response to the Government's Budget commitment to further engineering education, the Trustees requested an opportunity to work with relevant government officials on promoting engineering careers. This initiative is on-going.

The Foundation provides funds for The Skills Organisation (formerly the Electro-technology Industry Training Organisation) to co-ordinate the Schools-Industry visits programme in 2013. This enables selected student groups in Auckland and Christchurch to be introduced to engineering career options within hi-tech industries. The Foundation also contributed to the cost of publishing a book on New Zealand rivers.

The investment portfolio has been conservatively invested over the last four years, holding value in a market of turmoil.

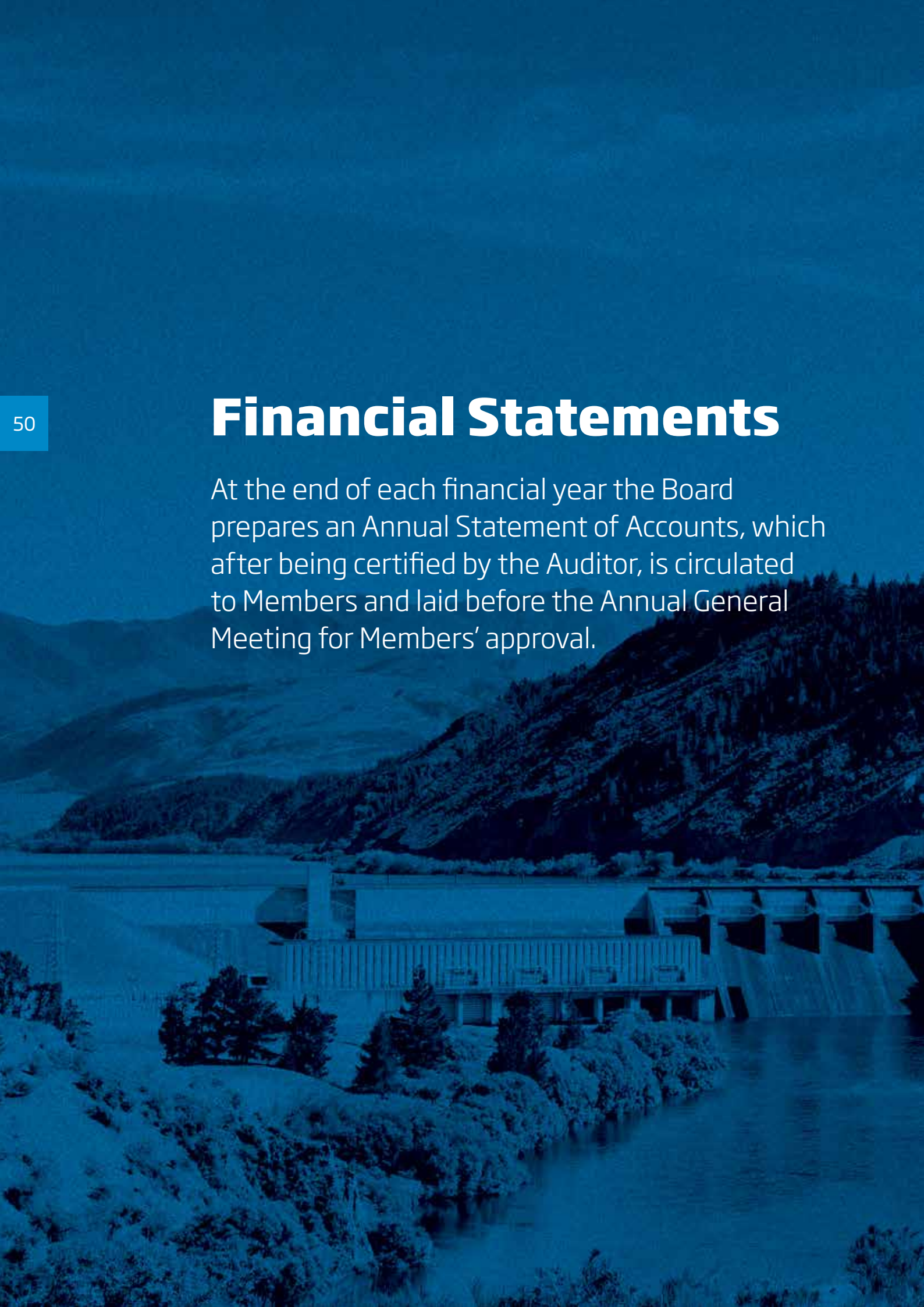
It aims to further, in New Zealand, the development and practical application of scientific knowledge in engineering or technology for the wider public good

