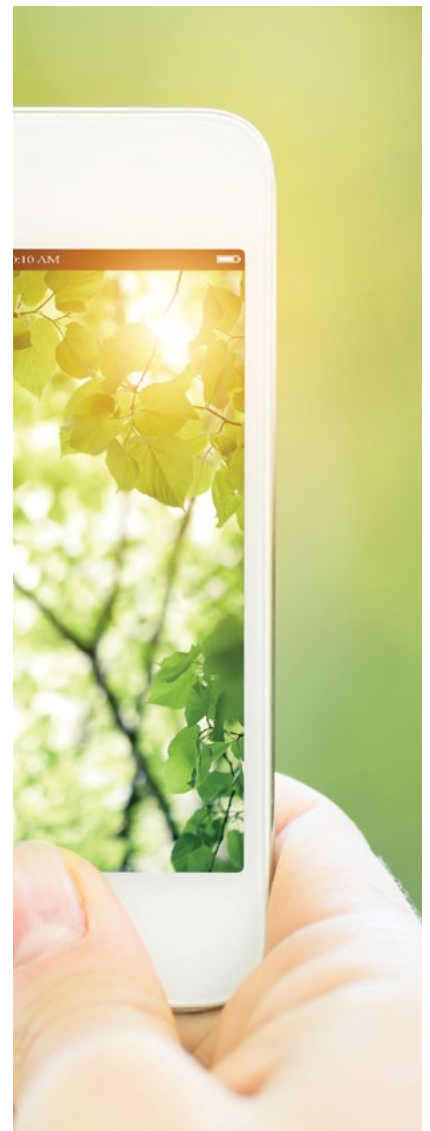
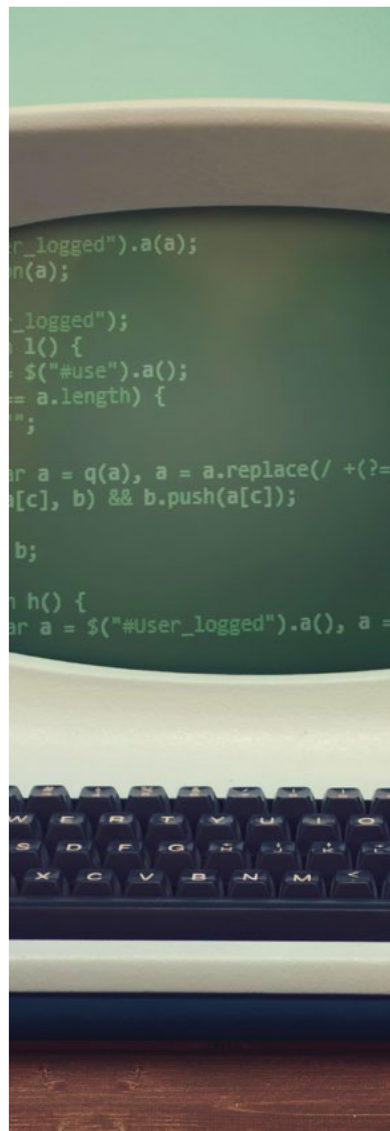
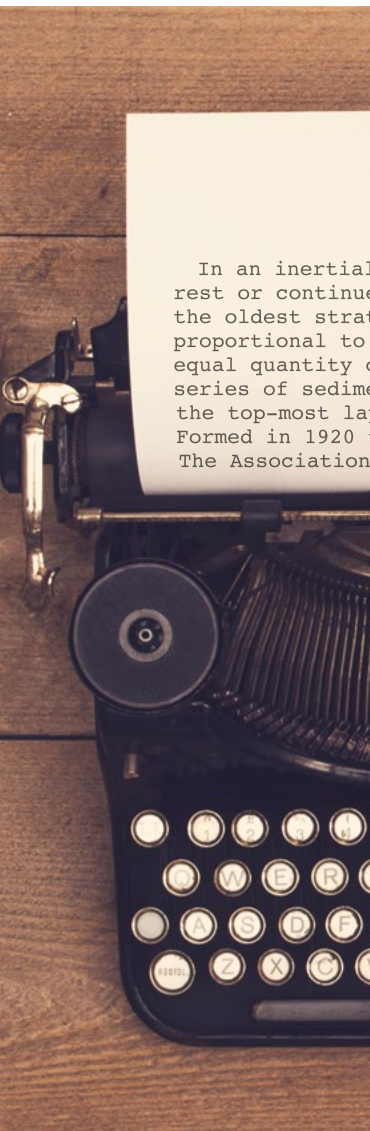


Annual Report | 2017



TOWARDS A CENTURY OF SERVICE



The Association of Professional
Engineers and Geoscientists of Alberta

WHO

Our members and permit holders practise **engineering** and **geoscience** in a **diverse** array of sectors. They are major **engines** in the Alberta economy, enhancing the quality of life Albertans and others enjoy.

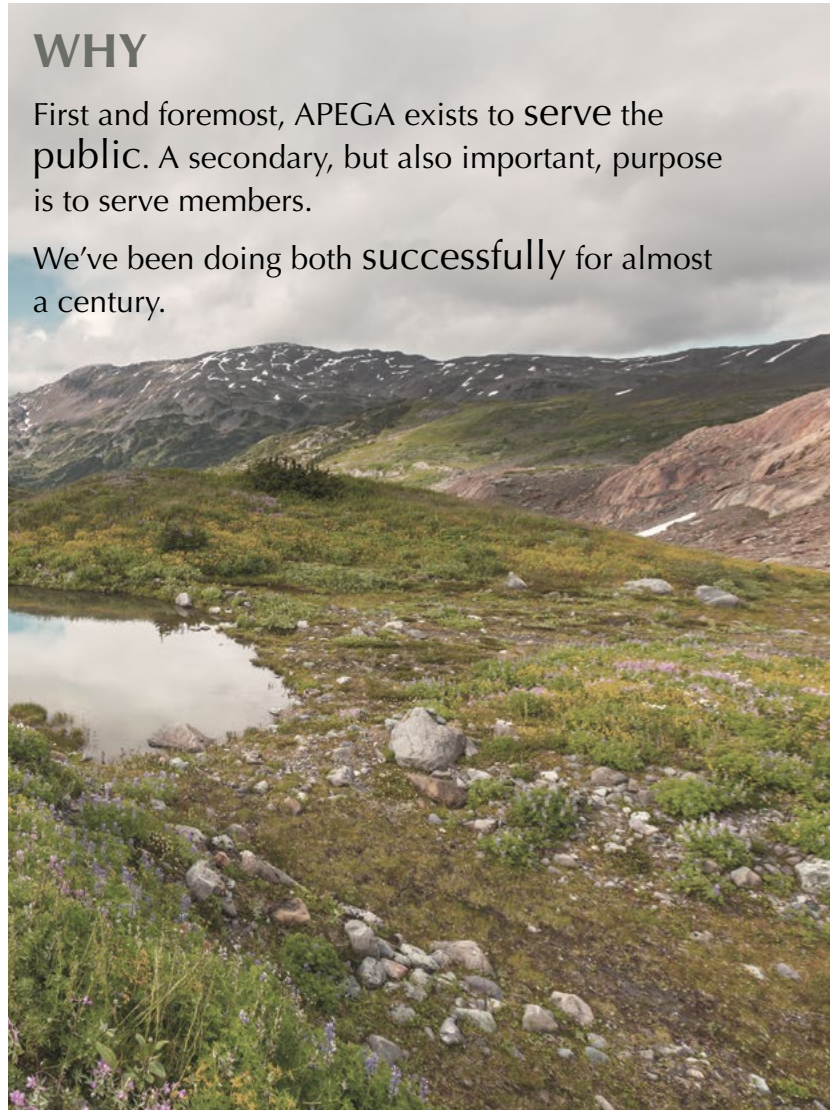
From academia to industry, from government to not-for-profits, from oil and gas to solar power, APEGA's members are making **ethical** and skilled decisions that **protect** and serve the public.

Leaders. Innovators. Experts. Professionals.

WHY

First and foremost, APEGA exists to **serve the public**. A secondary, but also important, purpose is to serve members.

We've been doing both **successfully** for almost a century.



Rocky Mountains meadow



WHAT

With nearly 60,000 professional members, APEGA is the largest organization of self-regulated professionals in Western Canada. APEGA regulates the practices of engineering and geoscience in Alberta on behalf of the Government of Alberta.

In existence since 1920 and empowered by the *Engineering and Geoscience Professions Act*, APEGA registers and licences engineers, geoscientists, and the companies they practise with. We ensure they are competent and ethical. We develop practice standards for them to follow. When necessary, we investigate and discipline them.

We also protect the public from non-members who contravene our legislation—those that use our protected titles or practise when they are not licensed.



THE GOVERNANCE PERSPECTIVE: REPORT OF THE PRESIDENT

Alberta's recession strongly influenced APEGA governance and operations, throughout my tenure as President-Elect and President.

In exercising our duty to protect the public, Council had to continue the association's major regulatory projects—a detailed and consultative review of our legislation, for example, and an overhaul of our registration systems and procedures. Yet we knew, of course, that many members were struggling financially, to a degree Alberta and our professions had not experienced since the early 1980s.

Tough realities were reconciled by our making difficult decisions. We required staff to reduce operational costs in non-critical areas. We reduced dues for unemployed members. We approved defensible dues increases for 2017 and 2018. This process challenged Council and staff, it was not painless, and the dues increases were not popular with many of our members. The reasoning behind the increases was sound, however, and that is a message I have shared while touring the province to meet members face to face.

The increases were a lot to ask of members, but they were carefully considered in relation to a continued need to improve the association. Council and senior staff had identified foundational weaknesses we could not ignore and had to fund. Then, our analysis of the risks associated with regulation convinced us we needed money earmarked for risk management.

The need to improve does not wait for the economy to change. Society has placed increased expectations on regulators, and that is happening now, so we cannot simply set aside plans to be better and more resilient. We must also be capable of handling severe

risks, such as lawsuits, challenges that threaten our protected titles and regulatory decisions, and other actions or events that undermine public protection.

I must also note that we have made our dues system more reflective of the actual costs associated with membership. Prior to 2017, we had one-size-fits-all dues for permit-holding companies. Permit holders have professional responsibilities like those of individual members, applying across each organization. This means that the larger the permit holder, the greater the potential for regulatory costs to APEGA. To reflect that, the amount paid in dues now increases with the size of the permit holder. On July 1, 2018, the second and final phase of the increase comes into effect.

Although economists predict it will take until 2019 for Alberta's economy to fully recover from the recession, things seem to be moving in the right direction. APEGA's professional members—among them innovators, entrepreneurs, researchers and academics, APEGA volunteers, and leaders in our communities and around the world—will be critical to Alberta's continued success.

Recessions challenge all of us, individually and organizationally. APEGA has continued to deliver great value to the public, to members, and to permit holders. The downturn made us stronger and more cost-conscious, and I am confident we will carry those lessons into the future.

Very soon, in 2020, APEGA will celebrate 100 years of existence. We came into being because Alberta and the public needed us. The need still exists, and APEGA must continue to change and improve to meet it. We have done this for almost 100 years, and I am confident we will do it for the next 100.

