Engineers Canada
2012 Membership Survey

June 3, 2013

Contents

List of Tables

List of Figures

Descriptions of Membership Categories

The membership categories vary from one jurisdiction to another and so do the terms used to describe the categories. To describe the membership composition at a national level, it is therefore necessary to establish a common ground for the categories. In the core of the text, the terms defined here are identified in *blue italics*.

Engineer Members: Total engineer members includes all categories of members **except** engineering students. Note that this category includes engineers-in-training (ingénieurs juniors/stagiaires in Québec) although they are not technically considered engineers yet. These are the numbers used in this report to track year-to-year growth in the last five years.

Adjustment for Dual Licensing: Note that membership counts include a certain proportion of dual memberships since members can obtain licensing in more than one jurisdiction. Earlier Engineers Canada studies have shown that approximately 12 percent of the male practising P.Eng.'s (exclusive) are licensed to practise in more than one jurisdiction in Canada. The adjusted number is therefore arrived at by reducing the number of *P.Eng.'s—exclusive* reported by each constituent association by 12 percent.

Professional Engineers (P.Eng.'s)—Inclusive: Includes all categories of practising and non-practising professional members reported by the constituent associations. These are:

- Professional Engineers—exclusive
- Temporary Licence Holders
- Restricted Licence Holders
- Licence to Practise Holders
- Non-Practising or Retired P.Eng.'s
- Life Members

Practising Professional Engineers (P.Eng.'s)—Inclusive: Includes all categories of practising (i.e. not retired) professional members reported by the constituent associations. These are:

- Professional Engineers—exclusive
- Temporary Licence Holders
- Restricted Licence Holders
- Licence to Practise Holders

Practising Professional Engineers (P.Eng.'s)—Exclusive: This category excludes professional engineers accounted for among other categories. These are:

- Licence to Practise Holders
- Temporary Licence Holders
- Restricted Licence Holders

- Retired P.Eng.'s
- Life Members.

Practising Engineer Members: Includes all members who are practising engineer graduates (or equivalent). Excludes non-practising or retired P.Eng.'s, life members, and engineering students.

Engineers-in-Training: These are engineering graduates (or equivalent) who are actively working toward earning a licence to practise engineering according to the rules of their respective jurisdiction. They are sometimes called junior engineers ("ingénieurs juniors" or "stagiaires" in Quebec)

Engineering Students: Includes engineering students in jurisdictions where students are reported by the constituent association.

Members and Participating Students: Some constituent associations report students in this membership survey. In some cases, students are reported because they are members, in other cases they are reported because they are offered services by the constituent associations to provide opportunities for them to network with members and familiarize themselves with the engineering profession. The total number of members and participating students will include all categories of members as well as engineering students in jurisdictions where students are reported.

Engineers Canada 2012 Membership Survey

1 Introduction

Each year Engineers Canada surveys the engineering regulatory bodies in the provinces and territories (see Appendix 1) to collect demographic data about the engineering profession. This report compiles the data, presenting a national view, as well as showing some trends in the profession. Engineers Canada gratefully acknowledges the time and effort dedicated by each constituent association to collect and provide this information.

2 Membership Composition

Total Membership

- Total membership in constituent associations across all membership categories (adjusted to correct for dual members) increased by 5.4 percent from 2011 to 2012. This annual increase improves upon last year's 3.9 percent increase from the previous year.
- In 2012, the total number of *engineer members*—excluding students[1]—across all constituent associations was 260,325; an increase of 10,195 members, or 4.1 percent, from 2011.
- Adjusting for dual memberships[2], the total number of *engineer members* was estimated to be 240,381, which also represents an increase of 4.1 percent from 2011.

Sub-Categories

In 2012, two-thirds (66.8 percent) of total membership across the constituent associations was made up of practising professional engineers (*P.Eng.-Exclusive:* see Figure 1).

- These practising *P.Eng.'s (P.Eng.-Exclusive)*, combined with those granted licences to practise, temporary licences or restricted licences, comprise 68.1 percent of Canadian membership. This proportion is down 0.7 percent from 2011 when it was 68.8 percent.
- *Engineering Students* and *Engineers-in-Training* comprised 21.4 percent of membership in 2012, up by 1.1 percent from the proportion reported the year previous (20.3 percent).
- Non-practising members (retired) and life members accounted for 10.5 percent of the membership, down slightly from 2011 when it was 10.9 percent.

1 In some jurisdictions students are reported as participating students but not in others.
2 These numbers were adjusted to eliminate double counting of members who are licensed to practise in more than one jurisdiction. A 2002 survey estimated that 12 percent of members held a membership in more than one Canadian jurisdiction, and that these were mainly older, self-employed males. Therefore, a downward adjustment of 12 percent of male P.Eng.'s has been applied.

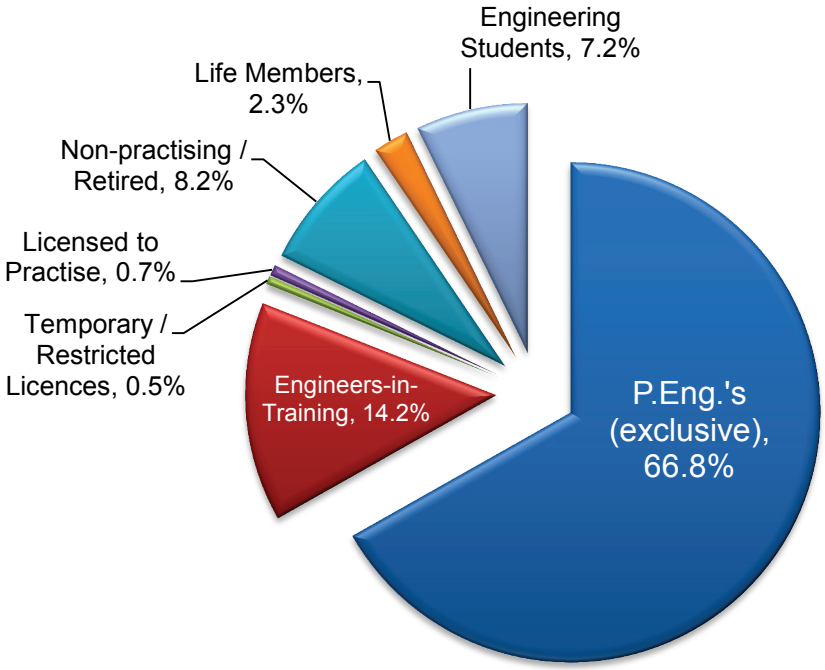

Figure 1*: Member categories as a percentage of total 2012 membership (across all constituencies)

*Percentages may not total 100 due to rounding.

Practising Professional Engineers[3]

- When adjusted for dual membership, the number of *Practising Professional Engineers (P.Eng.'s—Exclusive)*[4] in Canada increased by 4.1 percent in 2012, to 168,304, down 0.2 percent from the 4.3 percent growth reported in 2011.
- If we include all those practising with temporary, limited, restricted, or other licences in this total, there were 171,885 *Practising Professional Engineers (P.Eng.—Inclusive)* in Canada in 2012 compared to 164,871 in 2011, which represents an increase of 4.3 percent.

3 All figures in this section are adjusted to account for dual memberships.
4 Does not include engineers-in-training, those with temporary/limited/restricted licences or retired/non-practising engineers.

Practising Engineer Members[5]

Across all constituent associations there were 230,783 *Practising Engineer Members* in 2012, compared to 220,972 in 2011. Figure 2 shows trends in the various categories of *Practising Engineer Members*, over the five membership periods beginning in 2008.