Foundation Trustees

Roly Frost (Chair)	Neville Jordan
Peter Browne	Tiina Hall-Turner
Carol Caldwell	Peter Jackson

Financial Statements

At the end of each financial year the Board prepares an Annual Statement of Accounts, which after being certified by the Auditor, is circulated to Members and laid before the Annual General Meeting for Members' approval.





Financial Statements



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Independent Auditor's Report on the Summary Financial Statements

To the Members of The Institution of Professional Engineers New Zealand Incorporated

The accompanying summary financial statements, which comprise a summary statement of financial position as at 30 September 2013, a summary statement of comprehensive income, summary statement of changes in equity and summary cash flow statement for the year then ended, and related notes, are derived from the audited financial statements of The Institution of Professional Engineers New Zealand Incorporated. We expressed an unmodified audit opinion on those financial statements in our report dated 13 December 2013.

The summary financial statements do not contain all the disclosures required for full financial statements under generally accepted accounting practice in New Zealand. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of The Institution of Professional Engineers New Zealand Incorporated.

Board Members' responsibility for the Summary Financial Statements

The Board Members are responsible for the preparation of a summary of the audited financial statements in accordance with FRS-43: *Summary Financial Statements*.

Auditor's responsibilities

Our responsibility is to express an opinion on the summary financial statements based on our procedures which were conducted in accordance with International Standards on Auditing (New Zealand) (ISA (NZ)) 810, *Engagements to Report on Summary Financial Statements*.

Other than in our capacity as auditor we have no relationship with, or interests in, The Institution of Professional Engineers New Zealand Incorporated.

Opinion

In our opinion, the summary financial statements derived from the audited financial statements of The Institution of Professional Engineers New Zealand Incorporated for the year ended 30 September 2013 are consistent, in all material respects, with those financial statements in accordance with FRS-43.

Grant Thornton New Zealand Audit Partnership
Wellington, New Zealand
13 December 2013

Summary Statement of Comprehensive Income

For the Year Ended 30 September 2013

	2013	2012
	\$	\$
Income		
Member Subscriptions and Related Fees	3,543,709	3,354,395
Competency Assessment Fees	692,614	438,112
Contract Income	1,435,656	2,006,679
Interest	345,228	316,785
Other Income	2,451,342	2,052,196
Technical and Special Interest Groups	764,810	807,443
Total Revenue	9,233,359	8,975,610
Expenditure		
Consultancy Competency Assessments	322,259	229,607
Depreciation and Amortisation	180,289	214,419
Direct Contract Expenses	305,658	453,512
Publishing, Production and Distribution Costs	350,233	309,938
Employee Remuneration	4,335,133	4,190,351
Travel and Meeting Expenses	513,765	377,162
Other Expenses - See Note	3,031,711	2,192,689
Technical and Special Interest Groups	782,427	723,689
Total Expenditure	9,821,475	8,691,367
Surplus/(Deficit) before Tax	(588,116)	284,243
Income Tax Expenses	-	-
Net Surplus/(Deficit) for the period	(588,116)	284,243
Other Comprehensive Income	-	-
Total Comprehensive Income for the Period	(588,116)	284,243