Jane Tink, P.Eng., FEC, FGC (Hon.)



THE OPERATIONAL PERSPECTIVE: REPORT OF THE REGISTRAR & CEO

For APEGA, 2017 was marked by significant transition and transformation. Council's strategic decision to combine the duties of Registrar and CEO into one position

demonstrated Council's commitment to creating a more effective structure that would streamline communication and enhance organizational oversight.

As a professional engineer and APEGA member for many years, accepting this leadership position has been one of the hallmarks of my career. I feel honoured and privileged to have the opportunity to give back and advance APEGA to its next century of service as Western Canada's largest association of self-regulated professionals. Looking ahead, I see immense possibilities, potential, and promise for APEGA. Our 2020 centennial year is swiftly approaching and with it a rare opportunity to celebrate and share with all Albertans APEGA's rich history, milestones, and progress as a professional regulatory body.

While the future is exciting, 2017 was characterized by the challenges and ripe learning that often accompany substantial change. APEGA focused on becoming a stronger, more effective regulator and building a robust, high-calibre executive leadership team that would bring vision and more stability to an organization that faced great changes in a short time.

Our sharpened focus on becoming a more effective regulator occurred amidst a slowly recovering Alberta economy. The increasing unemployment of APEGA's professional members, particularly those who worked in Alberta's oil and gas sector, was a harsh reality that APEGA considered seriously in its member-focused efforts and decisions.

APEGA's primary role and responsibility is to act in the public interest and regulate the professions of engineering and geoscience in Alberta. Becoming a stronger regulator improves APEGA's ability to more effectively protect the public and ensure public safety. Throughout 2017, APEGA's approach to improving its regulatory function included proactively working with members to better understand issues and share best

practices, encouraging compliance instead of immediately defaulting to punitive actions, and discovering the underlying reasons that contribute to regulatory issues. We sought to understand more about our members and to create more lines of communication, so APEGA and its members would benefit from mutual learning. This approach enabled all involved to become more competent and knowledgeable—key attributes for protecting the public.

In 2017, APEGA continued its comprehensive legislative review of the *Engineering and Geoscience Professions Act*, which has not been significantly updated for more than 35 years. We continued consultations with members and developed recommendations to create the explicit authorities and processes required to reflect the highest standards for public safety; enhance transparency and accountability for unplanned events (e.g., industrial accidents); enable more meaningful, severe consequences for those who fail to uphold the public safety that Albertans deserve and expect; and provide APEGA with the explicit authority to investigate incidents immediately and work more proactively and preventatively.

APEGA strived to work in partnership with the Association of Science and Engineering Technology Professionals of Alberta (ASET) on the legislative review because ASET was included under the Act in 2009. ASET was focused on leveraging the modernization process to promote its long-held objective of giving its technologists independent scope of practice without oversight or authentication. APEGA opposes this because it would not serve the public interest and would create labour mobility issues for these technologists.

Moving forward, APEGA will continue collaborating with the Government of Alberta's Ministry of Labour on modernizing the legislation. We have benefitted greatly from the ministry's insights and guidance.

As APEGA becomes a stronger regulator, we will amplify our relevance and value to members and the public. We will shape our future in creative, bold ways. I am inspired by the opportunities ahead.

Jay Nagendran, P.Eng., FEC, QEP, BCEE



THE PUBLIC PERSPECTIVE: COUNCIL

As public members appointed by the Government of Alberta to APEGA Council, it is our duty to provide oversight in the interest of public safety. We are an essential outside voice, bringing to the table our governance experience and the expertise of our professions. We participated in all Council meetings in 2017 and various working groups and committees. This is our assessment.

On the eve of APEGA's 100th anniversary, the organization faces huge challenges.

The public is demanding stronger regulatory control in the wake of such scandals as the collapse of Algo Centre Mall in Elliot Lake, Ontario, where poor engineering design and inspection killed two persons. In Quebec, there was the unethical awarding of construction contracts, which led to the Charbonneau Commission hearings and their damning conclusions. Across the Atlantic in London, there was the deadly horror of the Grenfell Tower fire.

Yet the legislation by which APEGA members can be disciplined is old and antiquated, lacking in the investigative powers found in other regulatory legislation. It has been a challenge for the association to use the few effective provisions available. In the last 10 years, APEGA's professional membership has grown from about 36,000 members to almost 60,000, an increase of 58 per cent and a staggering load for an organization to absorb. In 2017 alone, almost 6,000 new applications were processed.

These two factors—growth and old legislation—continue to put pressure on the organization to provide timely, effective services and regulatory functions for members and the public.

But there is also a human side to these statistics. The downturn in the Alberta economy had a profound effect on many members, especially in Calgary, where the city was rocked by round upon round of layoffs. The membership has needed help in coping with the new economic situation.



‘On the eve of APEGA’s 100th anniversary, the organization faces huge challenges.’

The organization also manages something like 1,500 volunteers, who selflessly provide their expertise, energy, and enthusiasm in service to members, university students, children, and the rest of the Alberta public, as well as the improvement of society’s science literacy.

We note that the professional dues of APEGA members are a fraction of what we pay, the public members on Council, to our own professional associations. Annual dues for lawyers, apart from an insurance levy, are \$2,600. Chartered accountants pay \$1,051 annually, registered nurses \$584. Yet in 2017, professional APEGA members paid only \$360.

Council has responded to APEGA’s challenges with important initiatives, including the combining of the roles of CEO and Registrar to provide for more efficient management. The leadership team has also responded by reducing the backlog of complaints and increasing the pace for processing applications. APEGA has re-emphasized the importance of its continuing professional development program to members. To ensure that the infrastructure required to support operations is robust, changes were made to accounting practices and the association’s information technology system, including the introduction of a quality management system.

APEGA has undertaken a thoughtful and detailed review of its legislation and made comprehensive change recommendations to the Government of Alberta, designed to give the organization the tools needed to be a more effective regulator.

With limited resources, priorities are based on a risk-management approach and a renewed focus on improving the regulatory system, including enhancing APEGA’s investigative capacity.

At the same time, there have been improvements to member services, including a compassionate approach to membership dues payments, recognizing that there may well be extenuating circumstances.

But with this 21st century approach to problem solving, APEGA has never forgotten that the public trusts APEGA to live up to the obligations of the Professional Member Oath and the APEGA *Code of Ethics*: that is, to keep the public safe.

Mary Phillips-Rickey, FCA, FCPA

Georgeann Wilkin, RN, LL.B.

Susan McRory, LL.B., ARCT

NEXT-CENTURY REGULATORY TOOLS

The APEGA that emerges from its first century of service will be better equipped than ever to use the tools of self-regulation to protect the public interest.

How do we know this?

- Because in 2017 we concluded a comprehensive, fact-based consultation and research process, called the legislative review.
- Because the review resulted in a set of practical and thoroughly debated recommendations from APEGA Council for the Government of Alberta to consider.
- Because we are confident that the government sees the validity of our input and will use it to rewrite the *Engineering and Geoscience Professions Act (EGP Act)* and *General Regulation*.

We began our legislative review in 2014, at the request of the province. Three years and five rounds of consultation later, we completed our submission.

HIGHLIGHTS

Explicit Authority. Council's recommendations seek to clarify how authority and its delegation are described in multiple areas of our legislation, bringing APEGA in line with the best practices you'll find in more recently updated legislation. This will reduce confusion and the potential for legal challenges.

Notification. A modernized *EGP Act* will support notification of incidents between APEGA and other regulators and government ministries. Benefits to the public are faster resolution, better cost effectiveness, less duplication of effort, and a harmonious approach with other regulators to protect Albertans and the environment.

Complaint Initiation. A key recommendation would explicitly authorize the APEGA Registrar to initiate complaints and investigations, enshrining a proactive approach when the public, workers, or the environment are put at risk.

Improved Investigative and Practice Review Tools. These would allow APEGA to obtain the information from the appropriate authority needed to investigate complaints and review professional practices.

Bigger Fines, New Sanctions. Public expectations have changed, making the current maximum fine of \$10,000 inadequate when major incidents threaten the public interest. Along with bigger fines, the new legislation would allow for the use of creative sanctions. These sanctions could assist in correcting behaviour in other—and often more meaningful—ways.



THE LEGISLATIVE CONVERSATION CONTINUES

APEGA had planned to make a joint submission to the Government of Alberta with the Association of Science and Engineering Technology Professionals of Alberta (ASET), our partners in the regulation of professional technologists.

Unfortunately, ASET is seeking to become an independent self-regulating organization, without the participation of APEGA. To that end, ASET made its own submission to the government, advocating scopes of practice for technologists without their requiring supervision by a licensed professional.

APEGA strongly opposes ASET's independent scope proposals because they would:

- increase risk to public safety
- allow complex engineering and geoscience work to be done by individuals without the appropriate education and experience
- create two independent regulators for engineering and geoscience, which would be confusing and inefficient
- create approaches that are inconsistent and incompatible with those of other provinces and territories

We conducted a series of in-person, videoconference, and web-based consultations in late 2017, to present the facts to members about ASET's position. More than 570 members registered for these events, and many others read or viewed our online materials. Our YouTube video on the subject received more than 2,000 views.

Reviewing the Numbers

cumulative to end of 2017



5 Rounds of legislative review consultation sessions (spring and fall). Stakeholders shared their input on legislative change through • face-to-face meetings • surveys • email • webinars • videoconferencing

4,240

Stakeholders who participated in consultation sessions



3,930 Stakeholders who completed legislative review surveys

200

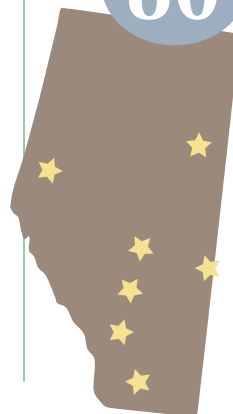
Proposed legislative changes under consideration

40 Professional Engineers and Geoscientists

who make up the champions collaborative, a group of professionals engaging members and permit holders in the legislative review process and leading discussions on proposed changes

80

Proposed recommendations examined during consultations and endorsed by Council



7 COMMUNITIES

where in-person consultation sessions were held • Calgary • Edmonton • Fort McMurray • Grande Prairie • Lethbridge • Lloydminster • Red Deer

BECOMING AN APEGA PROFESSIONAL— IT'S A BIG DEAL

Registration is about **people** and their future in the organization. And it's about *our future* as an organization.

Each APEGA applicant is attempting to complete a **life-changing** transition. It's a big deal, and we get that.

