THE CANADIAN ACADEMY OF ENGINEERING
Leadership in Engineering Advice for Canada

L'ACADÉMIE CANADIENNE DU GÉNIE
Chef de file en matière d'expertise-conseil en génie pour le Canada

2016 ANNUAL GENERAL MEETING

27 June 2016, 1230 – 1330 EDT
Hotel Fort Garry
The Gateway/Tache Room (Mezzanine Level)
222 Broadway Winnipeg Manitoba R3C 0R3

DRAFT AGENDA

1. Welcome and Opening Remarks
2. Recognition of Deceased Fellows
3. Quorum Determination
4. Approval of Agenda
5. Approval of Minutes – AGM 2015
6. Report of President – 2015/2016
7. Financial
   - Audit Report 2015
   - Treasurer's Report / Budget 2016
   - Appointment of Auditors 2016
8. Election of Directors and Officers – 2016/2017
10. Report of President-Elect.
11. Annual General Meeting Arrangements – 2017
12. Other Business
13. Adjournment

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MINUTES
ANNUAL GENERAL MEETING 2015
14 June 2015, 1230 - 1330 EDT
Hamilton Hall West, Homewood Suites Hotel
40 Bay Street South, Hamilton, ON L8P 0B3

FELLOWS IN ATTENDANCE

Acchione Paul
Anjos Miguel*
Barber H. Douglas
Beauchamp Yves
Behdinan Kamran*
Bianchini John
Burlton Bruce
Charles Michael E.
Chowdhury Somen*
Croasdale Kenneth
El Maraghy Waguih
Frederking Robert
Gu Peihua
Haas Carl
Haas Ralph
Haccoun David*
Heidebrecht Art
Henein Hani
Huang Guohe Gordon*
Karakatsanis Catherine
Laguë Claude
Lakshmanan Vaikuntam
Leon L. Joshua*
Ling Charles*
Lortie Pierre
Mascher Peter
Matich Miroslav
Nolan Ronald
Polistuk Eugene
Pugsley Thomas
Putt Kenneth
Rowe Ian
Ruth Douglas
Sain Mohini
Sidhu Tarlochan
Wasmund Bert
Wijewickreme Dharma
Xiao Huining

(* = New Member)

1. OPENING REMARKS

Executive Director Kevin Goheen opened the meeting at 12:42 p.m. He thanked McMaster University for providing support staff, Ms. Janet Delsey, to help organize this event. He then mentioned that Mr. Richard Marceau would be returning to resume his duties as Past-President. He introduced the CAE president.

President Pierre Lortie extended a warm welcome to all members, old and new, to Hamilton and the 29th Annual General Meeting of the Canadian Academy of Engineering. He introduced the head table participants – Kevin Goheen (Executive Director), Doug Ruth (Board member and President-Elect) and Yves Beauchamp (Board member and Treasurer).

2. RECOGNITION OF DECEASED FELLOWS

President Lortie asked the assembly to stand for a few moments while he recognized Fellows who we are aware of who have passed away since our last AGM:

Robert Day, elected in 2009, passed away on September 30, 2014
Ivan Stojmenovic, elected in 2012, passed away on November 3, 2014
StanleyHatcher, elected in 1991, passed away on November 30, 2014
J. Terence Rogers, elected in 2005, passed away on November 25, 2014
Anastasios Venetsanopoulos, elected in 2001, passed away on November 17, 2014

3. QUORUM DETERMINATION

President Lortie noted that our By-Laws require a minimum of 20 members or 20% of the active membership (whichever is less) to constitute a quorum. He observed that there were clearly more than 20 Active Fellows present, and hence declared a quorum. He reminded attendees that while Emeritus and Honorary Fellows are welcome to participate fully in the discussion and to address the meeting, they are **NOT** eligible to cast a formal vote, or to propose or second motions. He requested participants to identify themselves, when making motions or addressing the meeting, to ensure that we have an accurate record of the meeting.