Summary Statement of Financial Position

As at 30 September 2013

	2013	2012
	\$	\$
Current Assets		
Cash and Equivalents	1,099,638	901,929
Bank Term Deposits - Current	5,585,000	5,980,000
Trade Debtors and Other Receivables	546,295	504,780
Prepayments	146,736	139,401
Total Current Assets	7,377,669	7,526,110
Non Current Assets		
Bank Term Deposits - non-current	1,000,000	1,000,000
Property, Plant and Equipment	311,962	371,292
Intangible Assets	28,314	53,869
Total non-current Assets	1,340,276	1,425,161
TOTAL ASSETS	8,717,945	8,951,271
Current Liabilities		
Trade Creditors and Other Payables	942,854	980,079
Income Received in Advance	1,799,705	1,405,266
Employee Entitlements	411,952	414,376
Total Current Liabilities	3,154,511	2,799,721
Net Assets	5,563,434	6,151,550
Represented By: Members Funds	5,563,434	6,151,550

Summary Statement of Changes in Equity

For the Year Ended 30 September 2013

	2013	2012
	\$	\$
IPENZ National Office		
Opening Balance	4,295,235	3,997,506
Net Surplus for the year	(588,116)	284,243
Transfer from (to) Futureintech Continuation Reserve	84,630	75,590
Transfer from (to) IPENZ Centenary Reserve	16,600	21,650
Transfer from (to) Technical and Special Interest Group Reserve	17,617	(83,754)
	3,825,966	4,295,235
IPENZ Centenary Reserve		
Opening Balance	228,350	250,000
Transfer from/(to) IPENZ National Office	(16,600)	(21,650)
	211,750	228,350
Futureintech Continuation Reserve		
Opening Balance	385,330	460,920
Transfer from/(to) IPENZ National Office	(84,630)	(75,590)
	300,700	385,330
Technical and Special Interest Group Reserve		
Opening Balance	1,242,635	1,158,881
Transfer from/(to) IPENZ National Office	(17,617)	83,754
	1,225,018	1,242,635
Total Equity	5,563,434	6,151,550

Summary Statement of Cash Flows

For the Year Ended 30 September 2013

	2013	2012
	\$	\$
Cash Flow from Operating Activities		
Cash was provided from:	9,586,333	9,290,100
Cash was disbursed to:	9,688,220	8,245,365
Net Cash Flow from Operating Activities	(101,887)	1,044,735
Cash Flow Applied to Investing Activities	(95,404)	(114,302)
Net Increase in Cash Held	(197,291)	930,433
Add Cash and Short Term Deposits at the start of the Year	6,881,929	5,951,496
Cash and Short Term Deposits at year end, represented by Westpac Bank	6,684,638	6,881,929

Notes to the Summary Financial Statements

For the Year Ended 30 September 2013

Other Expenses: This cost is inclusive of the costs associated with the Marketing and Process review projects.

The summary financial statements have been extracted from the full financial statements for the reporting entity, The Institution of Professional Engineers New Zealand Incorporated (the 'Institution'). The Institution is incorporated under Incorporated Societies Act 1908. The full financial statements have been prepared in accordance with generally accepted accounting principles (New Zealand GAAP). They comply with New Zealand equivalents to International Financial Reporting Standards (New Zealand IFRS) and other applicable Financial Reporting Standards as appropriate to public benefits entities. The financial statements are presented

in New Zealand dollars which is the functional currency of the Institution.

The summary financial statements can not be expected to provide as complete an understanding as provided in the full financial statements. The full financial statements, including the summary financial statements, were authorised by the IPENZ Board on the 13 December 2013 and signed by the President and the Chief Executive and have been subject to audit and an unqualified audit report was issued on 13 December 2013. The full financial statements are available for viewing or downloading at www.ipenz.org.nz.

The accounting policies adopted are consistent with those of the previous financial year. There were no contingent liabilities at balance date

and there are no post balance date events that need to be disclosed.

Technical and Special Interest Groups (TIGs):

The activities of the (non-incorporated) TIGs and the related revenue and expenditure are recorded in the Statement of Comprehensive Income with any surplus or deficit being transferred to the TIGs funds in the Statement of Financial Position.