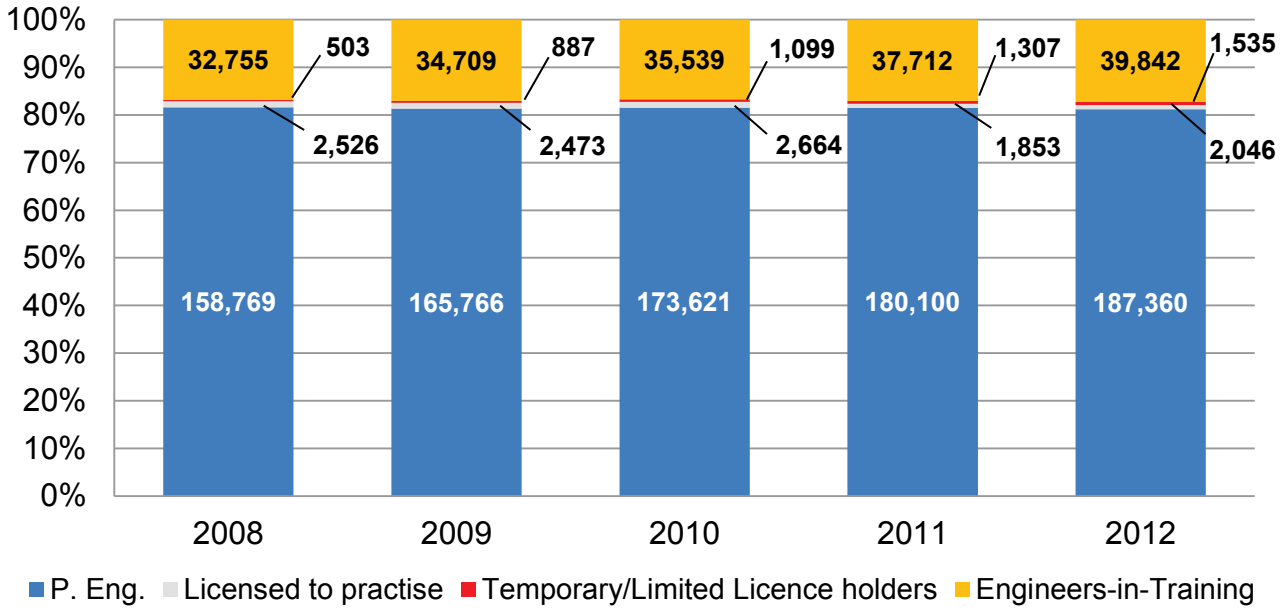

Figure 2: Number of individuals within each category of practising engineer members (all constituencies) reported from 2008 to 2012

- The 6.0 percent annual growth rate of *engineers-in-training* observed from 2008 to 2009 declined to 2.4 percent from 2009 to 2010 but then increased to 6.1 percent from 2010 to 2011. In 2012, the annual growth rate of *engineers-in-training* has made significant gains, with an increase of 12.1 percent from 2011. Across this five-year period the number of *engineers-in-training* has increased by 21.6 percent, from 32,755 to 39,842.
- The number of P.Eng.'s (*P.Eng.'s—Exclusive*) increased by 4.0 percent in 2012, from 180,100 to 187,360. This growth rate is 0.3 percent above that which was reported last year, and continues to maintain the positive trend that has been observed in recent years.
- The number of practising P.Eng.'s (*P.Eng.'s—Exclusive*) has increased by 18.0 percent since 2008. Consistently throughout this five-year period, 8 out of every 10 practising engineers in Canada have held the P.Eng. designation.
- The small number of engineers practising with temporary or limited licences (totalling 1,535 members in 2012) has seen significant increases in annual growth since 2008. The 2012 number represents an increase of 17.4

5 Figures in this and subsequent sections of the report are not adjusted for dual membership.

percent from the 1,307 members reported in 2011. Before that, there was an 18.9 percent increase from 2010 to 2011, a 23.9 percent increase from 2009 to 2010, and a 76.3 percent increase from 2008 to 2009. Overall, from 2008 to 2012, there has been an increase of 205.2 percent of members holding a temporary or limited licence.

***Key Point*:** The decline in the growth of *engineers-in-training* observed from 2008 to 2010 was reversed starting in 2011 and continued in 2012, with increasing growth in the number of those preparing for full integration into the profession. Continued progress in this area will be important to ensure growth in the P.Eng. categories for future years.

3 Geographic Distribution

In 2012, the three constituent associations contributing the largest proportions of engineer members – PEO, OIQ and APEGA - comprised 77.7 percent of all Canadian *engineer members* (see Figure 3, below). This combined proportion is 0.5 percent lower than that observed from 2008 to 2011 when the combined proportion of the three largest constituent associations remained essentially unchanged at 78.2 percent.

- The proportion of total *engineer members* attributable to APEGA has increased by 1.9 percent since 2008 (when it represented 19.1 percent of all members) to 21.0 percent in 2012.
- The PEO share of membership has declined by 1.6 percent over the same period, from 34.2 percent in 2008 to 32.6 percent in 2012.
- Similarly, the OIQ share of total engineer members has declined 1.4 percent from 2008 when it was 25.5 percent to its 2012 level of 24.1 percent.
- Among the smaller constituencies, APEGS, PEGNL, APEGM, and APEY have all registered an increase in their share of total Canadian membership since 2008 (with increases of 0.8 percent, 0.2 percent, 0.1 percent, and 0.1 percent, respectively during that time frame). The contribution to membership made by each of the remaining four constituencies has been essentially constant across the five-year period.

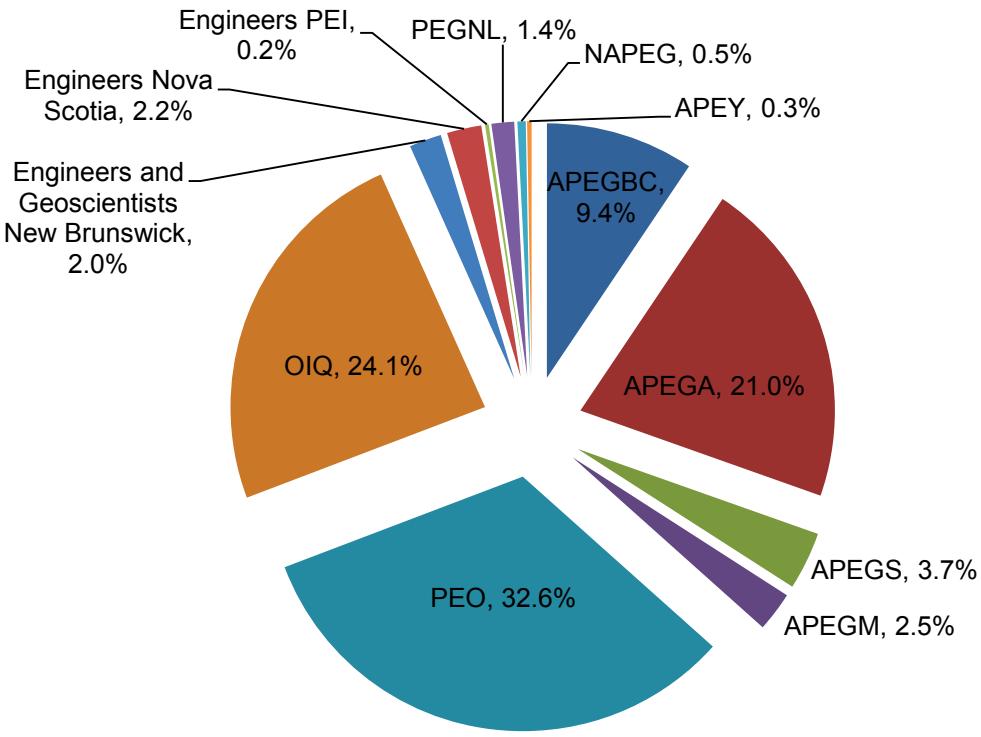

Figure 3*: Proportion of total 2012 engineer membership (excluding students) contributed by each constituent association

*Percentages may not total 100 due to rounding.