4. APPROVAL OF AGENDA

President Lortie invited any additions or modifications to the agenda distributed. There being none, it was moved by R. Ravindran, seconded by D. Ruth, that the Agenda be approved. **CARRIED.**

5. APPROVAL OF MINUTES – AGM 2014

The President invited identification of any errors or omissions by those in attendance. It was moved by R. Ravindran, seconded by P. Acchione, that the minutes for the 2014 AGM be approved. **CARRIED.**

6. REPORT OF PRESIDENT – 2014/2015

My first words will be to thank Doug Ruth and Peter Mascher for organizing the 2015 Annual General Meeting and Symposium of the Academy here in Hamilton, a city that has long been the "steel capital" of Canada.

I also want to thank Mo Elbestawi, Vice President Research of McMaster University and David Wilkinson, McMaster Provost, both CAE Fellows, and the Engineering Department of McMaster University for their outstanding support in the organization of this year's Annual General Meeting.

CELEBRATING ENGINEERING EXCELLENCE

A key mission of the Canadian Academy of Engineering is to celebrate engineering excellence by electing Fellows of the Academy from among Canada's most experienced and outstanding engineers. In so doing, we highlight the contributions of engineers to the well-being of Canadians and the economic development of Canada.

The Academy counts 607 Fellows. Later today we will induct 50 additional members selected through a rigorous process under the chairmanship of Peter R. Frise. We also have five Honorary Fellows. This meeting gives us an opportunity to celebrate the life accomplishments of another remarkable Canadian engineer, Dr. Norbert Morgenstern, our 2015 Honorary Fellowship recipient. I will present Dr. Morgenstern accomplishments at the Induction ceremony later today.

Congratulations are also in order to another CAE Fellow, UBC Professor Vijay Bahargava, which has been awarded last month at Rideau Hall the 2015 Killam Engineering price to celebrate his lifetime achievements with wireless networks.

PROMOTING SOUND SCIENTIFIC AND ENGINEERING ADVICE INTO POLICY MAKING

The second key dimension of the Canadian Academy of Engineering is to enhance, through the application and adaptation of scientific and engineering principles, the well-being of Canadians and the creation of wealth in Canada and to provide leadership and expert advice on the implications and economic effects of strategic choices about the potential of technology, engineering, design and innovations.

It may seem paradoxical but the first step in the journey towards an influential leadership position in the Canadian polity depends on the ability of the CAE to promote cross fertilisation between industry, academia and public administration, through collaboration with our two sister Canadian Academies and, internationally, with foreign academies. Alone, it is unlikely that the CAE can attain the stature and respect its Fellows yearn for their Academy. We must reach out and partner with other organizations recognized for the depth and quality of their expertise in policy analyses and the elaboration of evidence-based policy through expert advice complementary to the one CAE Fellows can provide.

This is the impetus that led to our joint undertaking with the Institute of Research on Public Policy (IRPP) to organize a national conversation on the importance of evidence-based policies and the best approaches to embed sound scientific and engineering advice into policy making as a matter of course. Graham Fox, IRPP's President, and his staff have been fantastic partners

in this endeavour. Our common objective is to develop a consensus for an effective science, engineering and evidence-based advisory process that leads to better government decisions, minimizes crises and unnecessary controversies, and capitalizes on opportunities to improve the quality of life of Canadians, while creating value and wealth.
To date, we have held well attended roundtable discussions on science, technology and public policy in Halifax, Edmonton, Vancouver and Toronto. We have two more to go: Montreal and Ottawa. Remarkably, all those we have invited to participate in a roundtable have indicated that our initiative was timely and of the outmost importance.