Related Party: IPENZ Foundation was registered as a Charitable entity under the Charities Act 2005 on 30 June 2008. The Institution provides accounting and administration services to the Foundation. All transactions between the Institution and the Foundation are accounted for through the Foundation Current Account. There are no other related party transactions.

	2013	2012
	\$	\$
Property, Plant and Equipment		
Computer Equipment and Software	155,891	189,119
Office Equipment	15,307	21,319
Furniture and Fittings	58,097	62,536
Leasehold Improvements - 158 The Terrace	82,668	98,318
Total Book Value	311,963	371,292
Intangible Assets	28,314	53,869
Technical and Special Interest Groups		
Restricted Funds - Westpac Short Term Investments	1,065,000	980,000
Current Accounts with IPENZ	160,017	262,635
Total Technical and Special Interest Group's	1,225,017	1,242,635

How we use our Financial Resources

The governing Board allocates the Institution's resources to achieve the strategic plan.

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Professional Standards

Benchmark, Manage and Promote Standards

	Budget	Actual	%
Staff Hours	3,098	4,138	134%
Salary Cost	161,504	168,764	104%
Other Expenses	172,550	124,647	72%
Income	(198,409)	(191,826)	97%

Chartered Professional Engineer

	Budget	Actual	%
Staff Hours	1,370	2,003	146%
Salary Cost	66,311	93,065	140%
Other Expenses	120,001	224,712	187%
Income	(369,473)	(351,660)	95%

Competence Assessments

	Budget	Actual	%
Staff Hours	4,871	4,856	100%
Salary Cost	140,362	140,463	100%
Other Expenses	431,468	414,029	96%
Income	(788,169)	(717,982)	91%

International Agreements Secretariat

	Budget	Actual	%
Staff Hours	1,494	1,665	111%
Salary Cost	71,043	71,240	100%
Other Expenses	16,980	23,205	137%
Income	(164,968)	(165,545)	100%

International Development

	Budget	Actual	%
Staff Hours	462	460	100%
Salary Cost	38,885	34,467	89%
Other Expenses	31,000	24,491	79%
Income	-	-	-

Engineering Leadership

Engineering Practice Leadership

	Budget	Actual	%
Staff Hours	7,100	10,210	144%
Salary Cost	482,000	498,492	103%
Other Expenses	135,750	308,375	227%
Income	(35,000)	(38,029)	109%

Informed Engagement

Public Policy

	Budget	Actual	%
Staff Hours	2,521	2,735	108%
Salary Cost	161,931	157,377	97%
Other Expenses	18,983	60,801	320%
Income	-	-	-

Enhanced Understanding

Audience Perception Shifts

	Budget	Actual	%
Staff Hours	1,241	1,809	146%
Salary Cost	54,448	64,661	119%
Other Expenses	19,296	13,323	69%
Income	-	(1,435)	-

Engineering Heritage

	Budget	Actual	%
Staff Hours	1,735	2,077	120%
Salary Cost	77,239	85,080	110%
Other Expenses	50,990	33,565	66%
Income	(3,000)	(4,333)	144%

Pickering Lecture Programme

	Budget	Actual	%
Staff Hours	460	429	93%
Salary Cost	20,045	15,682	78%
Other Expenses	24,995	24,539	98%
Income	(10,000)	-	-

New Zealand Engineering Excellence Awards

	Budget	Actual	%
Staff Hours	1,616	2,035	126%
Salary Cost	71,563	75,640	106%
Other Expenses	124,472	123,800	99%
Income	(153,816)	(150,484)	98%

Enduring Capability

Career Development Support

	Budget	Actual	%
Staff Hours	1,987	1,937	97%
Salary Cost	80,458	65,530	81%
Other Expenses	19,003	28,660	151%
Income	(2,999)	(3,400)	113%

Continuing Professional Development

	Budget	Actual	%
Staff Hours	2,919	2,419	83%
Salary Cost	111,250	79,692	72%
Other Expenses	210,483	319,357	152%
Income	(435,901)	(596,322)	137%