Key Point: Since 2008, membership growth[6] in Alberta, Saskatchewan, Manitoba, Newfoundland and Labrador, and the Yukon have compensated for the membership declines in Ontario, Quebec and New Brunswick.

4 Trends and Growth

Long-Term Membership Growth

Figure 4 summarizes the rate of growth in *engineer members* (i.e. all members excluding engineering students) for each constituent association from 2008 to 2012.

6 Total membership excluding engineering students.

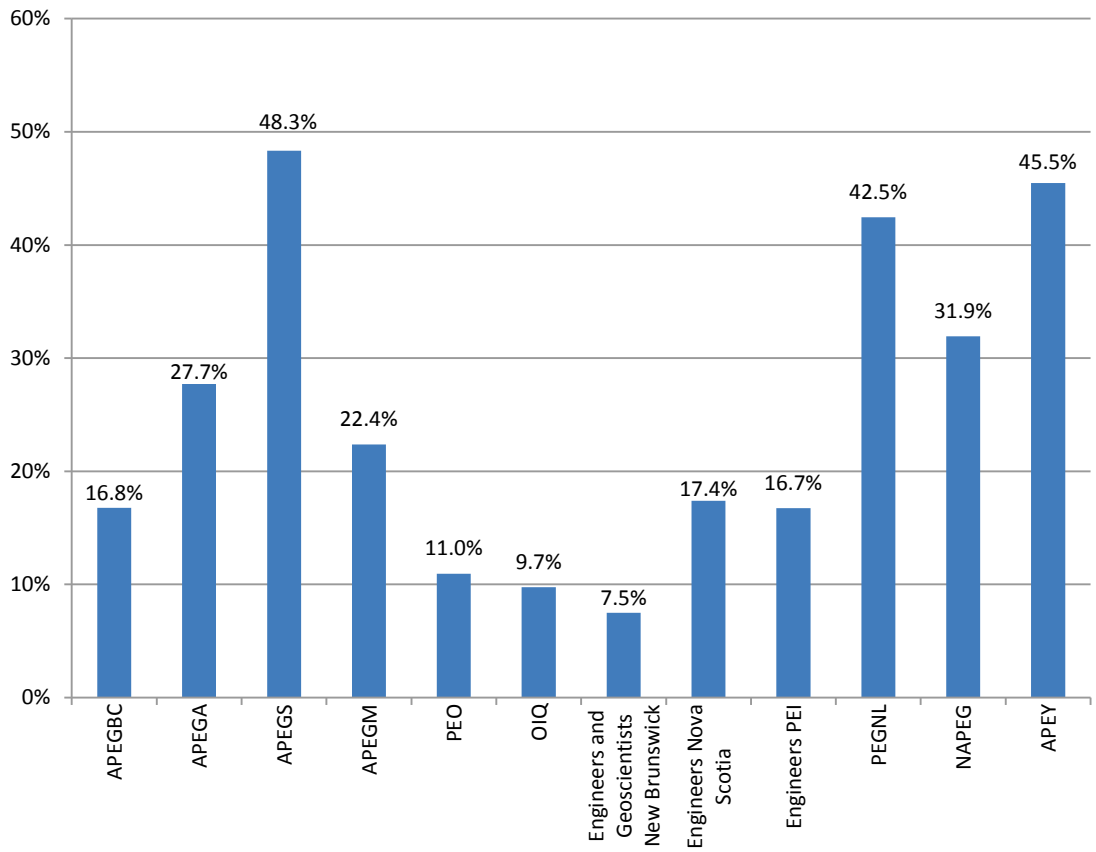

Figure 4: Percent growth in engineer membership (excluding students) for each constituent association between 2008 and 2012

- The national rate of growth over the entire period was 16.4 percent.
- Saskatchewan led all constituencies in growth over this five-year period, at 48.3 percent. The Yukon (45.5 percent), Newfoundland and Labrador (42.5 percent), Nunavut and the Northwest Territories (31.9 percent), Alberta (27.7 percent), and Manitoba (22.4 percent) each also grew at rates significantly above the national average.
- Engineer members increased at just above the national average in British Columbia (16.8 percent), while growth in the remaining jurisdictions was below the national average. New Brunswick reported the lowest growth rate over the five years (7.5 percent), behind Quebec (9.7 percent), Ontario (11.0 percent), Prince Edward Island (15.0 percent), and Nova Scotia (15.0 percent).

Key Point: As was the case last year, all constituent associations grew in engineer members over the five-year period from 2008 to 2012, with a significant portion of the national growth concentrated in the western provinces and the northern territories.

Recent Membership Growth

The total number of *engineer members* (i.e. excluding students) in constituent associations across Canada increased by 4.1 percent between 2011 and 2012. This represents a slightly higher annual increase than that observed from 2010 to 2011, when it was 3.6 percent. Figure 5 below illustrates the annual growth for each constituent association.

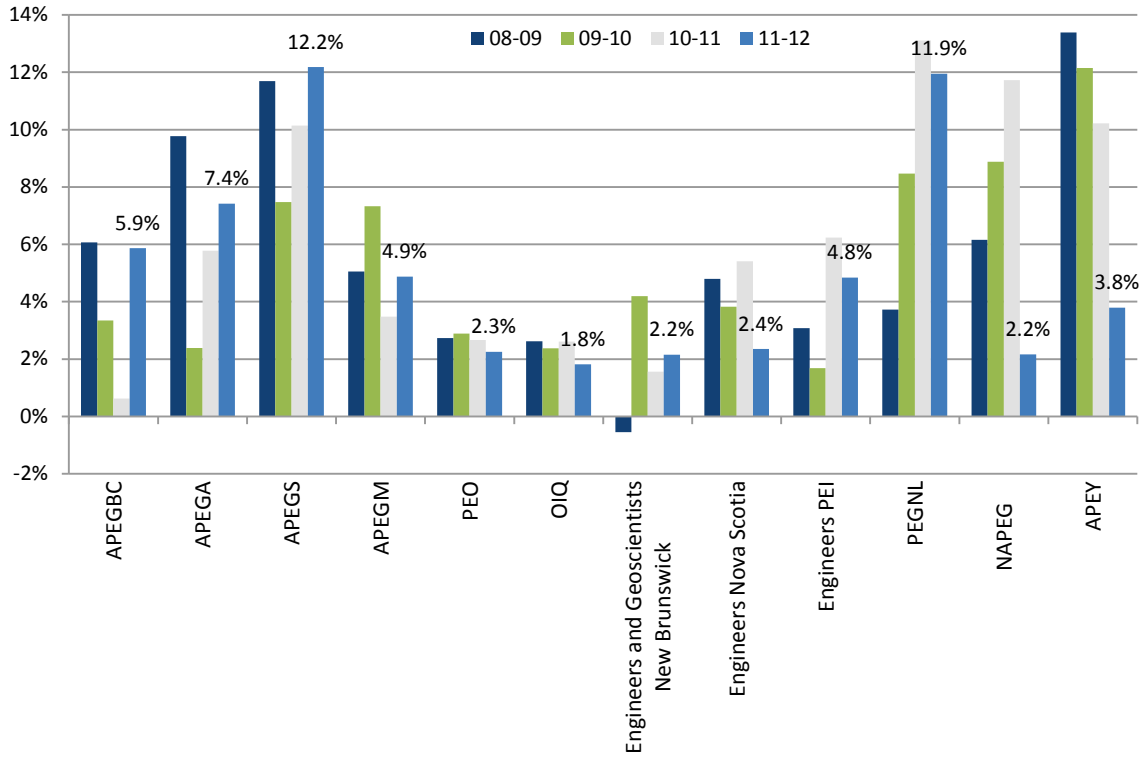

Figure 5: Annual growth in engineer membership (excluding students) from 2008 through 2012, for each constituent association

- In the west all provinces reported annual growth rates above the national average from 2011 to 2012, with Saskatchewan at 12.2 percent, Alberta at 7.4 percent, British Columbia at 5.9 percent, and Manitoba at 4.9 percent. All four of these constituencies have seen positive growth in their membership from 2011 to 2012, and all four have also improved on their growth rate relative to the gains observed in the previous year.
- Annual growth in the territories was below the national average. Growth rates in Nunavut and the Northwest Territories (2.2 percent) and the Yukon (3.8 percent) both remain positive, but are significantly lower than the double digit growth observed from 2010 to 2011.
- In the east, annual growth rates in Newfoundland and Labrador (11.9 percent) and Prince Edward Island (4.8 percent) are both above the national

average, while New Brunswick (2.2 percent) and Nova Scotia (2.4 percent) are below it.