This positive sentiment no doubt reflects the concerns that, nowadays, anecdotal reports, exceptional events and populism dominate policy debates and shape public opinion, a process amplified by the ubiquitous social media, at the expense of hard evidence and rational debate. Policy makers are very concerned by this evolution since it significantly curtails the range of options open for consideration and irremediably leads to policies likely to produce more damage than good. They are generally keen to arrest the debasing of scientific knowledge as a fundamental component of policy making but find it very difficult to blend empirical evidence and the various strands of scientific and engineering advice into coherent and implementable policies. They are confronted with the facts that policy decisions are strongly influenced by values and that science is complex and does not provide complete answers. The difficulties are compounded by the eroding public trust in science fueled by the media embrace of pseudo-science and the legitimacy it lends to "quackademics."

Following the series of six events, a compendium of the discussions and the recommendations that arise will be published in Policy Options magazine, IRPP's flagship publication. It is also expected that the discussions will lead to the publication of a series of articles written by some of the participants.

OTHER CAE INITIATIVES

Several other initiatives in the policy realm have been undertaken under the auspices of the Academy. These include:

- The Northern Oceans task force, led by Ian Jordaan and Ken Croasdale. They will report on their work and how it affects public policy later today.

- The Energy Pathways task force, led by Clement W. Bowman and Richard J. Marceau. Following the publication of their book, Canada: Becoming a Sustainable Energy Powerhouse, at last year's AGM, they have pursued their work by holding two conferences to discuss the following topics: (i) refinery to add value to bitumen from the oil sands; and (ii) a national electrical grid to facilitate expansion of renewable energy. A third event is in the planning stage. It will address the need to revitalize manufacturing to meet the supply chain needs of the energy industry.

- Clean Coal Technology: Substantial efforts have been made to ensure the success of the July 9-10, 2015 international conference on clean coal technology. Led by Ravi Ravindran, this CAE conference is held in partnership with India's National Academy of Engineering and it is hosted by Ryerson University. The Toronto event will be complemented by "industrial" visits of state-of-the-art facilities in Alberta and Nova Scotia.

- The Trottier Energy Future Project: By far the most important large-scale project the CAE has undertaken in recent years is the Trottier Energy Future Project. Funded by the Trottier Family Foundation, (Lorne Trottier is a CAE Fellow), and conducted in collaboration with the David Suzuki Foundation, the objective is to identify the most optimal path for Canadian society to achieve a 80% reduction of GHG emissions in 2050 relative to 1990 levels. Although the matter is prone to controversies, CAE is ensuring, through the active engagement of John Leggatt on the project board, the watchful projects supervision of Kevin Goheen and by a peer review of the final report by CAE Fellows, that the TEFP exercise:

    - Addresses the energy–climate change challenge in a comprehensive, integrated multi-jurisdictional and multiple time period context.

    - Combines the use of an optimization model with the more detailed simulation model and that it is the best globally available "state-of-the-art" methodology for analyzing national and global energy-climate change challenges.

    - Includes a comprehensive consideration of all direct investment and operating costs in all sectors being considered.

    - Provides a strong analytical foundation for deriving optimal combination of costs and GHG reduction opportunities.

    - Provides a strong analytical foundation for assessing overall impacts (cost and/or GHG reduction) associated with implementing certain constrains on potential avenue solutions.

    - Is credible because the conclusions rest on a thorough analysis of socio-economic projections, nationally and per industrial sectors and of global market and price projections for fossil fuels and collaboration with the National Energy Board and other international agencies (IEA, US-EIA and IEA-ETSAP).

    - Allows for direct evaluation of marginal GHG unit cost values, which is the foundation for carbon pricing considerations.

    For sure, several conclusions of the project will be controversial. We all know that it is much easier to preach virtue if you don't have to pay for it. Notwithstanding these risks,

it is undisputable that a public debate on these critical issues is occurring in Canada, and worldwide. We have a responsibility to ensure it is an informed debate.