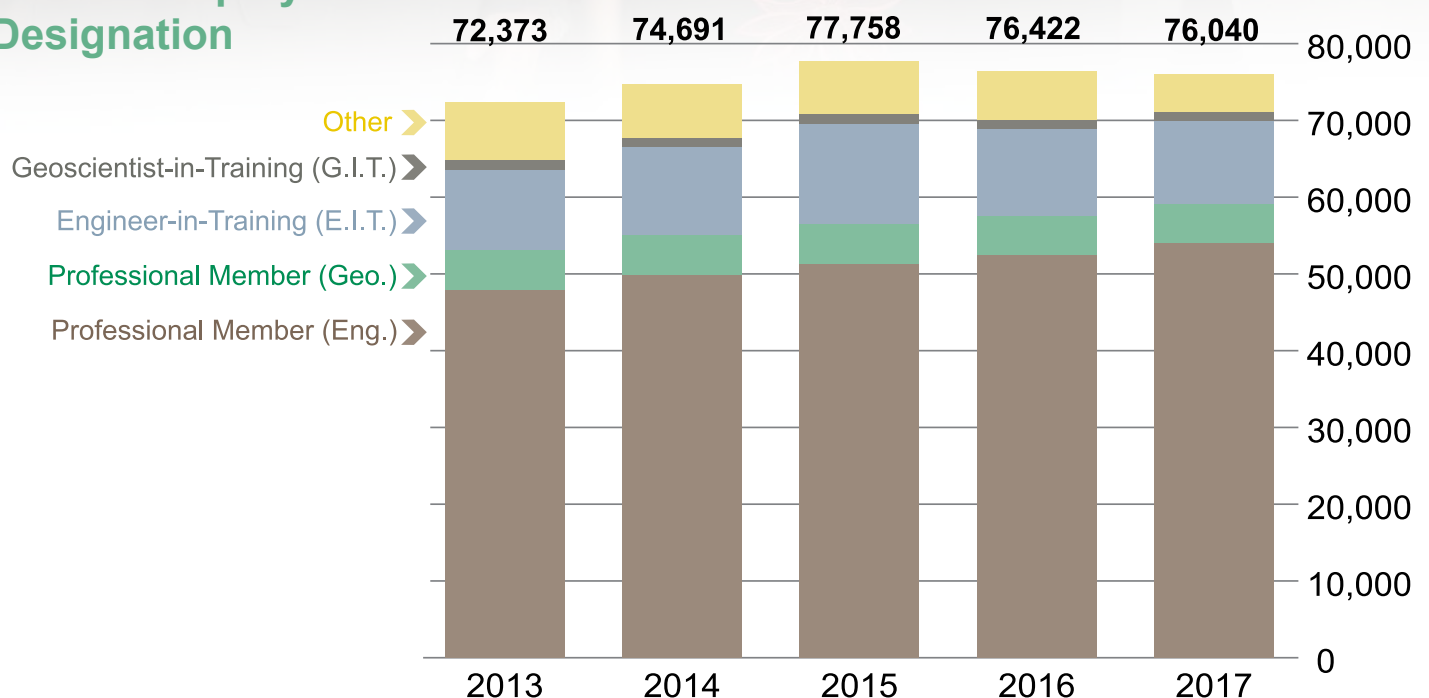
We treat our potential members with **respect**. We honour their needs and dreams by processing their applications honestly and fairly, and as promptly as possible.

But also at play is something bigger than any individual applicant or member. Registration is a critical component in APEGA's service to the **public interest**.

We must be certain that members have the education, experience, ethical and professional knowledge, and English-language competency necessary for a **high standard** of professional practice.

All of the above drives us, as we near the end of the association's first century of service.

Membership by Designation



Other = Restricted Practitioners, Examinees, Students, University Students, and Honorary Members

Geoscientist-in-Training = Geoscientists-in-Training, Provisional Licensees (Geo.)

Engineer-in-Training = Engineers-in-Training, Provisional Licensees (Eng.)

Professional Member (Geo.) = Professional Geoscientists, Professional Licensees (Geo.), Licensees (Geo.), Life Members (Geo.)

Professional Member (Eng.) = Professional Engineers, Professional Licensees (Eng.), Licensees (Eng.), Life Members (Eng.)



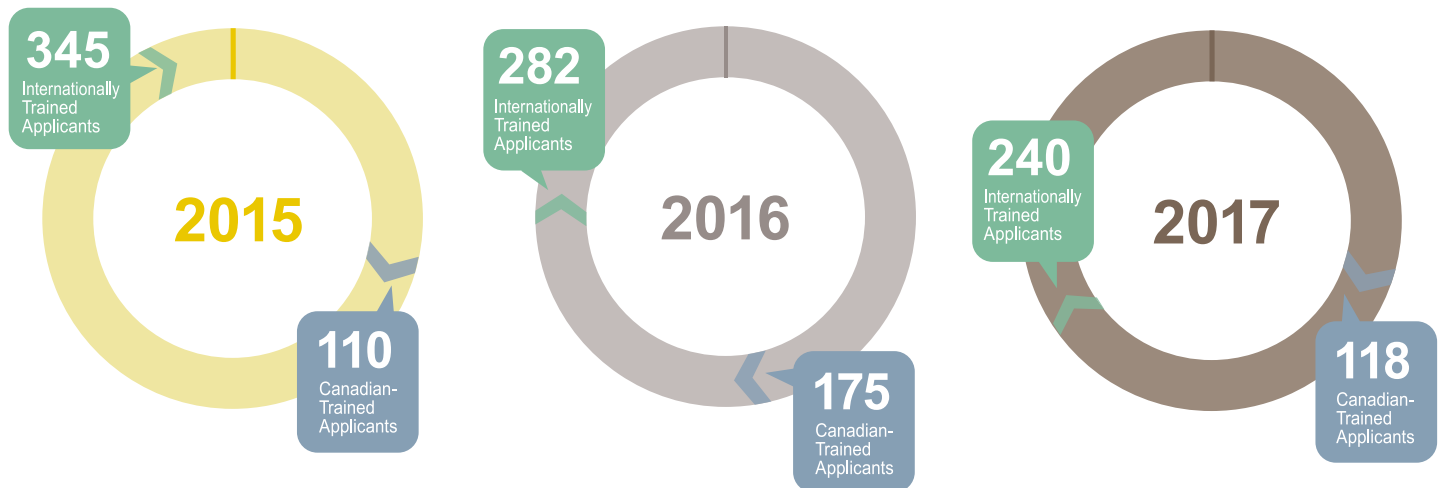
In 2017, APEGA continued to **renew**, develop, and **improve** registration tools and processes. More advancements lie ahead, but already we're seeing reduced processing times for applications.

We are finding efficiencies while improving **consistency** and fairness, and we're doing it while ensuring everyone who receives an APEGA designation is properly **qualified**.

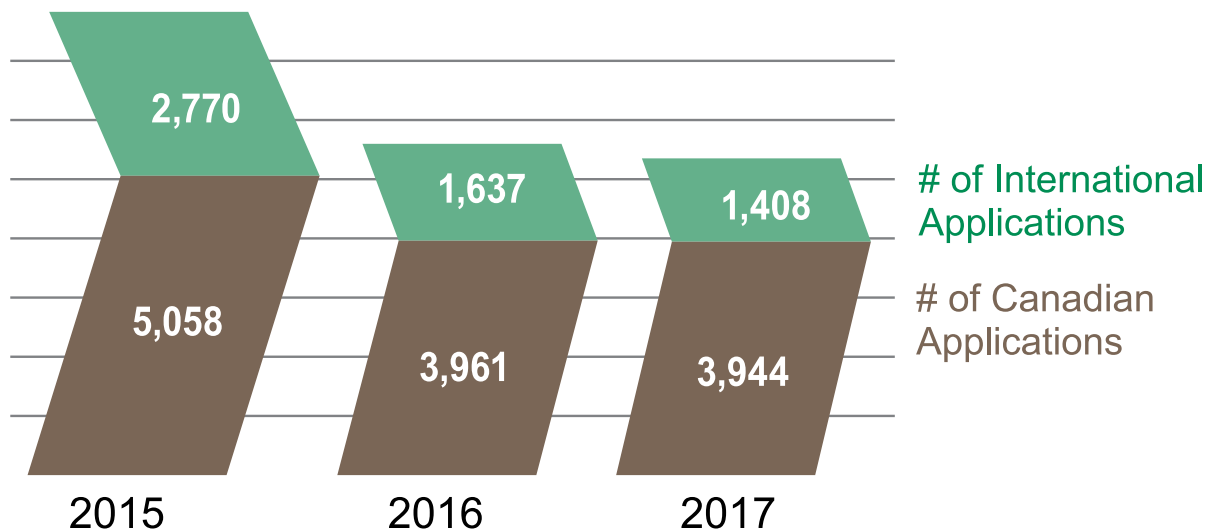
The most time-consuming and complicated applications are those from internationally trained applicants. Average **processing times** in this category dropped 18 per cent in 2016 and 15 per cent in 2017.

Application Processing Times

mean in days



Application Volume





TOP GRADES

APEGA delivers about 7,000 exams a year to applicants and professional members, most of them online. Exams are used to **assess** and confirm the knowledge and education of applicants, and sometimes to provide a first step for members towards **licensure** to practise in the U.S.

APEGA is a national leader in the continuous **development** and improvement of the National Professional Practice Examination (NPPE). The NPPE is used by APEGA and 11 other engineering and geoscience **self-regulating** organizations to confirm knowledge of professionalism, law, regulations, and **ethics**.

All applicants for APEGA professional membership must pass the NPPE before they can legally practise.

The public interest is well served by APEGA through the NPPE. Questions are regularly reviewed and **improved** through a national process, keeping them current and valid.

Cheating on the NPPE has been significantly **reduced**, thanks to a migration to computer-based testing in October 2015 and the adoption of **collusion detection** and other test security techniques. Illegal sharing of exam content online has **dropped** dramatically.

End-of-Exam Satisfaction

computer-based National Professional Practice Examination

Taking the NPPE
was a positive
experience

94.12%



(strongly agree and agree)

Please rate your
experience with
exam centre
personnel

98.8%



(excellent and good)

Please rate your
experience with
quality of computer
equipment

97.37%



(excellent and good)

Overall, did the exam
assess dimensions
(knowledge, skills, and
abilities, etc.) that you
believe are important to
professional practice?

98.24%



(yes and somewhat)

THE PUBLIC PERSPECTIVE: BOARD OF EXAMINERS

In July 2017, the Hon. Christina Gray, Alberta Minister of Labour, appointed to the Board of Examiners (BOE) two new public members, Becky Kallal and Leslie Beard, who joined longtime public member Ernest Skakun.

The role of these three public board members is to protect the public's interests. We help ensure that those licensed as engineers and geoscientists are competent and that the process for licensure is fair, unbiased, consistent, and valid.

During 2017, the BOE introduced several initiatives based on a risk management model adopted by APEGA Council. One of these was the restructuring of the BOE, which still exists legislatively, into two bodies: a registration committee, comprising academic and experience subject matter experts; and a registration executive committee, comprising 20 members. The latter committee has decision-making responsibilities. From our perspective, this change makes better use of the expertise residing with BOE members and in-house professional staff.

This restructuring paved the way for the second initiative, an increase of responsibility for in-house professional staff. Much of the work related to the in-depth review of applicants' academics and experience, once done by BOE members, is now delegated to in-house professional staff. This allows BOE members to review and assess applicants identified as potentially high risk.

Registration staff has built into the process several safeguards that ensure applicants provide all the necessary documentation to enable professional staff and the BOE to conduct proper reviews. All files are reviewed independently by the director of registration and the assistant director of registration, prior to the files being included on a consent poll and the agenda. We believe that these changes provide sufficient system checks to ensure that the reviews are fair, unbiased, and consistent.