Members with Specialised Needs

	Budget	Actual	%
Staff Hours	1,844	2,153	117%
Salary Cost	273,000	82,337	30%
Other Expenses	90,514	51,359	57%
Income	(3,599)	(5,826)	162%

Futureintech

	Budget	Actual	%
Staff Hours	15,266	19,381	127%
Salary Cost	644,784	675,144	105%
Other Expenses	326,500	277,853	85%
Income	(1,243,685)	(1,328,516)	107%

Techlink

	Budget	Actual	%
Staff Hours	1,980	2,386	121%
Salary Cost	87,570	93,918	107%
Other Expenses	56,250	103,324	184%
Income	(215,274)	(208,292)	97%

Engineering in Schools

	Budget	Actual	%
Staff Hours	754	512	68%
Salary Cost	29,145	17,861	61%
Other Expenses	27,250	36,259	133%
Income	(30,000)	(42,950)	143%

Behind the Scenes - Supporting Activities**Governance and Forum**

	Budget	Actual	%
Staff Hours	3,112	3,393	109%
Salary Cost	199,721	163,870	82%
Other Expenses	192,994	123,597	64%
Income	-	-	-

Development of Business Processes

	Budget	Actual	%
Staff Hours	-	1,856	-
Salary Cost	-	90,087	-
Other Expenses	-	259,528	-
Income	-	(12,417)	-

Membership Research

	Budget	Actual	%
Staff Hours	-	1,077	-
Salary Cost	-	48,773	-
Other Expenses	-	55,652	-
Income	-	-	-

Representation of IPENZ

	Budget	Actual	%
Staff Hours	823	1,358	165%
Salary Cost	52,951	60,499	114%
Other Expenses	20,501	6,833	33%
Income	-	(1,096)	-

Recognition of Contribution

	Budget	Actual	%
Staff Hours	1,690	1,343	79%
Salary Cost	81,828	54,402	66%
Other Expenses	67,505	56,997	84%
Income	(45,500)	(47,313)	104%

Membership Development

	Budget	Actual	%
Staff Hours	1,300	1,538	118%
Salary Cost	56,500	58,557	104%
Other Expenses	59,250	62,294	105%
Income	-	(24,213)	-

Membership Systems and Record Maintenance

	Budget	Actual	%
Staff Hours	6,422	7,665	119%
Salary Cost	215,104	198,886	92%
Other Expenses	144,952	120,851	83%
Income	(3,429,566)	(3,543,710)	103%

Underpinning Office Accommodation and Services

	Budget	Actual	%
Staff Hours	6,796	8,944	132%
Salary Cost	279,928	293,170	105%
Other Expenses	963,077	977,903	102%
Income	(342,434)	(387,023)	113%

Human Resources

	Budget	Actual	%
Staff Hours	6,373	5,684	89%
Salary Cost	345,718	269,864	78%
Other Expenses	236,721	145,219	61%
Income	-	-	-

Publications

	Budget	Actual	%
Staff Hours	5,945	6,588	111%
Salary Cost	215,436	257,725	120%
Other Expenses	339,498	355,286	105%
Income	(310,000)	(302,738)	98%

Web Services

	Budget	Actual	%
Staff Hours	2,005	3,478	173%
Salary Cost	90,064	118,942	132%
Other Expenses	15,002	248	2%
Income	-	-	-

Events Management Services

	Budget	Actual	%
Staff Hours	3,277	3,137	
Salary Cost	130,773	96,620	74%
Other Expenses	6,515	11,102	170%
Income	(115,184)	(84,595)	73%

Contracted Support Services

	Budget	Actual	%
Staff Hours	507	706	-
Salary Cost	23,378	24,070	103%
Other Expenses	8,000	6,037	75%
Income	(26,000)	(35,581)	-

Secretariats

	Budget	Actual	%
Staff Hours	1,504	1,620	108%
Salary Cost	58,645	53,338	91%
Other Expenses	5,000	3,919	78%
Income	(94,982)	(95,000)	100%

IPENZ Foundation

Financial Summary



Grant Thornton

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Independent Auditor's Report on the Summary Financial Statements

To the Trustees of the IPENZ Foundation

The accompanying summary financial statements, which comprise a summary statement of financial position as at 30 September 2013, a summary statement of financial performance, summary statement of changes in equity for the year then ended, and related notes, are derived from the audited financial statements of the IPENZ Foundation. We expressed an unmodified audit opinion on those financial statements in our report dated 9 December 2013.