- The annual growth rates in the two largest constituencies, Ontario and Quebec, were both below the national average (2.3 percent and 1.8 percent, respectively) and represent a decrease from their 2010-2011 growth rates of 2.7 percent and 2.6 percent, respectively.

Key Point: The annual rate of growth in engineer members was above the national average in six out of 12 constituencies, with Saskatchewan reporting the highest annual growth at 12.2 percent. Growth rates have increased in British Columbia, Alberta, Saskatchewan, Manitoba, and New Brunswick, but have slowed in all other constituencies.

5 Women in Engineering

Women comprised 11.3 percent of all P.Eng.'s (*P.Eng.'s—Exclusive*) in Canada in 2012. This represents a slight increase compared to 2011, when 10.9 percent of Canadian P.Eng.'s were women. Across the five-year period from 2008 to 2012, there has been gradual growth in the percentage of Canadian P.Eng.'s who are women. Over this five-year period, the proportion has increased by almost half a percent per year; from 9.5 percent in 2008 to 11.3 percent in 2012.

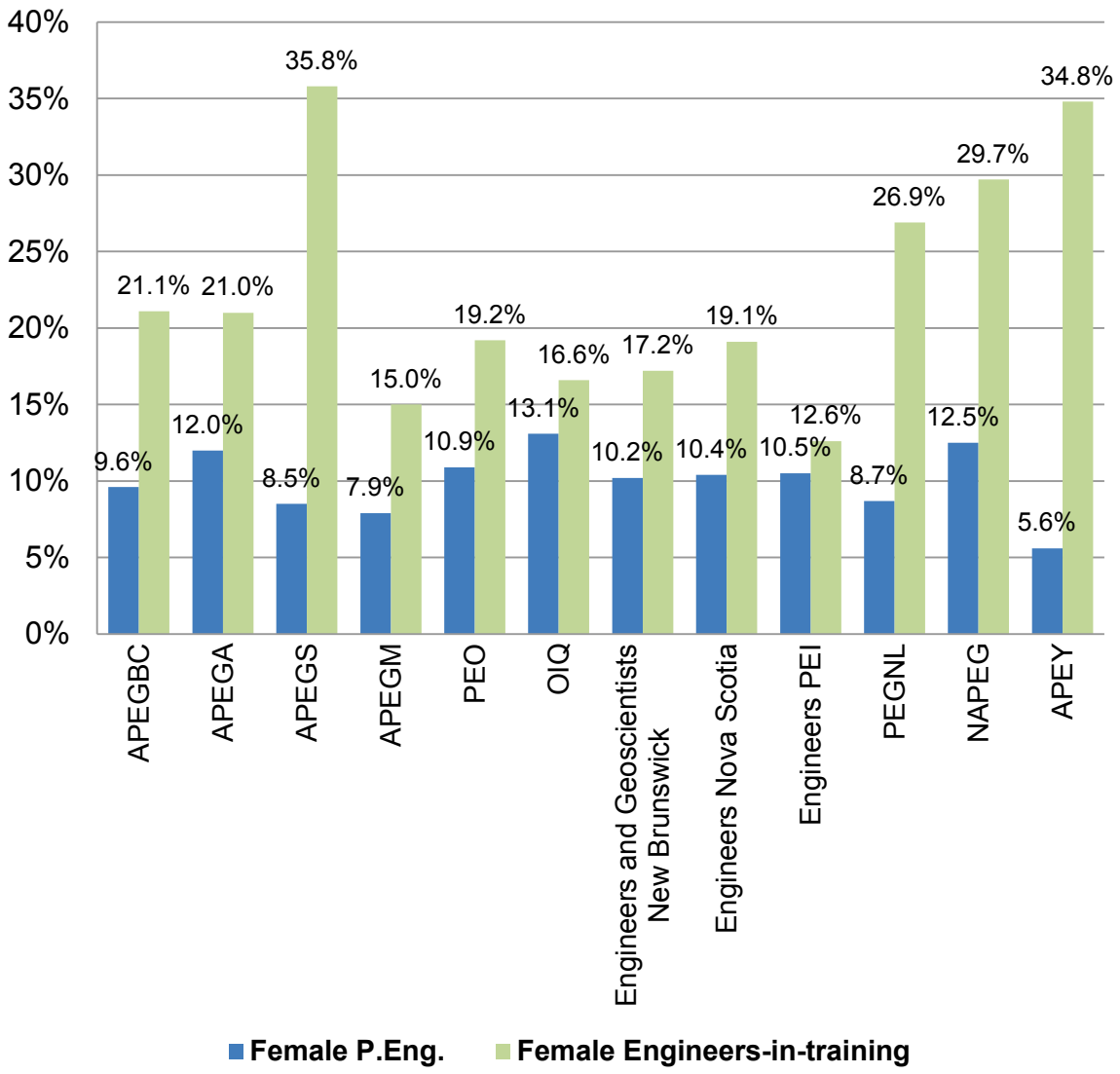

Figure 6: Percent female P.Eng.'s and female Engineers-in-Training reported in 2012, for each constituent association

- As was the case in previous years, the proportion of female *P.Eng.'s—Exclusive* continues to vary across the constituent associations in 2012.
- The proportion of female professional engineers was highest, and above the national average, in Quebec (13.1 percent), Nunavut and the Northwest Territories (12.5 percent), and Alberta (12.0 percent). Each of these also represents an increase from the corresponding levels observed in 2011.
- The proportion of female P.Eng.'s increased in 2012 in all constituencies except New Brunswick, where a 1.4 percent decrease can be seen relative to its 2011 level of 11.6 percent.
- In 2012, the largest gain in the proportion of female professional engineers was reported by Nunavut and the Northwest Territories, with an increase of 2.7 percent (from 9.8 percent in 2011 to 12.5 percent in 2012), followed by

Prince Edward Island, with an increase of 2.0 percent (from 8.5 percent in 2011 to 10.5 percent in 2012). Annual increases to female P.Eng.'s in the other constituencies included Saskatchewan (0.7 percent), British Columbia (0.6 percent), Quebec (0.4 percent), Alberta (0.3 percent), Manitoba (0.3 percent), Ontario (0.3 percent), Nova Scotia (0.3 percent), the Yukon (0.2 percent), and Newfoundland and Labrador (0.1 percent).