THE COUNCIL OF CANADIAN ACADEMIES

There are very few examples where natural science and technology can alone inform sound public policies. The establishment of the Canadian Council of Academies in 2002, an umbrella organization formed to coordinate and facilitate the participation of Fellows of the Royal Society of Canada, the Canadian Academy of Engineering and the Canadian Academy of Health Sciences who are recognized experts of the topic under study, was the institutional answer to the need to ensure that the bread of expert advice required to ensure a comprehensive analysis of the issues under consideration was assembled. The assessments made over the years under the aegis of CCA have generally complied with the standards of balanced, evidence-based and independent advice. The CCA fulfills an important and valuable role; the CAE contribution to this work is in line with the mission of our Academy.

It is fair to say that, in recent years, the relations between the CCA and the three national Academies were not as constructive as one would have hoped.

I am pleased to report that under the able leadership of CCA Chair Margaret Bloodworth, things have changed. Firstly, the central role of the Academies as the founding members of CCA is recognized and acknowledged. Second, Margaret was able to secure renewal of the annual funding of the CCA operations. In the current context of fiscal restraint, this is quite an achievement. Third, an agreement in principal was reached whereby the CCA will, on a going forward basis, pay for the services CAE contributes to the CCA activities.

CAE's fundamental objective is to ensure that the CCA reports reflect the best knowledge available at the time. We know that engineering alone is not, in most cases, the perfect solution. However, in most cases, it is a fundamental consideration which should not be discarded. With Margaret at the helm, we are confident that this will not happen and that the CCA–CAE relationship will yield important results and provide sound, informed and evidence based advice on which the Canadian government can establish its policies.

CONCLUSION

The CAE has done a great job in the last year. Much of this success is due to Kevin Goheen, our Executive Director, and to the dedication and professionalism he has brought to the task. Kevin has contributed in no small way to enhance the reputation and standing of the CAE in various spheres of influence. I would be remiss if I did not mention Mrs. Roxanne Lepage, our Office Manager, who joined CAE in 2014. Roxanne has been an efficient contributor since she joined the Academy and, on behalf of all Fellows, I want to tell her we are happy that she joined the team.

For the future, there is no doubt that the management of our ambitious public policy outreach program, which focuses on the articulation of evidence-based policies to promote the use of sound scientific and engineering advice in policy making, will place a significant administrative burden on our staff. For this is not their only task.

The program requires the active participation and sustained commitment on the part of our Fellows. This is as it should be: the Fellows make the CAE and not vice versa. The purpose of the CAE is to recognize and bring together the most successful and most talented engineers from all sectors of engineering to provide independent and expert advice on issues of national importance pertinent to engineering, technology and innovation. Thus, it is our collective and individual responsibility to bring our experience and knowledge to bear on issues of vital importance to Canadian society. And for the CAE, its role is to provide Fellows with the means and mechanisms to achieve this.

Thank you.

Pierre Lortie, M.C., FCAE

7. FINANCIAL

- **Audit Report 2014**

The Treasurer, Mr. Yves Beauchamp presented the auditor's 2014 financial statement for the CAE. The net result for 2014 was an operating excess of revenue over expenses of $42,961; this was due to careful control of operations expenses and greater than budgeted revenue from the current stage of the Trottier Energy Futures Project and AGM/Symposium Sponsorship.

It was moved by M. Charles, seconded by W. El Maraghy that the audited Financial Statements for 2014 be approved. **CARRIED.**

- **Treasurer's Report / Budget 2015**

  Y. Beauchamp presented a detailed analysis of F2014 and the Board approved budget for F2015.

- **Appointment of Auditors 2015**

In keeping with best risk management practice of changing auditors periodically the Board is recommending the new auditing firm of Frouin Group for the financial year 2015.

It was moved by K. Putt, seconded by P. Acchione, that Frouin Group be appointed as CAE auditors for 2015. **CARRIED.**

9. ELECTION OF DIRECTORS AND OFFICERS – 2015/2016

President Lortie noted that the Nominating Committee had provided a recommended slate of proposals for 2015/2016, and that these had been endorsed by the Board of Directors.