With the increased responsibility on in-house staff, it is imperative that the APEGA Registration Department be adequately staffed and that the workload for each staff member is reasonable. We are not suggesting that the department is inadequately staffed or that workloads are unreasonable. However, factors that may lead to

or cause the registration process to be compromised may have consequences in terms of protection of the public interest.

The third initiative deals with the transition to a more quantitative method for assessing academic qualifications and experience requirements. The goal of this initiative is to assure the public that all applicants meet the same standard for licensure. Although initially planned to be in place during 2017, it is our understanding that implementation is now scheduled for 2018.

A uniform standard for licensure is highly important. We recommend that APEGA provide the resources to implement the new proposed methods for academic and competency-based experience assessments and to consider this initiative a top priority. Assuming the new methods will be implemented in 2018, we also recommend that measures be put in place to evaluate their impact on the assessment process.

A fourth initiative, increased transparency and openness, is one that the APEGA Registration Department and the BOE have integrated into their decision-making and other actions over the past few years. One way this is demonstrated is through registration staff continuing to provide extensive BOE support.

This support takes the form of orientation sessions for new public members; in-service and workshops on academic and competency-based assessments for BOE members; and the development of policies and bulletins to guide changes to academic and experience assessments. Staff members also help applicants by offering an online self-assessment tool.

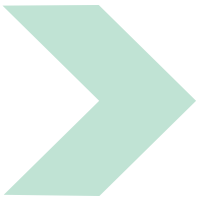
Above all, registration staff members carry the additional responsibility of conducting the initial review of applicants' academic qualifications and experience requirements. This work is done in an exemplary manner. Considering the short turnaround, staff is to be commended for the efficiency and timeliness with which consent polls and consent agendas are distributed to the APEGA Registration Executive Committee.

The BOE and staff of the APEGA Registration Department continue to perform their duties diligently, focusing on the fundamental principle of public safety.

Leslie Beard

Becky Kallal

Ernest Skakun, PhD



CORPORATE-LEVEL PROFESSIONAL PRACTICE— THE OTHER TYPE OF MEMBERSHIP

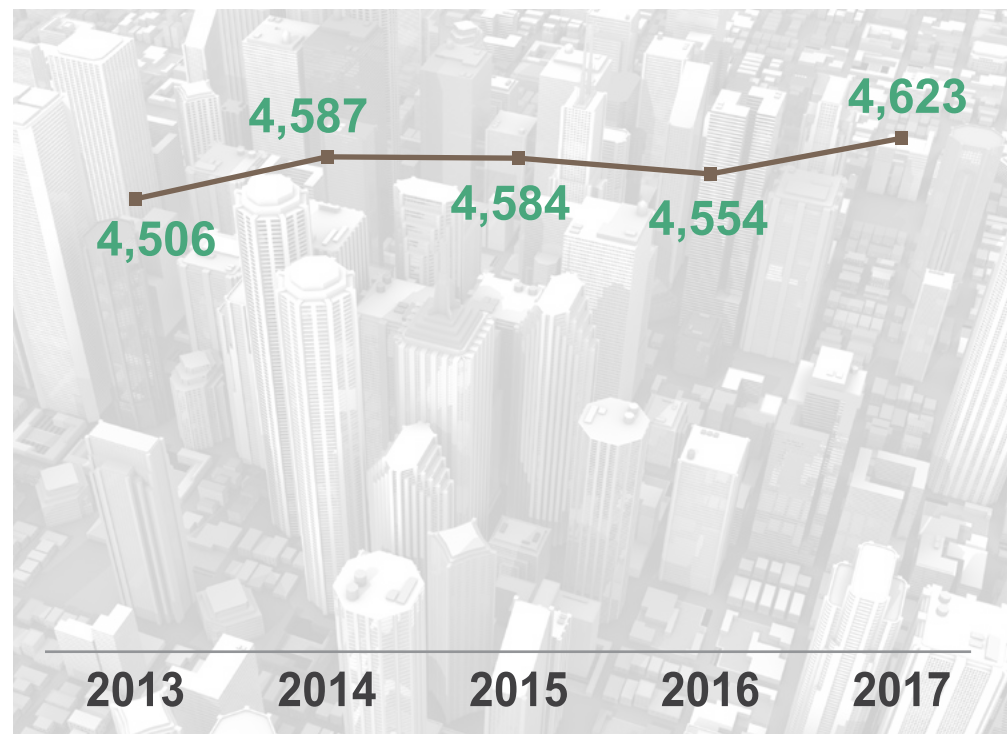
Geoscience and engineering are not exclusively the spheres of individuals. Companies and other organizations employ APEGA members to practise their professions, so they must be licensed, too.

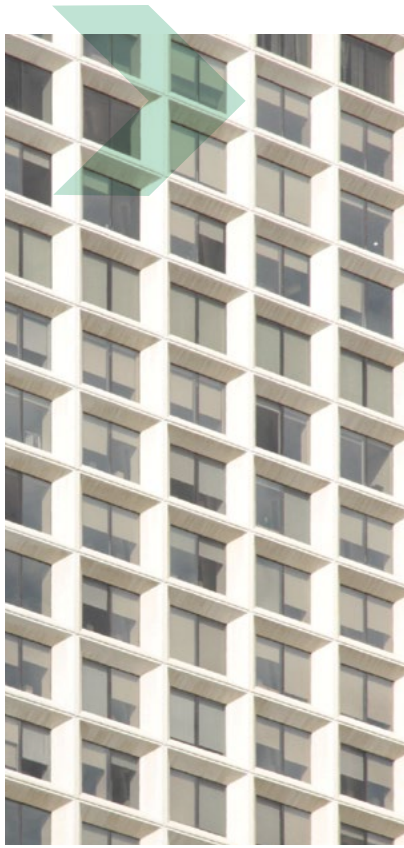
Through permits to practice, we ensure APEGA's ethical and skill requirements reach corporate Alberta.

On July 1, 2017, the first phase of an increase in permit holder dues took effect, to better reflect the costs associated with regulating them. A sliding scale now applies. Permit dues paid increase with the number of APEGA members employed.

Responsible Members (RMs) in permit-holding companies help oversee their employers' professional practice. At year-end, 7,896 APEGA professional members served as RMs.

Total Active Corporate Permits to Practice year-end





THOSE WHO SAY THEY ARE MEMBERS MUST BE MEMBERS

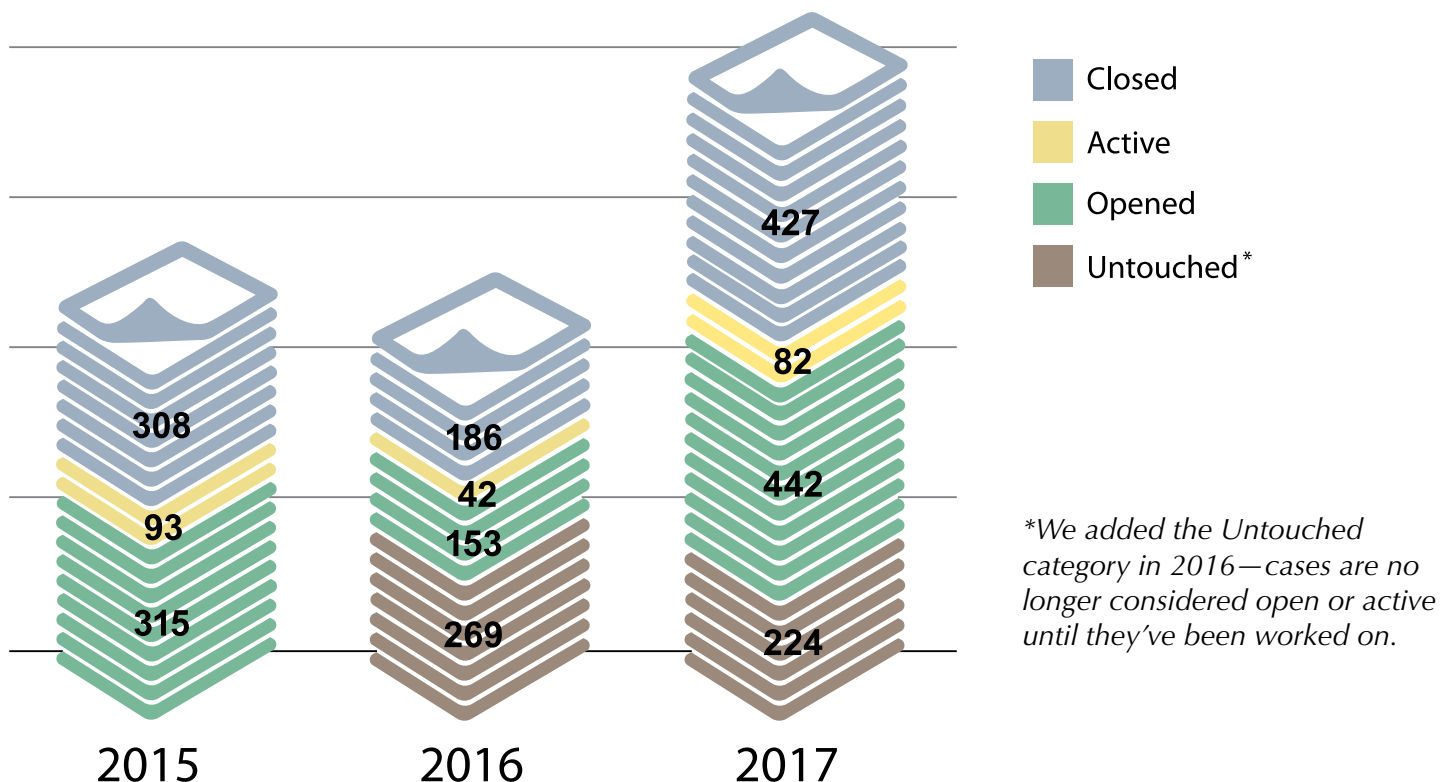
When you hire an APEGA member, you should get an APEGA member—along with the **regulatory rigour** that comes with our professional designations.

Only APEGA members and permit holders can **legally** use terms like engineer and geoscientist in ways that suggest to the public that they can practise. Use of the title P.Eng., for example, by someone not qualified and licensed is a use-of-title and holding-out **violation**. A non-permit holder claiming on its website that it offers geoscience services is also holding out as qualified to practise.

And regardless of how they portray themselves, individuals and companies can't legally practise engineering or geoscience unless they are **licensed**.

A regulatory function that continually investigates title usage, called compliance, protects the public from **unqualified** practice. It also increases the value of APEGA licences and permits to practice, building public trust.