- Nationally, the proportion of female *Engineers-in-Training* in 2012 was 19.5 percent; this represents a 0.7 percent increase from the 18.8 percent reported in 2011.
- The proportion of female *Engineers-in-Training* was above the national average in six out of 12 constituencies. The highest proportion was reported in Saskatchewan at 35.8 percent, followed closely by the Yukon at 34.8 percent. The others included Nunavut and the Northwest Territories (29.7 percent), Newfoundland and Labrador (26.9 percent), British Columbia (21.1 percent), and Alberta (21.0 percent).
- Two constituencies reported proportions of female *Engineers-in-Training* at around the national average, including Ontario at 19.2 percent and Nova Scotia at 19.1 percent.
- The remaining four constituencies reported proportions of female *Engineers-in-Training* below the national average. Prince Edward Island was the lowest at 12.6 percent, while the others were Manitoba at 15.0 percent, Quebec at 16.6 percent, and New Brunswick at 17.2 percent.
- Increases in the proportion of female *Engineers-in-Training* relative to 2011 were reported in four jurisdictions. The largest gain was observed in Saskatchewan, with a 17.5 percent gain, followed by the Yukon with an 11.5 percent gain. The other two were Prince Edward Island with a 4.1 percent gain and Ontario with a 0.8 percent gain.
- The proportion of female *Engineers-in-Training* remained unchanged from 2011 to 2012 in Nova Scotia where it held steady at 19.1 percent.
- In 2012, decreases in the proportion of female *Engineers-in-Training* relative to 2011 levels were reported in seven jurisdictions. The largest drop was observed in New Brunswick with a decrease of 1.4 percent; the others being Manitoba (1.2 percent decrease), Nunavut and the Northwest Territories (0.7 percent decrease), British Columbia, Alberta, and Newfoundland and Labrador (0.4 percent decrease for each), and Quebec (0.2 percent decrease) relative to 2011.

Key Point: Positive change toward gender balance among professional engineers and engineers-in-training continued in 2012, with significant gains in some jurisdictions. Relative to 2011, both the national proportion of female professional engineers and the national proportion of female engineers-in-training rose in 2012 to 11.3 and 19.5 percent, respectively. Further growth in these categories remains essential in order to achieve better representation of the Canadian population within the Canadian engineering profession. Efforts to increase the female engineer-in-training reservoir and encourage the successful

transition of female engineers-in-training to full professional status should be maintained and promoted.

6 Engineers-to-Population Ratio

The engineers-to-population ratio measures the number of *Practising Professional Engineers (P.Eng.'s)—Exclusive*[7]) for every one thousand persons in the population[8]—the higher the ratio, the larger the number of engineers who are available to serve a region.

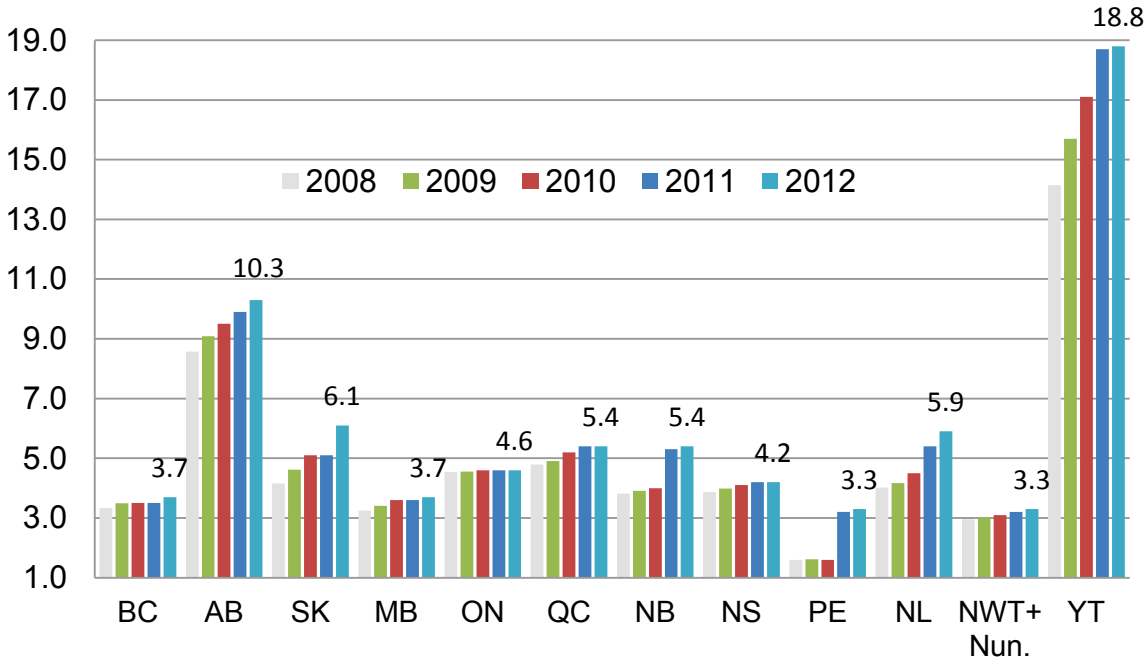

Figure 7: The number of practising P.Eng.'s per thousand residents of each province/territory for 2008 through 2012

- Considering Canada as a whole, in 2012 there were 5.4 practising professional engineers per thousand people. This was up from 5.2 engineers per thousand in 2011, and over a five-year period the ratio has increased 0.6 percent from its 2008 level of 4.8 engineers per thousand people. Steady, gradual growth in engineers relative to the overall Canadian population has been observed over the past five years.
- As Figure 7 illustrates, growth in P.Eng.'s in all jurisdictions has either kept pace with or increased more rapidly than the general population growth since 2008.
- The Yukon (18.8) and Alberta (10.3) had the highest number of professional engineers per thousand people, each substantially above the national

7 Does not include engineers-in-training, those with temporary/limited/restricted licences or retired/non-practising engineers.
8 Source: Statistics Canada, population as of July 1, CANSIM, table 051-0001, last modified: 2012-09-27.

average of 5.4. In both of these jurisdictions, growth in engineers is staying notably ahead of general population growth.

- In the remaining 10 constituencies, two per capita rates were above the national average with Saskatchewan at 6.1 and Newfoundland and Labrador at 5.9. The remaining eight constituencies were all around or below the national average of 5.4 with Quebec and New Brunswick each at 5.4, Ontario at 4.6, Nova Scotia at 4.2, British Columbia and Manitoba each at 3.7, and Prince Edward Island and Nunavut and the Northwest Territories each at 3.3.

Key Point: Across jurisdictions in 2012 the number of professional engineers either kept pace with or grew faster than the general population.

7 Academic Credentials

Six constituent associations[9] reported information regarding the method by which their members have satisfied the academic requirements for licensure. This information represents a total of 158,425 individuals, as itemized below.

Number of individuals in each category of credentials qualification for the six constituent associations reporting in 2012

Organization	CEAB	IEG	Exam	Other	TOTAL
APEGM	6,152	679			**6,831**
PEO	49,947	20,090	4,752	1,329	**76,118**
OIQ	55,230	6,444	983	28	**62,685**
Engineers and Geoscientists New Brunswick	3,482	272			**3,754**
Engineers Nova Scotia	4,562	686	41		**5,289**
PEGNL	3,250	498			**3,748**
TOTAL	**164,061**	**40,621**	**5,920**	**1,787**	**158,425**

9 Data were not available from British Columbia, Alberta, Saskatchewan, Prince Edward Island, Yukon, or Nunavut and the Northwest Territories.

- As Figure 8 illustrates, a little more than three-quarters (77.3 percent) of these members received their undergraduate degrees in Canada. That is, they were graduates of programs accredited by the Canadian Engineering Accreditation Board.
- A little less than one-fifth of those for whom credentials were reported (18.1 percent) were international engineering graduates. That is to say that they received a degree outside Canada which is recognized as a bachelor of engineering equivalent.
- Based on reporting jurisdictions, individuals who qualified through an examination program represent 3.6 percent.
- Those whose credentials are categorized as "other" (0.9 percent of the total reported) qualified by an unspecified process.
- These proportions remain reasonably consistent with those reported in previous years.