The summary financial statements do not contain all the disclosures required for full financial statements under generally accepted accounting practice in New Zealand. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of the IPENZ Foundation.

Trustees' responsibility for the Summary Financial Statements

The Trustees are responsible for the preparation of a summary of the audited financial statements in accordance with FRS-39: *Summary Financial Statements*.

Auditor's responsibilities

Our responsibility is to express an opinion on the summary financial statements based on our procedures which were conducted in accordance with International Standards on Auditing (New Zealand) (ISA (NZ)) 810, *Engagements to Report on Summary Financial Statements*.

Other than in our capacity as auditor we have no relationship with, or interests in, the IPENZ Foundation.

Opinion

In our opinion, the summary financial statements derived from the audited financial statements of the IPENZ Foundation for the year ended 30 September 2013 are consistent, in all material respects, with those financial statements in accordance with FRS-39.

Grant Thornton New Zealand Audit Partnership
Wellington, New Zealand
9 December 2013

Summary Statement of Financial Performance

For the Year Ended 30 September 2013

	2013	2012
	\$	\$
Income		
Dividends and Interest Received	46,662	47,493
Realised and Unrealised Investment Gains (Losses)	4,099	(2,396)
Donations and Sundry	34,056	30,003
Total Operating Income	84,817	75,100
Expenditure		
Scholarships and Branch Scholarships	31,500	32,000
Sponsorship	11,700	17,000
Sundry Expenses	25,159	26,800
Total Expenditure	68,359	75,800
Net Income before Unrealised Gains (Losses)	16,458	(700)
Unrealised Gains (Losses)	49,228	43,009
Net Surplus/(Deficit)	65,686	42,309

Summary Statement of Movements in Equity

For the Year Ended 30 September 2013

	2013	2012
	\$	\$
Opening Balance	804,023	761,714
Plus Net Income	65,686	42,309
Total Equity	869,709	804,023

Summary Statement of Financial Position

as at 30 September 2013

	2013	2012
	\$	\$
Current Assets		
Cash and Bank	135,663	114,440
Investments	66,253	175,604
Other Receivables and Prepaid Expenses	21,376	(5,034)
Total Current Assets	223,292	285,010
Non Current Assets	650,552	523,132
Total Assets	873,844	808,142
Less Current Liabilities	4,135	4,119
Net Assets	869,709	804,023
Represented By:		
Accumulated Funds	751,634	673,734
Branch Funds Reserve	118,075	130,289
Total Equity	869,709	804,023

Disclosures

The summary financial statements have been extracted from the full financial statements for the reporting entity, IPENZ Foundation. The Foundation's full financial statements have been prepared in accordance with generally accepted accounting principles, in accordance with New Zealand Financial Reporting Standards.

The IPENZ Foundation financial statements were authorised by the Foundation Trustees on 9 December 2013 and have been subject to audit

and an unqualified audit report was issued on 9 December 2013.

IPENZ Foundation was registered as a charitable entity under the Charities Act 2005 on 30 June 2008.

Related Party: The Institution of Professional Engineers New Zealand Inc (the institution) provides accounting and administration services to the Foundation. There were no other related party transactions during the year ended 30 September 2013.

There were no contingent liabilities at balance date and there are no post balance date events that need to be disclosed. There has been no changes to the accounting policies.




The summary financial statements can not be expected to provide as complete an understanding as provided in the full financial statements. The full financial statements for IPENZ Foundation are available for viewing or downloading at www.ipenz.org.nz



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