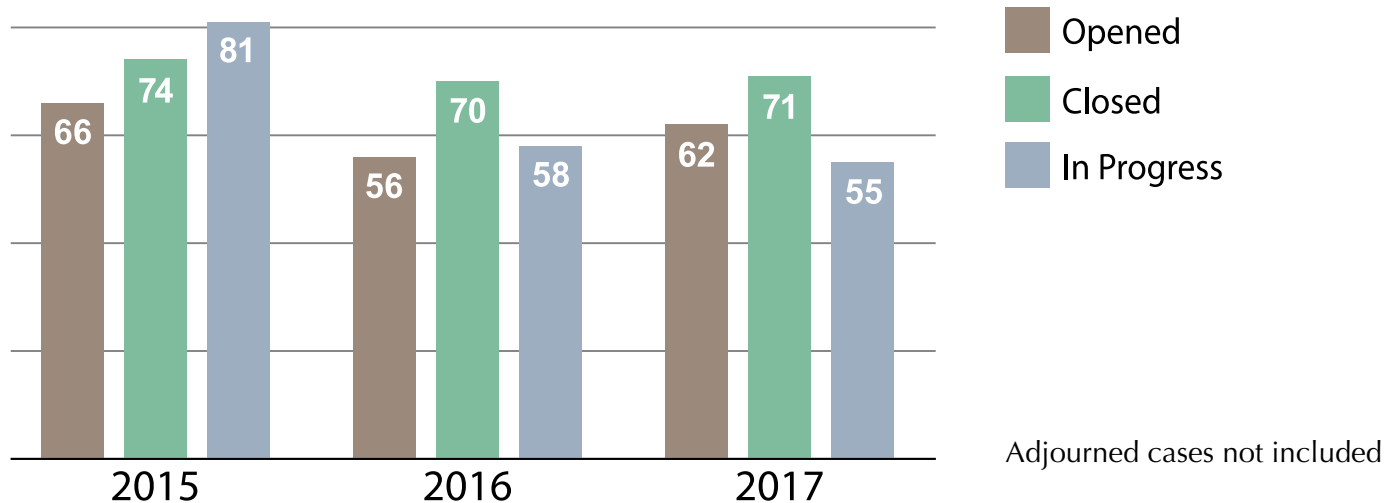
Compliance Activity year-end



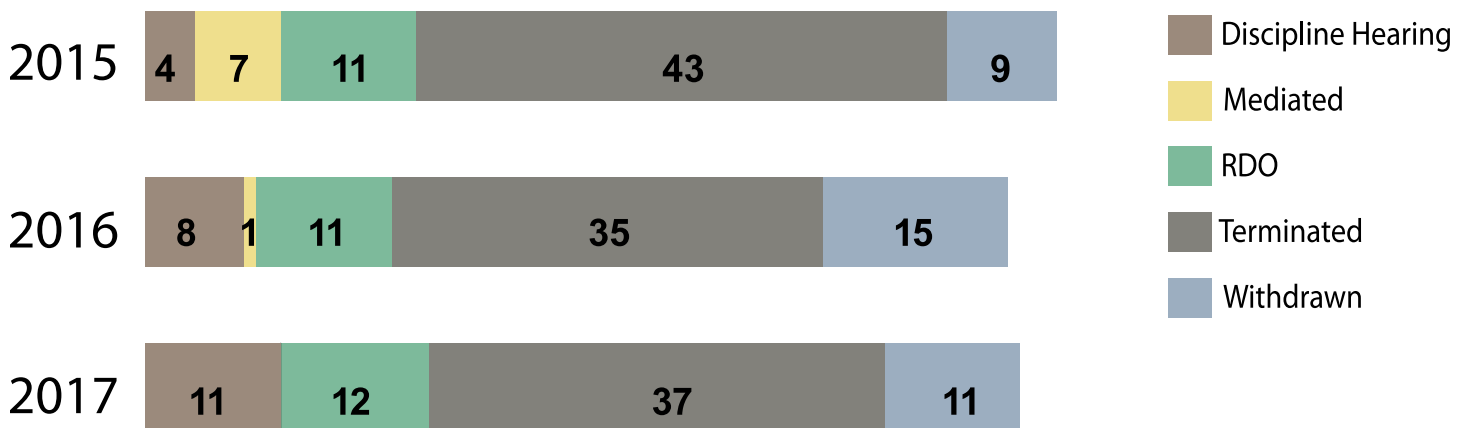
INVESTIGATIONS OF MEMBERS AND PERMIT HOLDERS

Cases

year-end



How Cases are Closed



Methods of Case Closure

Discipline Hearing—the Investigative Committee has referred the matter to the Discipline Committee for a formal hearing.

Mediated—the Investigative Committee has approved a mediated agreement between the parties.

RDO—recommended discipline order. The investigated member has admitted to unskilled practice, unprofessional conduct, or both, and has agreed to specific sanctions.

Terminated—the Investigative Committee has determined that the complaint was either frivolous or vexatious, or that there was insufficient evidence of unskilled practice, unprofessional conduct, or both.

Withdrawn—the complainant has either withdrawn or abandoned the complaint.



THE PUBLIC PERSPECTIVE: INVESTIGATIVE COMMITTEE

It is an honour to serve as the public representative on APEGA's Investigative Committee, since my ministerial appointment on July 4, 2017.

In my short time serving on the committee, I have found that it is well run and doing an excellent job of serving the engineering and geoscience professions and the public interest. It is holding APEGA's members to the high standards expected of all professionals.

The time commitment and dedication of committee volunteers and APEGA staff are exceptional and inspiring.

A past issue was the length of time required for complaint resolutions. The Investigative Committee takes all complaints seriously and no complaint is ever left uninvestigated, no matter how trivial. The committee is working towards a more streamlined approach to dealing with matters that do not really affect the public or the professions. The quick resolution of these complaints should decrease the length of time taken to resolve all complaints.

The complaint investigation process is thorough and comprehensive. All parties to a complaint are given adequate opportunity to present their cases. Complaints are investigated by experienced staff and appropriately designated professionals who volunteer on the committee.

Investigative techniques and procedures are complex. All parties in a complaint feel they are correct and justified in the stances they take. It is the investigators' job to present the facts objectively in a report to the Investigative Committee, while being aware of APEGA's professional standards and image, and the public interest.

The Investigative Committee is successfully fulfilling its mandate.

Ian McConnan, FCPA, FCA

THE PUBLIC PERSPECTIVE: DISCIPLINE COMMITTEE

“Professional engineers and geoscientists shall uphold and enhance the honour, dignity and reputation of their professions and thus the ability of the professions to serve the public interest.”

The above statement is one of the Rules of Conduct in the *Code of Ethics* of APEGA. It truly drives the proceedings of this committee.

During the 2017 year, I, the public member, had the opportunity to be involved with the various activities of the Discipline Committee. Whether it was discussion at a meeting of the committee as whole, the orientation of new members on the committee, or the deliberation among those of us sitting on a hearing panel, it was evident that the competency and compliance of the member’s practice, along with concern for the public well-being, were of paramount concern.

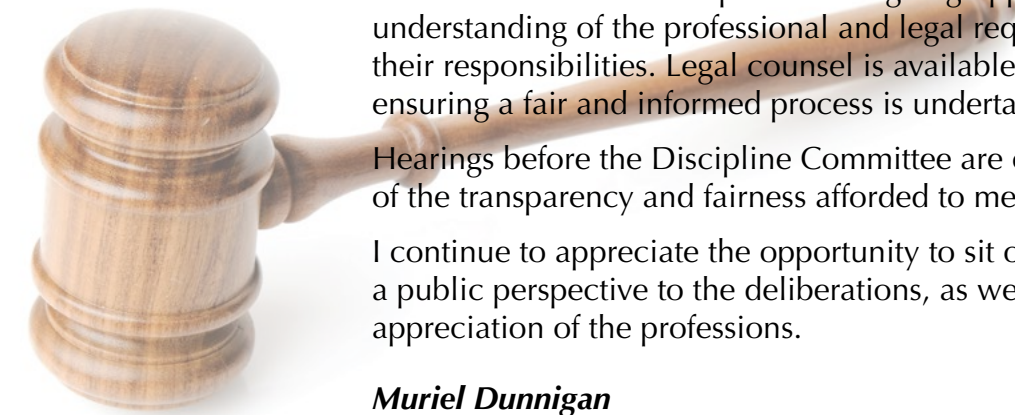
It is evident that the professions take their responsibility to fulfill the requirements of professional self-regulation in Alberta very seriously. The public member appointed by the government is truly welcomed and their input valued. APEGA is continually refining its governance and oversight practices. The Discipline Committee is working towards more timely resolutions of those cases under consideration, which in turn assures the public that its safety is a serious concern.

Committee members are provided ongoing opportunities to increase their understanding of the professional and legal requirements of such a body and their responsibilities. Legal counsel is available to support the committee, ensuring a fair and informed process is undertaken.

Hearings before the Discipline Committee are open to the public, an example of the transparency and fairness afforded to members under investigation.

I continue to appreciate the opportunity to sit on this committee and bring a public perspective to the deliberations, as well as have a more informed appreciation of the professions.