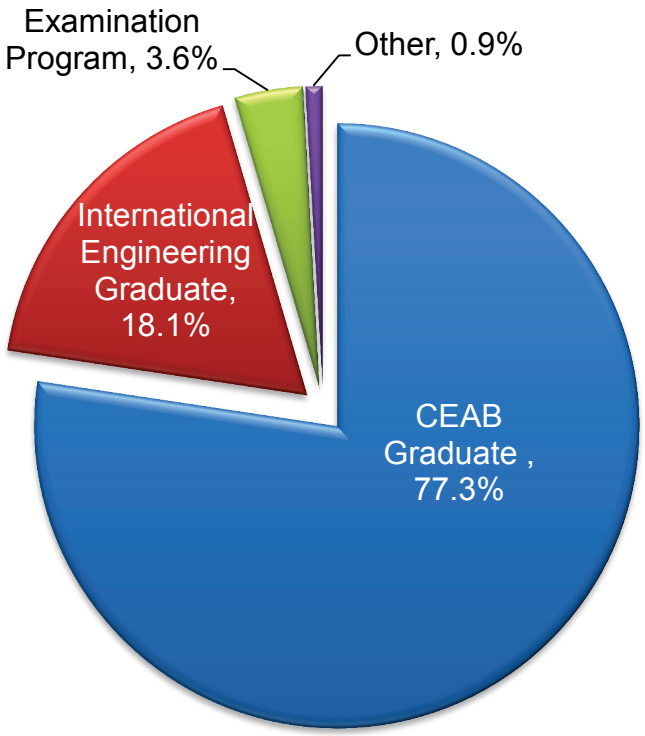

Figure 8*: Proportion of all individuals for whom credential information was reported in 2012 who qualified through Canadian Engineering Accreditation Board graduation, graduation from an international engineering degree program, an examination program, or some other method

*Percentages may not total 100 due to rounding.

Figure 9 depicts the proportion of international engineering graduates identified within each of the six reporting constituent associations.

- A little over one quarter (26.4 percent) of the PEO members for whom credentials were reported in 2012 were international engineering graduates (this represents a 0.3 percent increase from last year's numbers). In 2012, PEO was the only organization that reported a proportion of international engineering graduates above the 2012 national reported average of 18.1 percent. This average is represented in the figure by a horizontal line.
- In 2012, four of the other reporting constituent associations also showed an increase in their proportions of international engineering graduates relative to 2011. PEGNL identified 13.3 percent international engineering graduates (an increase of 0.7 percent from last year), Engineers Nova Scotia identified 13.0 percent (an increase of 4.1 percent from last year), OIQ identified 10.3 percent (an increase of 0.4 percent from last year), and APEGM identified 9.9 percent (an increase of 0.8 percent from last year). Engineers and Geoscientists New Brunswick was the only reporting organization to hold steady with their proportion of international engineering graduates at 7.2 percent (the same as last year).

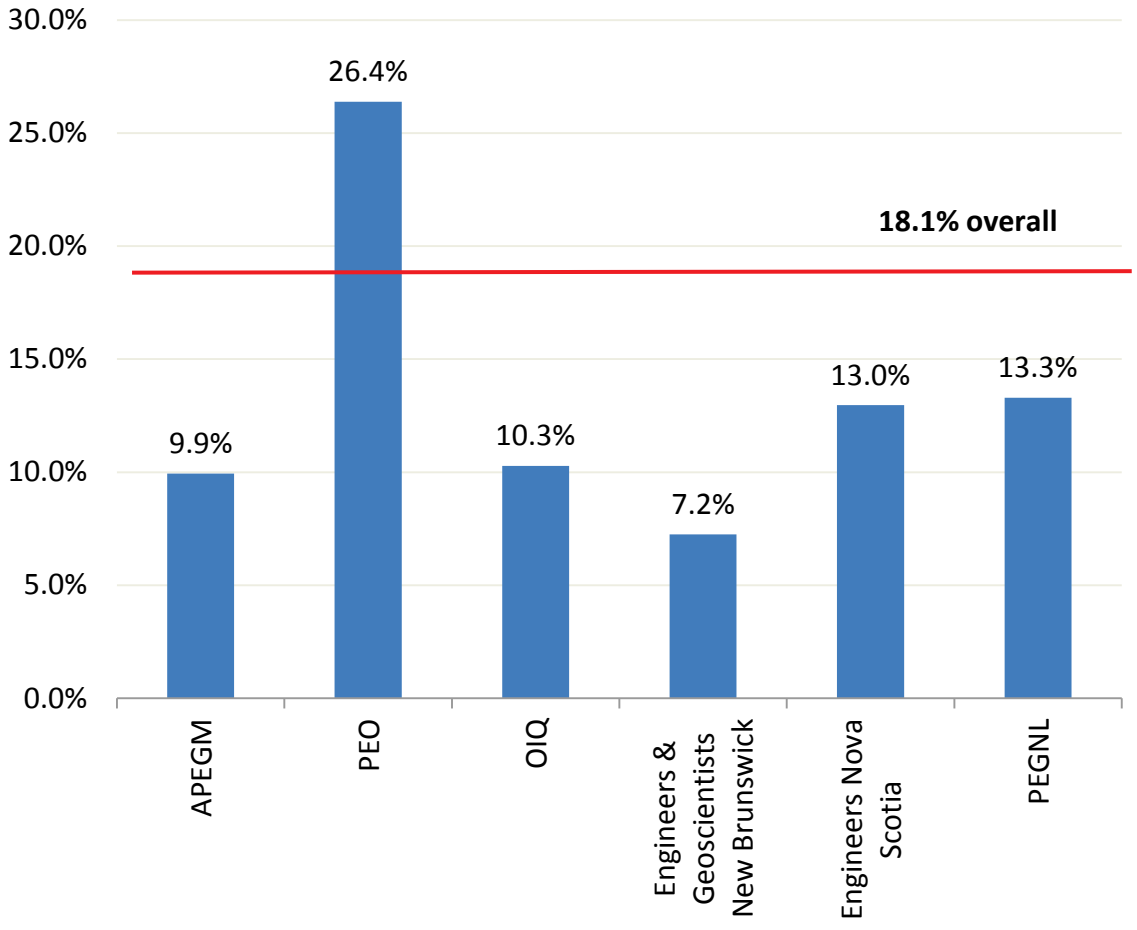

Figure 9: Proportion of international engineering graduates identified within each of the six reporting constituent associations in 2012

Appendices

Appendix 1: Engineers Canada Constituent Associations
Appendix 2: Summary Tables

Appendix 1: Engineers Canada Constituent Associations

APEGBC: Association of Professional Engineers and Geoscientists of British Columbia

APEGA: Association of Professional Engineers and Geoscientists of Alberta

APEGS: Association of Professional Engineers and Geoscientists of Saskatchewan

APEGM: Association of Professional Engineers and Geoscientists of the Province of Manitoba

PEO: Professional Engineers Ontario

OIQ: Ordre des ingénieurs du Québec

Engineers Nova Scotia

Engineers and Geoscientists New Brunswick

Engineers PEI

PEGNL: Professional Engineers and Geoscientists of Newfoundland and Labrador

NAPEG: Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists

APEY: Association of Professional Engineers of Yukon

Appendix 2: Summary Tables

Table 1: 2012 Membership Composition by Constituent Association[10]