Relative to Officers and Directors-at-Large, the following names had been proposed:

For Officers:

President:	Pierre Lortie
President-Elect:	Douglas Ruth
Secretary-Treasurer:	Yves Beauchamp
Past President:	Richard Marceau

For Directors-at-Large:

Continuing:	Eugene Polistuk
Continuing:	Ken Putt
Continuing:	Eddy Isaacs
Continuing:	Sara Jane Snook
Continuing:	Colin E. Smith
New:	Charles Randell
New:	Bruce Burlton

There being no alternative nominations from the floor, it was moved by R. Ravindran, seconded by P. Acchione, that this slate of officers and directors be approved. **CARRIED.**

Relative to membership of the Fellowship Committee the following proposal had been received:

For Fellowship Committee:

Chair (Continuing):	Peter Frise
	President
	President-Elect
	Secretary-Treasurer

Members-at-Large:

Continuing:	David Coleman
Continuing:	Ken Putt
Continuing:	André Bazergui

For Council of Canadian Academies Board of Governors (September 2016):

Continuing:	Axel Meisen
New:	Richard Marceau

For CAETS Board of Directors (June 2015 to June 2017):

Continuing:	Robert L. Evans

There being no alternative nominations from the floor, it was moved by R. Ravindran, seconded by P. Acchione, that this slate of members for the Fellowship Committee be approved. **CARRIED.**

11. ANNUAL GENERAL MEETING ARRANGEMENTS – 2016

President-Elect Doug Ruth announced Winnipeg, Manitoba as the location of the next Annual Meeting in June 2016. The Board may need to revise the date and venue as the year advances.

12. OTHER BUSINESS

There was no additional business

13. ADJOURNMENT

There being no other items of business, P. Lortie thanked the Fellows for attending the AGM and declared a CONSENSUS for adjournment at 1:37 p.m.

INDUCTION OF NEW FELLOWS 2015
(Added for the record)

The Induction of New Fellows took place before dinner at the Art Gallery of Hamilton. This year, 26 of the 50 newly-elected Fellows were able to be present at the Induction Ceremony. P. Lortie read the citations as each inductee came forward, received their framed certificate from D. Ruth and had a photograph taken, and then signed the members' register and received a CAE pin. Those present were:

Simaan AbouRizk
Miguel Anjos
Kamran Behdinan
Raouf Boutaba
Somen Chowdhury
Anthony Dawe
Greg Evans
Anthony Florizone
David Haccoun
Gordon Huang
Lewis Leon
Charles Ling
Horacio Marquez
Sushanta Mitra
Osama Moselhi
Natalia K. Nikolova
Vladimiros Papangelakis
Michel J. Pettigrew
Federico Rosei
Anne Sado
John Thompson
Wen Tong
Huining Xiao
Gu Xu
Hong Zhang
Qijun Zhan

Twenty-five other Fellows have been formally accepted for the year 2015, and will receive their certificates and lapel pin by mail. They are:

Sonia Aissa
Kim Allen
Soheil Asgarpour
Thomas Beamish
Fred J. Cahill
Pu Chen
Jordan Chou
Andre Corbould
Richard Hohendorf
Fassi Kafyeke
Zahra Moussavi
Jamie Long
Leonard Lye
Bob Magee
Virindar M. Malhotra
Meenakshinathan Parameswaran
Mihriban O. Pekguleryuz
Michael V. Sefton
Nariman Sepehri

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30th ANNUAL GENERAL MEETING

PRESIDENT'S REPORT

Pierre Lortie, M.C., FCAE

Monday, June 27, 2016
Winnipeg, Manitoba

My first words will be to thank Doug Ruth for organizing the 2016 Annual General Meeting and Symposium of the Academy in Winnipeg. This task takes a lot of time to organize and finance; Doug should be commended for sparing no effort to make our annual meeting a success.