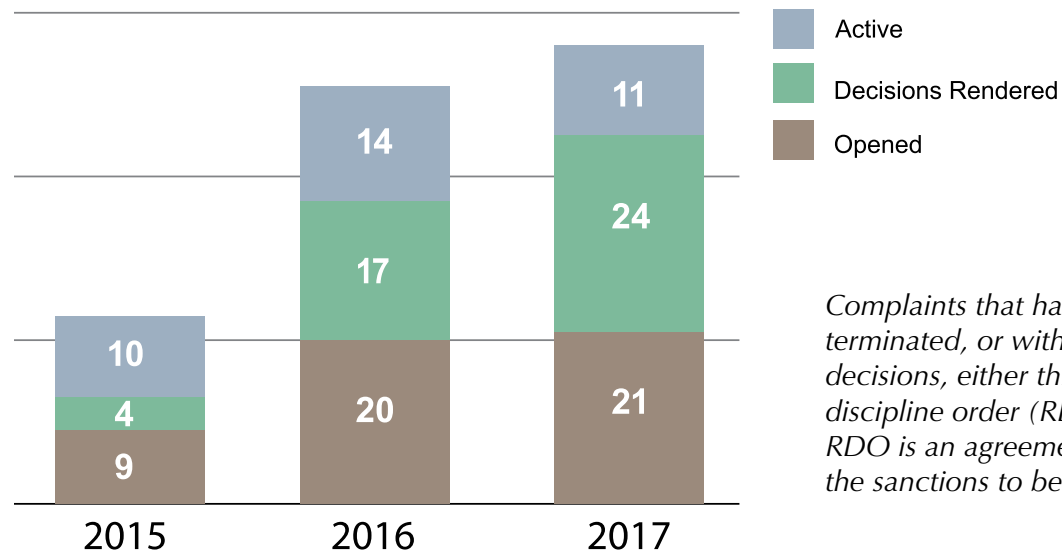
Muriel Dunnigan



MEMBER AND PERMIT HOLDER DISCIPLINE AND APPEALS

Discipline

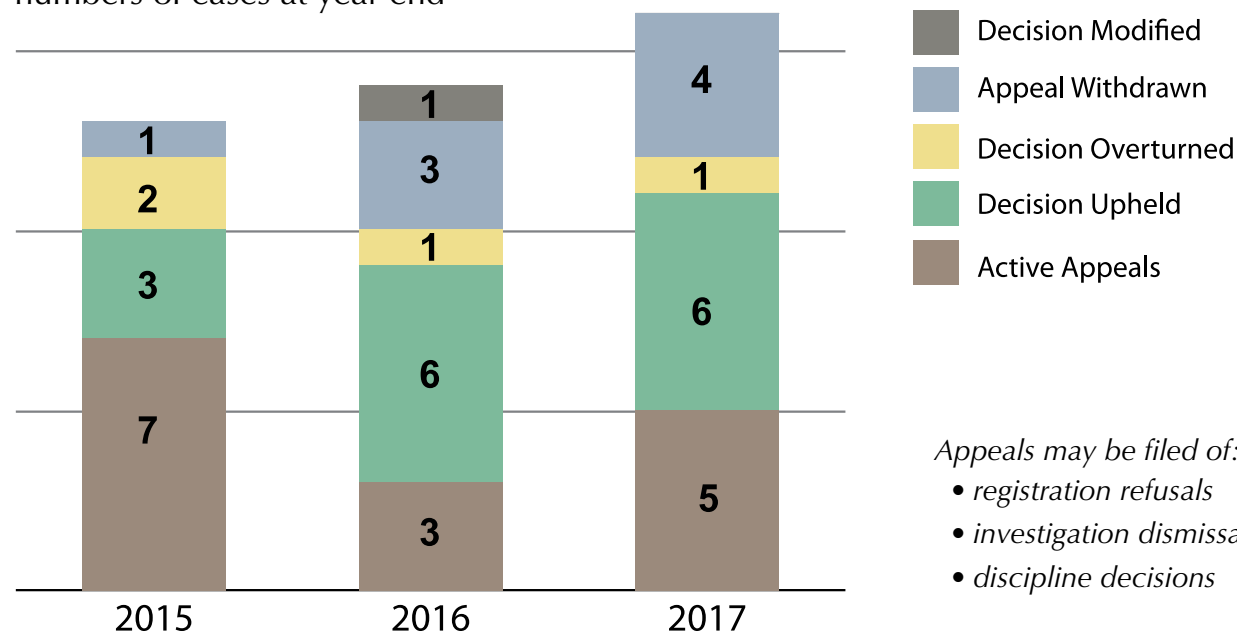
numbers at year-end



Complaints that have not been mediated, terminated, or withdrawn result in discipline decisions, either through a recommended discipline order (RDO) or a formal hearing. An RDO is an agreement on the facts of a case and the sanctions to be imposed.

Appeals

numbers of cases at year-end



Appeals may be filed of:

- registration refusals
- investigation dismissals
- discipline decisions



Average Number of Days to Render an Appeals Decision

THE PUBLIC PERSPECTIVE: APPEAL BOARD

The Appeal Board and the staff who work with it continued to make every effort to ensure the board effectively achieves its mandate. To that end, the board met twice to review its work and how it relates to the work of the Investigative Committee, the Discipline Committee, and the Board of Examiners, which are also tasked with meeting the requirements of APEGA's self-regulated professions. The board meetings afforded opportunity to review timelines for appeals, examine what legislative and administrative changes were in the works or had been implemented, and review issues and literature related to appeals in a profession that also seeks to protect the public interest.

The Appeal Board has gained new members, and the board meetings provide background and information for them in the role they have assumed.

appropriate standard of review. The board can hear appeals related to decisions of the Investigative Committee, the Discipline Committee, or the Board of Examiners. Most cases are related to decisions of the Investigative Committee, for which the Appeal Board has two options: uphold the decision or refer the matter to the Discipline Committee for hearing.

The Appeal Board heard appeals under Section 32 and Section 51 of the *Engineering and Geoscience Professions Act*. Most cases raise matters of unskilled practice or unprofessional conduct that relate to the public interest. Section 51 appeal hearings dealt with a wide variety of issues, including fracking and water contamination; welds and securing a pipeline; failure to pay wages and remit employee deductions; steam injection; third-party requests for proposal; employee reference impacting future employment; and investment in a building project.

‘The cases the Appeal Board heard indicate that members and companies with a permit to practice should ensure they engage in clear communications, develop clear written contracts with scope-of-work details, and maintain clear and current Professional Practice Management Plans. These measures will go a long way to prevent complaints and protect the public interest.’

The board has also named two assistant vice-chairs, to ensure chairs are available for hearings in the short-term and provide sound succession planning for the long-term. After examining the potential for appeals, APEGA sought to have a second public member named to share the workload, but was informed that, by legislation, the Government of Alberta may only appoint one public member.

Appeal Board panels are selected on the basis of who is available for the date identified for a hearing. Panels are made up of a chair, three other professional members of APEGA who sit on the board, and the public member (unless I must recuse myself). Whether written or in-person, the Appeal Board uses reasonableness as the

The cases the Appeal Board heard indicate that members and companies with a permit to practice should ensure they engage in clear communications, develop clear written contracts with scope-of-work details, and maintain clear and current Professional Practice Management Plans. These measures will go a long way to prevent complaints and protect the public interest.

APEGA and the Appeal Board have met the responsibilities of self-regulation and served Alberta's public interest well during the past year. I am pleased to be able to continue working on behalf of the public.

Harold Neth

STRENGTHENING THE PILLARS OF PROFESSIONAL PRACTICE

By guiding and supporting our licenced professionals and permit holders in three important pillars—individual practice, corporate practice, and practice standards and guidelines—we ensure the safe and ethical practice of engineering and geoscience in Alberta.

In 2017, we embarked on a journey to strengthen our processes, to educate those who practise the professions, and to create greater capacity to support our licensed professionals. This journey includes:

- creating, reviewing, and updating our professional practice standards and guidelines
- optimizing the administration of APEGA's mandatory continuing professional development program for our licenced professionals
- conducting professional practice reviews of our permit to practice holders

PRACTICE STANDARDS AND GUIDELINES

Professional practice standards and guidelines expand upon the *Engineering and Geoscience Professions Act* to provide concrete details on the obligations and responsibilities required of our licenced professionals. To keep these documents relevant, it is important that they are reviewed regularly. Accomplishing this requires a comprehensive effort from the volunteers who provide subject-matter expertise, the other members we reach through consultation, and our professional and other staff.

In 2017, APEGA released two standards:

- the new *Professional Responsibilities in Completion and Assurance of Wetland Science, Design and Engineering Work in Alberta*, in cooperation with nine other regulatory bodies
- the updated *Evaluation of Oil and Gas Reserves and Resources for Public Disclosure*

APEGA is also reviewing and updating core standards that assist licenced professionals in meeting their legal and ethical responsibilities. Including member consultation, the process will take 18 months. These core standards are:

- *Authenticating Professional Work Products* (moving to member consultations in fall 2018)
- *Relying on the Work of Others and Outsourcing* (starting in mid-2018)
- *Professional Practice Management Plan* (starting in 2019)

CONTINUING PROFESSIONAL DEVELOPMENT

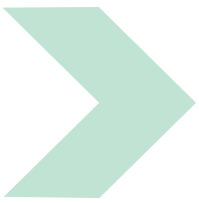
Alberta's citizens expect our licensed professionals, as part of self-regulation, to commit to career-long learning through our mandatory continuing professional development (CPD) program. Members who do not comply risk the loss of their licences to practise.

In a 2017 pilot project to optimize the administration of CPD, we reviewed the CPD submissions of 100 members in three categories:

- members who failed to report any CPD hours in the past three years
- members who had reported CPD but had *not* met minimum requirements
- members who *had* met requirements

The pilot resulted in many learnings for APEGA and the licensed professionals we reviewed. Overall, reviewees learned that reporting is not difficult once they understand the basics—much more of their informal activity is eligible for CPD than they had thought.

We know that we must spread these lessons across our membership. We will look for more ways of sharing them, helping licenced professionals meet their CPD obligations.



PROFESSIONAL PRACTICE REVIEWS

In our second 2017 pilot project, we tested a new approach to proactively reviewing the practices of APEGA permit holders. With the cooperation of six permit holders of varying sizes and across many industries, APEGA conducted collegial and collaborative reviews. These focused on improving the practices of engineering and geoscience in Alberta.

The pilot program was a successful stress test of the new process and tools. The result is a comprehensive, fair, and transparent review process, benefitting permit holders and Albertans.

Based on the pilot project, we initiated a further 26 practice reviews in 2017 for completion in 2018.

Critical to the pilot's success was the cooperation of the six permit holders, along with the participation and cooperation of their Responsible Members, other licenced professionals, members-in-training, and other staff members. The participating permit holders are:

- CH2M HILL Energy Canada Ltd.
- Insituform Technologies Ltd.
- Nexen Energy ULC
- Rally Engineering Inc.
- Supreme Steel LP
- Tetra Tech Canada Inc.



THE PUBLIC PERSPECTIVE: PRACTICE REVIEW BOARD

In April 2017, I received the official letter from the Minister of Labour appointing me as the Government of Alberta's public member on APEGA's Practice Review Board (PRB).

The PRB helps ensure that members of APEGA using the title professional engineer, professional geoscientist, or professional licensee (or the legacy titles professional geophysicist or professional geologist) adhere to the standards, regulations, and ethics of the professions. The PRB undertakes these responsibilities through reviewing and making recommendations on requests for reinstatement and resumption of practice; ensuring that professionals maintain their designation through professional training and development; and reviewing the practices of permit holders. The latter began in 2017 as a pilot project that included on-site reviews of engineering and geoscience firms.

As the only public (non-engineer/non-geoscientist) member of the PRB, I am accountable to fully participate in the work of the board. It is also my responsibility to ensure that the public's interests are represented in the board's deliberations, considerations, and decision-making. The other volunteer members of the board and APEGA staff have welcomed this input and have invited my full participation in all their endeavours.

APEGA's strategic plan for the PRB's work has been expanded to more fully undertake assurances that, as a self-regulating body, APEGA serves its members more holistically. The plan also calls on APEGA to strive to improve its enforcement of Alberta's *Engineering and Geoscience Professions Act*, the *General Regulation*, APEGA's bylaws, and APEGA's practice standards and guidelines—some of the essential regulatory documents for the professions of engineering and geoscience.

Successes over the past year included:

- executing a pilot program to review the professional practices of engineering and geoscience firms that hold APEGA permits to practice. Staff worked diligently to support board members in this work by developing a questionnaire for use in reviewing the Professional Practice Management Plans (PPMPs) of six engineering firms that volunteered for the pilot. Staff also organized on-site audits and compiled the findings on behalf of the review teams for consideration by the full board. These on-site audits were extremely beneficial for all parties involved

and will no doubt prove to be a tremendous learning opportunity for not only the permit holders and APEGA, but also for the management teams of the firms and the members of the professions who participated. The board will also use some of these findings to improve its services to APEGA members. Some of the findings involve: technical clarifications, expanded digital access and information; and support through clarifications and recommendations for improvement to PPMPs

- initiating 26 additional initial practice reviews of APEGA permit holders using the lessons learned from the pilot program
- executing a second pilot program to improve enforcement of APEGA's mandatory continuing professional development program
- recommending approval for about 700 reinstatement or resumption applications. Reinstatements are for former members wishing to re-establish their APEGA membership. Resumptions are for members who wish to re-establish their practising status after declaring a period of non-practice. As part of this process, the PRB also initiated a panel hearing to ensure that natural justice was appropriately exercised in the case of an applicant who is not recommended for reinstatement. I participated in that panel

Although there were over 30 practice reviews and hundreds of reinstatements and recommendations made by the board, given the date of my appointment, I was only able to attend the last five of eight PRB meetings in 2017. However, I was able to fully participate in the pilot permit holder reviews and in the first on-site audit. I also participated in a tribunal hearing panel and provided input into its procedures.