MEMBERSHIP CATEGORY	APEGBC	APEGA	APEGS	APEGM	PEO	OIQ	Engineers and Geoscientists New Brunswick	Engineers Nova Scotia	Engineers PEI	PEGNL	NAPEG	APEY	Total
Practising P.Eng.'s (exclusive) (male)	15,363	35,137	6,005	4,322	55,944	38,065	3,696	3,610	428	2,757	224	642	166,193
Practising P.Eng.'s (exclusive) (female)	1,640	4,809	561	373	6,835	5,728	418	421	50	262	32	38	21,167
Total Practising P.Eng.'s (exclusive)[11]	**17,003**	**39,946**	**6,566**	**4,695**	**62,779**	**43,793**	**4,114**	**4,031**	**478**	**3,019**	**256**	**680**	**187,360**
Temporary License Holders (male)	407	132	79	17	129	0	0	0	0	0	0	0	764
Temporary License Holders (female)	25	11	1	1	4	0	0	0	0	0	0	0	42
Total Temporary License Holders	**432**	**143**	**80**	**18**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**806**
Restricted License Holders (male)	86	343	25	0	152	88	0	0	0	0	0	3	697
Restricted License Holders (female)	4	10	1	0	14	3	0	0	0	0	0	0	32
Total Restricted License Holders	**90**	**353**	**26**	**0**	**166**	**91**	**0**	**0**	**0**	**0**	**0**	**3**	**729**
License to Practise Holders (male)	8	909	0	0	0	0	0	0	0	70	962	0	1,949
License to Practise Holders (female)	0	55	0	0	0	0	0	0	0	1	41	0	97
Total License to Practise Holders	**8**	**964**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**1,003**	**0**	**2,046**
P.Eng, Non-Practising or Retired (male)	1,147	2,791	648	405	12,338	4,404	219	89	22	12	45	0	22,120
P.Eng, Non-Practising or Retired (female)	110	51	72	31	493	138	5	2	1	19	7	0	929
Total Non-Practising P.Eng	**1,257**	**2,842**	**720**	**436**	**12,831**	**4,542**	**224**	**91**	**23**	**31**	**52**	**0**	**23,049**
Life Members (male)	2,206	1,156	635	207	486	47	480	920	18	227	24	33	6,439
Life Members (female)	8	7	0	1	22	4	3	6	1	2	0	0	54
Total Life Members	**2,214**	**1,163**	**635**	**208**	**508**	**51**	**483**	**926**	**19**	**229**	**24**	**33**	**6,493**
Engineers-in-Training (male)	2,749	7,321	1,004	986	6,874	11,844	409	494	76	291	26	15	32,089
Engineers-in-Training (female)	736	1,944	561	174	1,635	2,364	85	117	11	107	11	8	7,753
Total Engineers-in-Training	**3,485**	**9,265**	**1,565**	**1,160**	**8,509**	**14,208**	**494**	**611**	**87**	**398**	**37**	**23**	**39,842**
Engineering Students (male)	0	3,651	0	255	11,915	0	0	400	0	0	0	0	16,221
Engineering Students (female)		1,097	0	67	2,690	0	0	105	0	0	0	0	3,959
Total Engineering Students	**0**	**4,748**	**0**	**322**	**14,605**	**0**	**0**	**505**	**0**	**0**	**0**	**0**	**20,180**

[10] *Includes dual licensing. Engineers Canada estimates that approximately 12 percent of the male practising P.Eng. members are licensed to practise in more than one jurisdiction in Canada*

[11] *Excludes Professional Enginers also accounted for in other categories such as: License to Practise Holders, Temporary License Holders, Restricted License Holders , Non-Practising P.Eng.'s, and Life Members.*

Table 2: 2012 Membership Sub-Categories by Constituent Association

MEMBERSHIP CATEGORY	APEGBC	APEGA	APEGS	APEGM	PEO	OIQ	Engineers and Geoscientists New Brunswick	Engineers Nova Scotia	Engineers PEI	PEGNL	NAPEG	APEY	TOTAL
Total Practising P.Eng.'s (exclusive)[12]	17,003	39,946	6,566	4,695	62,779	43,793	4,114	4,031	478	3,019	256	680	**187,360**
Total Practising P.Eng.'s (exclusive), adjusted for dual licensing	15,159	35,730	5,845	4,176	56,066	39,225	3,670	3,598	427	2,688	1,117	603	**168,304**
Total Professional Engineers (inclusive)[13]	21,004	45,411	8,027	5,357	76,417	48,477	4,821	5,048	520	3,350	1,335	716	**220,403**
Total Professional Engineers (inclusive), adjusted for dual licensing	19,160	41,195	7,306	4,838	69,704	43,909	4,377	4,615	469	3,019	1,308	639	**200,539**
Total Practising Engineer Members[14]	21,018	50,671	8,237	5,873	71,587	58,092	4,608	4,642	565	3,488	1,296	706	**230,783**
Total Practising Engineer Members, adjusted for dual licensing	19,174	46,455	7,516	5,354	64,874	53,524	4,164	4,209	514	3,157	1,296	629	**210,839**
Total Female Members (with students)	2,523	7,984	1,196	647	11,693	8,237	511	651	63	391	91	46	**34 033**
Total Female Members (excluding students)	2,523	6,887	1,196	580	9,003	8,237	511	546	63	391	91	46	**30,074**
Total Engineer Member[15]	24,489	54,676	9,592	6,517	84,926	62,685	5,315	5,659	607	3,748	1,372	739	**260,325**
Total Engineer Members, adjusted for dual licensing	22,645	50,460	8,871	5,998	78,213	58,117	4,871	5,226	556	3,417	1,345	662	**240,381**
Total Members and Participating Students[16]	24,489	59,424	9,592	6,839	99,531	62,685	5,315	6,164	607	3,748	1,372	739	**280,505**
Total Members and Participating Students, adjusted for dual licensing	22,645	55,208	8,871	6,320	92,818	58,117	4,871	5,731	556	3,417	1,345	662	**260,561**

[12] *Excludes professional engineers also accounted for in other categories such as: License to Practise Holders, Restricted License Holders, Non-Practising P.Eng.'s, and Life Members*

[13] *Includes practising P.Eng.'s and temporary, restricted and license to practice holders as well as retired P.Eng.'s, non-practising P.Eng.'s, and life members.*

[14] *Includes all members who are practising engineers graduates (or equivalent). Excludes retired P.Eng.'s, non-practising P.Eng.'s, life members, and engineering students.*

[15] *Includes all categories of members except engineering students.*

[16] *Includes all categories of members including engineering students in jurisdictions where students are reported.*

Table 3: 2008-2012 Membership Composition

MEMBERSHIP CATEGORY	APEGBC	APEGA	APEGS	APEGM	PEO	OIQ	Engineers & Geoscientists New Brunswick	Engineers Nova Scotia	Engineers PEI	PEGNL	NAPEG	APEY	Total
Total Engineer Members													
2012	**24,489**	**54,676**	**9,592**	**6,517**	**84,926**	**62,685**	**5,315**	**5,659**	**607**	**3,748**	**1,372**	**739**	**260,325**
2011	23,132	50,899	8,550	6,214	83,053	61,568	5,203	5,529	579	3,348	1,343	712	**250,130**
2010	22,990	48,118	7,763	6,005	80,899	60,005	5,123	5,245	545	2,960	1,202	646	**241,501**
2009	22,247	46,996	7,223	5,595	78,630	58,614	4,917	5,052	536	2,729	1,104	576	**234,219**
2008	20,974	42,813	6,467	5,326	76,542	57,118	4,944	4,921	528	2,631	1,040	508	**223,703**
Total Professional Engineers[17]													
2012	**21,004**	**45,411**	**8,027**	**5,357**	**76,417**	**48,477**	**4,821**	**5,048**	**520**	**3,350**	**1,335**	**716**	**220,483**
2011	20,080	42,497	7,159	5,149	75,181	47,229	4,697	4,954	497	2,996	1,297	682	**212,418**
2010	19,756	40,243	6,529	4,970	74,411	45,916	4,551	4,735	470	2,601	1,161	619	**205,962**
2009	19,131	38,414	6,049	5,377	72,926	44,841	4,364	4,598	469	2,395	1,069	557	**200,190**
2008	18,073	35,097	5,382	4,455	71,441	43,474	4,275	4,489	465	2,311	1,001	494	**190,948**
Total Female Members													
2012	**2,523**	**7,984**	**1,196**	**647**	**11,693**	**8,237**	**511**	**651**	**63**	**391**	**91**	**46**	**34,033**
2011	2,227	7,229	755	602	10,574	7,935	501	570	47	346	83	42	**30,911**
2010	1,974	5,749	655	513	7,954	7,519	511	469	43	302	65	37	**25,791**
2009	1,967	6,265	607	554	8,842	7,216	472	501	38	249	63	31	**26,805**
2008	1,768	5,550	537	546	7,894	6,907	476	448	37	226	53	25	**24,459**
Total Members[18]													
2012	**24,489**	**59,424**	**9,592**	**6,839**	**99,531**	**62,685**	**5,315**	**6,164**	**607**	**3,748**	**1,372**	**739**	**280,505**
2011	23,132	55,059	8,550	6,518	94,739	61,568	5,203	5,790	579	3,348	1,343	712	**266,541**
2010	23,915	52,201	7,763	6,484	90,317	60,005	5,123	5,506	545	2,960	1,202	646	**256,667**
2009	24,270	50,648	7,223	6,266	86,358	58,614	4,917	5,346	536	2,729	1,104	576	**248,587**
2008	23,891	46,400	6,467	6,038	82,223	57,118	4,944	5,220	528	2,631	1,040	508	**236,899**