I am very encouraged by the integrity, professionalism, and attentiveness of my fellow board members. I also want to commend the APEGA staff supporting the board for their professionalism, effort, and diligence in undertaking innovative steps to improve APEGA's self-regulatory functions and to improve its service to their members.

It has been a distinct honour to serve on the Practice Review Board of APEGA. I look forward to our work together and the continued improvements being made within APEGA's self-regulating professions for members and the overall benefit of Albertans.

Respectfully submitted,
Maria David-Evans, B.Sc., MBA, MA, RSW

REACHING THE TOP

Every year, a major part of our annual general meeting and conference is a celebration of high-achieving members and their projects. This honouring of a cross-section of excellence is called the Summit Awards.

2017 AWARDS & RECIPIENTS

Centennial Leadership

Dr. Gary Faulkner, P.Eng., FEC, FGC (Hon.)

Research Excellence

Dr. Josephine Hill, P.Eng., FEC, FGC (Hon.)

Frank Spragins Technical

Todd Simenson, P.Eng., FEC

Excellence in Education

Dr. Janet Elliott, P.Eng.

Early Accomplishment

Oliver Kohlhammer, P.Eng.

Community Service

Dr. Tracey Stock, P.Eng.

Outstanding Mentor

Dr. Andrzej Slawinski, P.Geol.

Women in Engineering and
Geoscience Champion

Dr. Jocelyn Grozic, P.Eng.

Environment and Sustainability

Quest Carbon Capture and Storage Project

Honorary Membership

Pat Lobregt, FEC (Hon.), FGC (Hon.)

SHOWING OUR APPRECIATION

Our people and their many contributions to APEGA and the public are important to us. We regularly let them know that, at special events acknowledging important accomplishments in their involvement with their professional association.

About 600 new life members were invited to special dinners in their honour. We also invited more than 350 members to events acknowledging their APEGA volunteering milestones or their attainment of fellowship status in Engineers Canada, Geoscientists Canada, or both.

In 2017, we also invited more than 4,000 new members to member induction ceremonies, to celebrate their professional membership in APEGA.



Quest team and project

THE POWER OF VOLUNTEERING

Sometimes our members support us by making a series of short-term commitments. For example, they are judges for APEGA Science Olympics, or resumé advisors for university students.

Other times, they're into the volunteering scene for a longer term. Maybe they're semi-regular presenters or branch executive members.

Volunteers also bring career wisdom and experience to major regulatory functions, committing to appointments as registration examiners, investigative committee members, or members of other statutory bodies.

Whatever roles they're selected for, members are critical to the success of their professions and their association. We couldn't do it without them.

- Volunteers ensure what we do is relevant, accurately reflecting the needs and expertise of our professions and the industries they represent.

- Volunteers help us introduce children to the wonders of science and math, and university students to their future professional community.
- Volunteers give our professions a human face, putting the self in self-regulation.
- Volunteers develop their own careers and knowledge, and learn new skills.
- Volunteers elected to Council provide leadership and governance to the entire organization.

There really is something for everyone. We post from 150 to 200 volunteer positions a year. At any given time, from 1,500 to 1,750 volunteers are on our volunteer roster.






THE FUTURE STARTS HERE

APEGA is helping ensure that the next century of professional geoscience and engineering is in good hands. We inspire students in Grade 1 to Grade 12 by putting on fun and engaging engineering and geoscience events. We add value to university students' studies, by connecting them to their future professions and employment sectors, and by helping them develop skills they'll need to excel in their careers.



events held

2,934 

students reached

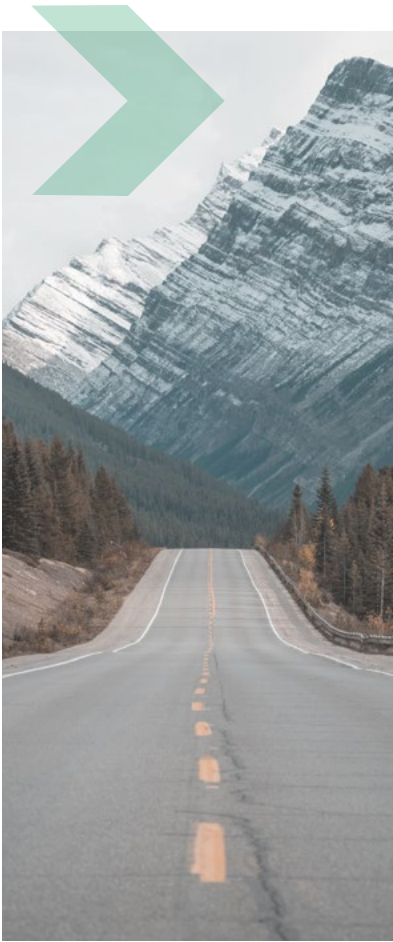
431

volunteer
positions filled

3,945

volunteer hours
recorded





MENTORING PROGRAM GOES PROVINCIAL

In October 2017, our mentoring program expanded to all 10 of our branches, making it a province-wide service. Members from across **Alberta** now have access to our online matching database, allowing them to connect with mentors or mentees in their region.

We also launched distance mentoring. If a local match isn't available, members can easily connect with **professionals** from another community—no travel required. Conversations take place via phone, email, FaceTime or Skype—whatever **technology** works best for each matched pair.

As part of the program expansion, we created a series of online orientation videos, allowing members to access **mandatory** training without even leaving home. Previously, new participants had to attend an in-person orientation session, which was only available to Edmonton and Calgary members.

QUICK FACT

Since the program's 2005 launch, more than 1,500 APEGA members have been matched.

Program Participation

year-end

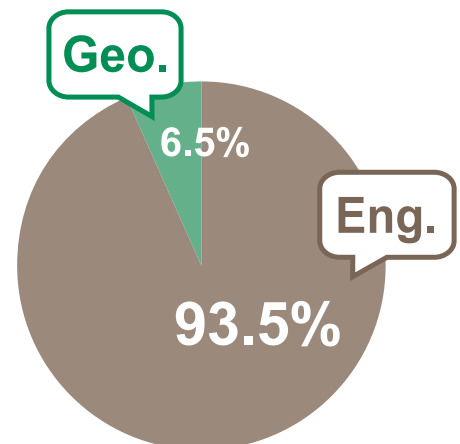
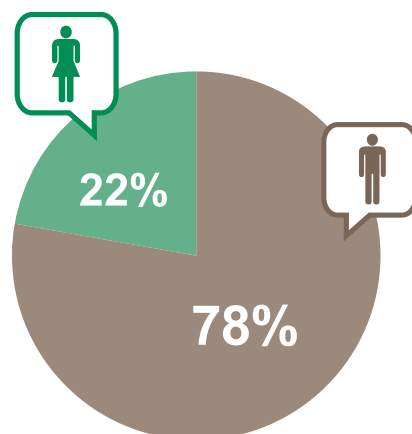
Mentors

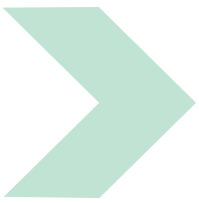
379

Mentees

311

Mentors and Mentees Combined





RESPONDING TO THE ECONOMY: DUES REDUCTION

Professional engineers and geoscientists faced high job losses during the recent recession. Alberta's economy is **improving**, but the job market is still recovering.

Over the past two years, APEGA has offered our **unemployed members** an annual dues reduction of 75 per cent. In 2017, Council approved a one-year **extension** to these dues reductions, to a maximum of three consecutive years.

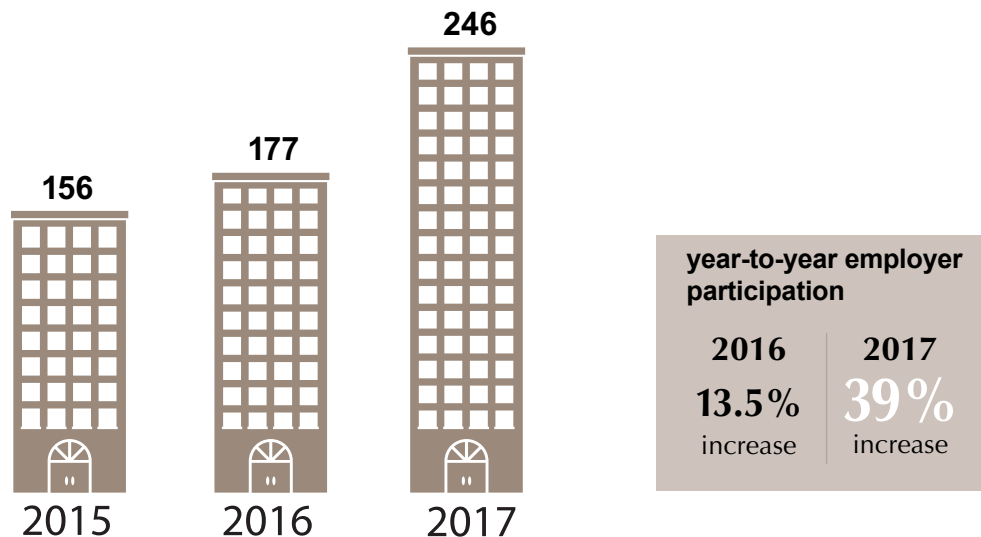
Members who currently have their dues reduced can apply to **extend** that reduction in 2018, if they are still unemployed.

GAUGING THE JOB MARKET, SEARCHING THE JOB MARKET

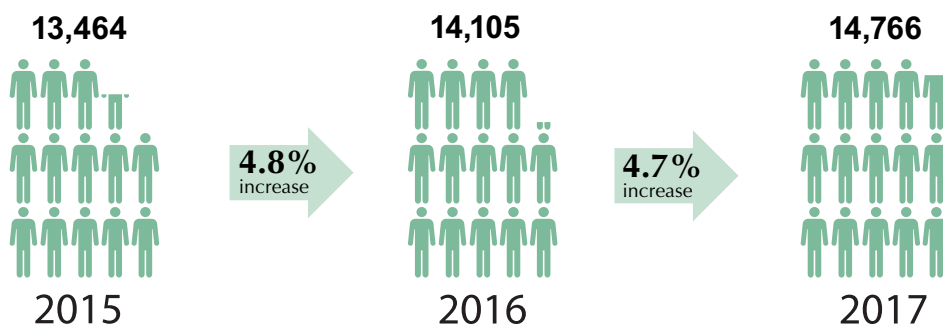
Every year, our salary survey provides up-to-date information on compensation for our members. In 2017, 246 permit holding organizations participated, representing more than 14,500 APEGA members.

Survey Participants

employers



total personnel represented





Gender Progress

- Females in geoscience continue to represent more than a quarter (28 per cent) of the total geoscience sample in our annual survey. Results show that salaries for female geoscientists are nearly equal to those of their male counterparts (99.5 per cent).
- Engineering base salary results show a difference of 2.5 per cent between male and female average base salaries in 2017.



Simple to use and fully searchable, our job board allows members to zero in on engineering- and geoscience-related positions.

APEGA Job Board 2017

9,379 

Members Registered*

705 

Employers Registered*

 916

Job Postings

**cumulative—includes 2016*

OPTIONS FOR LEARNING

We provide a mix of professional development opportunities to support members' professional learning needs and the requirements members must meet in our mandatory continuing professional development program.

APEGA offered a variety of sessions in 2017—everything from career management to incident investigation best practices.

Our biggest professional development event, the APEGA Annual General Meeting & Conference, included 24 interactive sessions in 2017. Regulatory insights, technical knowledge, management and leadership skills, and job search savviness in today's environment—these topics and more were presented.

Including the conference, we held 13 professional development events across the province, supporting the learning needs of about 580 members. Individual branches also offered their own speakers, tours, and other PD events, reaching hundreds of other members.

SUMMARY FINANCIAL STATEMENTS

Association of Professional Engineers and Geoscientists of Alberta
December 31, 2017

Independent Auditor's Report on the Summary Financial Statements

March 22, 2018

To the Members of
Association of Professional Engineers and Geoscientists of Alberta

The accompanying financial statements, which comprise the summary statement of financial position as at December 31, 2017 and the summary statement of operations for the year then ended, and the related notes, are derived from the audited financial statements of the Association of Professional Engineers and Geoscientists of Alberta for the year ended December 31, 2017. We expressed an unmodified audit opinion on those financial statements in our report dated March 22, 2018.

The summary financial statements do not contain all of the disclosures required by Canadian accounting standards for not-for-profit organizations. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of the Association of Professional Engineers and Geoscientists of Alberta.

Management's responsibility for the summary financial statements

Management is responsible for the preparation of a summary of the audited financial statements on the basis described in note 1.

Auditor's responsibility

Our responsibility is to express an opinion on the summary financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, Engagements to Report on Summary Financial Statements.

Opinion

In our opinion, the summary financial statements derived from the audited financial statements of the Association of Professional Engineers and Geoscientists of Alberta for the year ended December 31, 2017 are a fair summary of those financial statements, on the basis described in note 1.

Chartered Professional Accountants

SUMMARY FINANCIAL STATEMENTS

Association of Professional Engineers and Geoscientists of Alberta
As at December 31, 2017



Summary Statement of Financial Position

(in thousands of dollars)

	2017 \$	2016 \$
Assets		
Current assets		
Cash and cash equivalents	3,017	1,529
Accounts receivable	1,450	710
Prepaid expenses	380	255
	<hr/> 4,847	<hr/> 2,494
Tangible capital assets	5,145	5,280
Intangible assets	1,320	1,156
Investments	16,462	15,501
Defined benefit pension plan surplus	1,519	823
	<hr/> 29,293	<hr/> 25,254
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	1,435	980
Government remittances payable	-	97
Deferred dues and fees revenues	11,865	10,279
Obligation under capital lease	36	34
	<hr/> 13,336	<hr/> 11,390
Deferred lease inducement	1,367	1,570
Obligation under capital lease	30	66
	<hr/> 14,733	<hr/> 13,026
Net Assets		
Invested in tangible capital and intangible assets	6,399	6,336
Internally restricted – legislative review	1,000	1,100
Unrestricted	7,161	4,792
	<hr/> 14,560	<hr/> 12,228
	<hr/> 29,293	<hr/> 25,254

SUMMARY FINANCIAL STATEMENTS

Association of Professional Engineers and Geoscientists of Alberta
For the year ended December 31, 2017



Summary Statement of Operations

(in thousands of dollars)

	2017 \$	2016 \$
Revenues		
Members' annual dues	19,804	18,500
Permit annual dues	2,143	1,950
Registration fees	1,709	1,552
Examination fees	1,584	1,503
Affinity program	531	571
Fees recovered for programs	655	764
General	288	292
Realized and unrealized investment gain	1,039	1,280
	<u>27,753</u>	<u>26,412</u>
Expenses		
Salaries and benefits	13,104	12,471
Consultants and contractors	1,253	1,586
IT and telecommunications	2,273	1,387
Legal fees	1,056	817
Travel, meals and volunteers	1,241	1,461
Facilities lease and management	2,065	1,969
National assessment and premiums	1,076	1,210
Exam administration	722	723
Printing, supplies and distribution	773	1,042
Advertising and promotion	138	93
Sponsorships	62	100
Administration	271	455
Bank and financial charges	637	620
Depreciation and amortization	1,113	1,233
	<u>25,784</u>	<u>25,167</u>
Excess of revenues over expenses for the year	<u>1,969</u>	<u>1,245</u>

The accompanying notes are an integral part of these summary financial statements.

SUMMARY FINANCIAL STATEMENTS

Association of Professional Engineers and Geoscientists of Alberta
December 31, 2017



Notes to Summary Financial Statements

(in thousands of dollars)

1 Basis of presentation

The summary financial statements are derived from the audited financial statements, prepared in accordance with Canadian accounting standards for not-for-profit organizations as at December 31, 2017 and for the year then ended.

The preparation of these summary financial statements requires management to determine the information that needs to be reflected in them so that they are consistent in all material respects with, or represent a fair summary of, the audited financial statements.

Management prepared these summary financial statements using the following criteria:

- the summary financial statements include all statements included in the audited financial statements with the exception of the statement of changes in net assets and the statement of cash flows;
- information in the summary financial statements agrees with the related information in the audited financial statements;
- major subtotals, totals and comparative information from the audited financial statements are included; and
- the summary financial statements contain the information from the audited financial statements dealing with matters having a pervasive or otherwise significant effect on the summary financial statements, such as described in note 2.

The audited financial statements of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) are available on APEGA's website at www.apega.ca.

2 Summary of significant accounting policies

Revenue recognition

Revenue is recognized when evidence of an arrangement exists, the service has been rendered, the price is determinable and ultimate collection is reasonably assured.

Specific revenue recognition policies include the following:

- dues and permit fees are set annually by Council and are recognized as revenue proportionately over a fiscal year to which they relate;
- registration fees are recognized when received;
- examination fees are recognized when the examination is presented;
- general revenue is recognized when the related services are provided or goods are shipped; and
- realized investment income includes interest and dividends and is recognized when earned.

APEGA follows the deferral method of accounting for contributions, which include grants and donations. Grants are recognized in the accounts when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. Donations are recorded when received, since pledges are not legally enforceable claims. Unrestricted contributions are recognized as revenue when initially recorded in the accounts. Externally restricted contributions are deferred when initially recorded in the accounts and are recognized as revenue in the year in which the related expenses are recognized.

SUMMARY FINANCIAL STATEMENTS

Association of Professional Engineers and Geoscientists of Alberta
December 31, 2017



Notes to Summary Financial Statements

(in thousands of dollars)

3 Defined benefit pension plan

In the year-end summary statement of financial position, APEGA recognizes the defined benefit obligation, less the fair value of the plan assets.

	2017	2016
	\$	\$
Defined benefit pension plan surplus		
Plan assets at fair value	17,538	16,766
Accrued benefit obligations	(16,019)	(15,943)
	<hr/> 1,519	<hr/> 823

BIG-PICTURE STATEMENTS

VISION

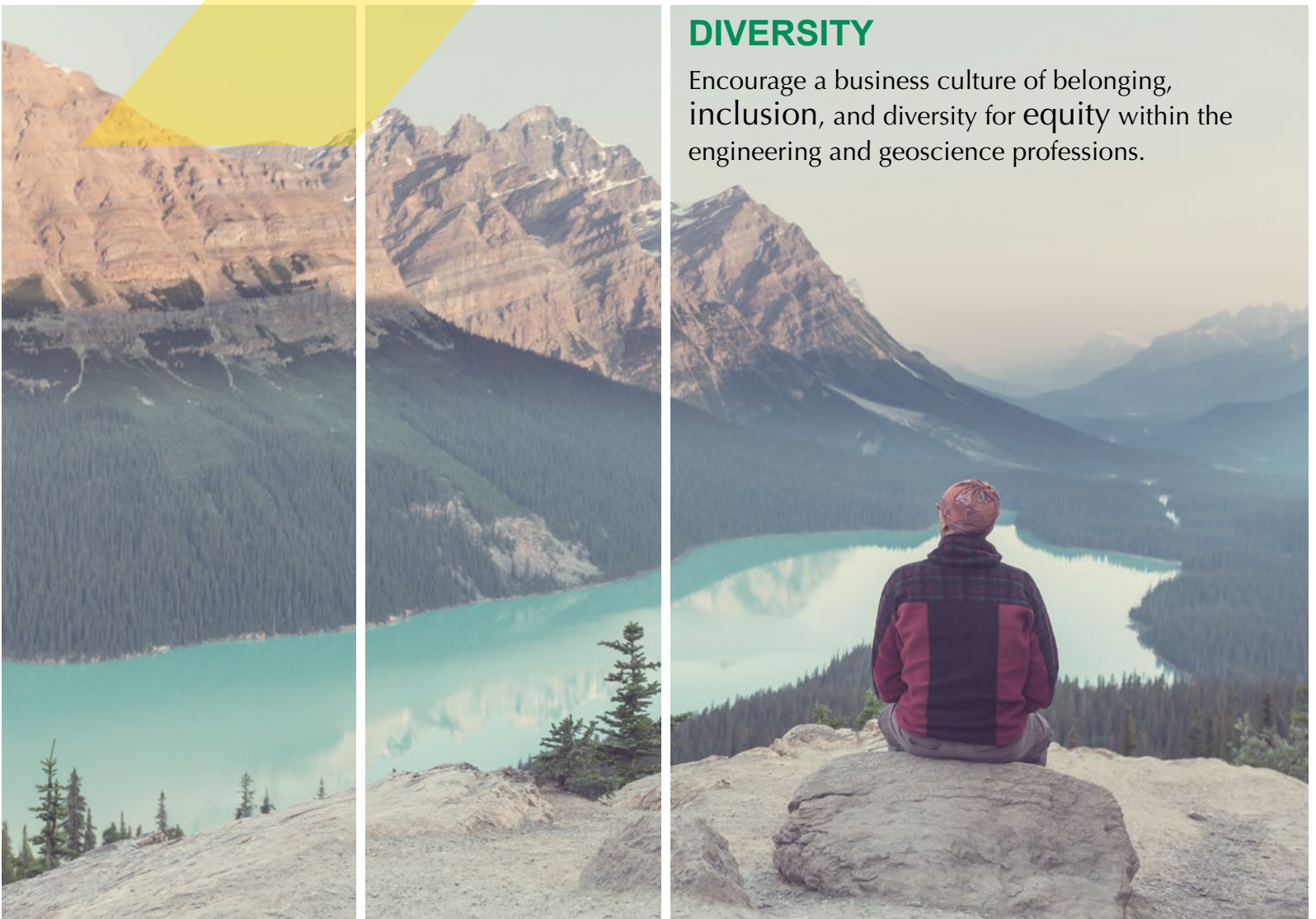
APEGA will earn the confidence of the public and instill pride in its members.

MISSION

Regulate the practices of engineering and geoscience to serve the public interest in Alberta.

DIVERSITY

Encourage a business culture of belonging, inclusion, and diversity for equity within the engineering and geoscience professions.



Peyto Lake in Banff National Park



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The Association of Professional
Engineers and Geoscientists of Alberta