[17] *Includes practicing P.Eng.'s, and those licensed to practice, as well as Retired P.Eng.'s, non-practicing P.Eng.'s, and Life Members,*
[18] *Includes all categories of members, including students.*

Table 4: 2008-2012 Engineers-to-Population Ratios

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	NWT + Nun.	YT	Canada
2012													
Professional Engineers[19]	17,003	39,946	6,566	4,695	62,779	43,793	4,114	4,031	478	3,019	256	680	**187,360**
Persons (thousands)[20]	4,622.6	3,873.7	1,080.0	1,267.0	13,505.9	8,054.8	756.0	948.7	146.1	512.7	77.0	36.1	**34,880.6**
P. Eng.'s/1000 People	**3.7**	**10.3**	**6.1**	**3.7**	**4.6**	**5.4**	**5.4**	**4.2**	**3.3**	**5.9**	**3.3**	**18.8**	**5.4**
2011													
Professional Engineers	16,168	37,321	5,569	4,553	61,703	42,692	4,032	3,966	461	2,742	244	649	**180,100**
Persons (thousands)	4,573.3	3,779.4	1,057.9	1,250.6	13,373.0	7,979.7	755.5	945.4	145.9	510.6	77.0	34.7	**34,482.8**
P. Eng.'s/1000 People	**3.5**	**9.9**	**5.3**	**3.6**	**4.6**	**5.4**	**5.3**	**4.2**	**3.2**	**5.4**	**3.2**	**18.7**	**5.2**
2010													
Professional Engineers	15,891	35,358	5,287	4,455	60,977	41,404	3,017	3,856	230	2,319	238	589	**173,621**
Persons (thousands)	4,531.0	3,720.9	1,045.6	1,235.4	13,210.7	7,907.4	751.8	942.5	142.3	509.7	77.0	34.5	**34,108.8**
P. Eng.'s/1000 People	**3.5**	**9.5**	**5.1**	**3.6**	**4.6**	**5.2**	**4.0**	**4.1**	**1.6**	**4.5**	**3.1**	**17.1**	**5.1**
2009													
Professional Engineers	15,576	33,507	4,670	4,167	59,532	38,450	2,929	3,737	228	2,119	228	529	**165,672**
Persons (thousands)	4,455.2	3,687.7	1,031.1	1,222.0	13,069.2	7,828.9	749.5	938.2	141.0	508.9	75.6	33.7	**33,739.9**
P. Eng.'s/1000 People	**3.5**	**9.1**	**4.5**	**3.4**	**4.6**	**4.9**	**3.9**	**4.0**	**1.6**	**4.2**	**3.0**	**15.7**	**4.9**
2008													
Professional Engineers	14,588	30,734	4,226	3,918	58,727	37,140	2,849	3,633	223	2,042	221	468	**158,769**
Persons (thousands)	4,381.6	3,585.1	1,016.0	1,208.0	12,929.0	7,750.5	747.3	938.3	139.8	507.9	74.7	33.1	**33,311.3**
P. Eng.'s/1000 People	**3.3**	**8.6**	**4.2**	**3.2**	**4.5**	**4.8**	**3.8**	**3.9**	**1.6**	**4.0**	**3.0**	**14.1**	**4.8**

[19] *Practicing P.Eng.'s only.*
[20] *Source: Statistics Canada, Population by Year by Province and Territory, Population as of July 1, CANSIM Table 051-0001, last modified: 2012-09-27*

Table 5: 2008-2012 Academic Qualifications of Engineer Members[21]

ACADEMIC QUALIFICATION	APEGBC	APEGA	APEGS	APEGM	PEO	OIQ	Engineers & Geoscientists New Brunswick	Engineers Nova Scotia	Engineers PEI	PEGNL	NAPEG	APEY	TOTAL
2012													
CEAB Graduate	-	-	-	6,152	49,947	55,230	3 482	4,562	-	3,250	-	-	**122,623**
International Engineering Graduate	-	-	-	679	20,090	6,444	272	686	-	498	-	-	**28,669**
Examination Program	-	-	-		4,752	983		41	-		-	-	**5,776**
Other	-	-	-		1,329	28			-		-	-	**1,357**
Total	-	**-**	-	**6,831**	**76,118**	**62,685**	**3 754**	**5,289**	-	**3,748**	-	**-**	**158,425**
2011													
CEAB Graduate	-	43,600	-	5,943	49,144	54,464	3 443	4,540	-	2,927	-		**164,061**
International Engineering Graduate	-	13,200	-	594	19,553	6,095	267	491	-	421	-		**40,621**
Examination Program	-		-		4,832	977		111	-		-	1	**5,921**
Other	-		-		1,368	32		387	-		-		**1,787**
Total	-	**56,800**	**-**	**6,537**	**74,897**	**61,568**	**3 710**	**5,529**	**-**	**3,348**	**-**	**1**	**212,390**
2010													
CEAB Graduate	-	40,600	-	5,790	48,499	53,182	3 436	4,259	-	2,641	-		**158,407**
International Engineering Graduate	-	12,300	-	528	19,132	5,720	333	564	-	319	-		**38,896**
Examination Program	-		-		4,912	986		32	-		-	1	**5,931**
Other	-		**-**		1,623	34		387	-		**-**		**2,044**
Total	**-**	**52,900**	**-**	**6,318**	**74,166**	**59,922**	**3 769**	**5,242**	**-**	**2,960**	**-**	**1**	**205,278**
2009													
CEAB Graduate	-	40,500	-	4,169	47,560	52,177		4,485	-	2,455	-	-	**151,346**
International Engineering Graduate	-	12,000	-	221	18,468	5,321	266	399	-	274	-	-	**36,949**
Examination Program	-		-	26	5,002	989		34	-		-	-	**6,051**
Other	-		-		1,704	127			-		-	-	**1,831**
Total	**-**	**52,500**	**-**	**4,416**	**72,734**	**58,614**	**266**	**4,918**	**-**	**2,729**	**-**	**-**	**196,177**
2008													
CEAB Graduate	-	36,100	-	3,656	46,285	51,011		3,371	-	2,356	-	-	**143,005**
International Engineering Graduate	-	11,100	-	723	17,676	4,972	245	295	-	275	-	-	**35,267**
Examination Program	-		-	76	5,060	995		12	-		-	-	**6,143**
Other	-		-		2,294	140			-		-	-	**2,434**
Total	-	**47,200**	-	**4,455**	**71,315**	**57,118**	**245**	**3,678**	-	**2,631**	-	-	**186,849**

[21] *Dashes (-) indicate information not available from constituent members.*