Induction of new Fellows

A key mission of the Canadian Academy of Engineering is to celebrate engineering excellence by electing Fellows at the Academy from among Canada's most experienced and outstanding engineers. In so doing, we highlight the contributions of engineers to the well-being of Canadians and the economic development of Canada.

This year AGM gives us the opportunity to recognize the contribution of 43 outstanding engineers. They will join the 682 Fellows who now constitute the Academy during the induction ceremony at the Canadian Museum for Human Rights, a truly world-class facility. These new Fellows were selected through a rigorous process under the chairmanship of Peter R. Frise and elected to the Academy by a large majority of Fellows. We are honored to have them join us as Fellows of the Academy.

A productive period

Recent months have seen the denouement of two major initiatives undertaken by the Academy in cooperation with other organizations and the publication of another report at the initiative of dynamic Fellows.

The first was the publication of the Round Table Report "Making Better Use of Science and Technology in Policy-Making", in conjunction with the Institute for Research on Public Policy (IRPP), our partner in this endeavour.

Our objective was to develop a consensus for an effective science, engineering and evidence-based advisory process that enhances the ability of governments to absorb the findings of outside research and technological developments and incorporate this new knowledge in the design of legislation, policy and regulation in a manner that leads to better government decisions, minimizes crises and unnecessary controversies, and capitalizes on opportunities to improve the quality of life of Canadians, while creating value and wealth.

To this end, we organized six roundtable discussions on science, technology and public policy across Canada as a venue to promote a national conversation on the importance of evidence-based policies and the best approaches to embed sound scientific and engineering advice into policy making as a matter of course. All were well attended, and the discussions led to a report which has been well received both within and without the Canadian Government.[1]

The second major achievement was the long-awaited publication of the final report of the Trottier Energy Futures Project entitled "Canada's Challenge & Opportunity: Transformations for major reductions in GHG emissions".[2]

The objectives and means to achieve a significant reduction of GHG emissions is giving rise to robust debates in Canada, and worldwide. The stated objectives require a profound transformation of the energy system. This structural change is highly dependent on technology, existing and to be developed. The Academy has a responsibility to ensure that the policies in this regard proceed from an informed debate.

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1 The Report entitled "Making Better Use of Science and Technology in Policy-Making" (March 2016), is available on the CAE website https://www.cae-acg.ca/publications-of-the-academy/ . See also Policy Options (March 2016) at http://irpp.org/ .

2 Summary and Final Report (April 2016), are available at https://www.cae-acg.ca/publications-of-the-academy/

CAE Fellows are justified to be proud of the TEFP Report. The analysis addresses the energy-climate change challenge in a comprehensive, integrated multi-jurisdictional and multiple time period context. It combines the use of optimization and simulation models that are "world best" "state-of-the-art" methodology for analyzing national and global energy-climate change challenges. The findings of the TEFP systems analysis are credible because the results take full account of socio-economic projections, nationally and per industrial sectors, and of global market and price projections for fossil fuels. This report is the first of its kind in Canada.

For this seminal report, we owe a great debt to the many Fellows who have spent countless hours to ensure the analysis was rigorous and evidence-based. In particular, I want to thank John Leggat for his active involvement on the project board, Oskar Sigvaldason who led much of the work at the project team level, Doug Ruth, Sara Jane Snook, Eddy Isaacs and Aniruddha Gole, who performed the CAE peer review, and Kevin Goheen who exercised a vigilant supervision throughout the project.

The TEFP provides a detailed modelling study of the technical feasibility of the options available to Canada to reduce GHG emissions. This is an essential first step in developing an optimal path to achieve the stated objectives. However, we all know that it is much easier to preach virtue if you don't have to pay for it! While numerous analyses have been completed, the measures that must be taken, the lowest cost opportunities, and the government interventions that will be required are still subject to much uncertainty. This area needs to be the focus of CAE's next contribution to GHG emissions reduction policy debate.

To this end, we have agreed with the Conference Board of Canada to perform an examination, through modelling, of the economic and social implications of pathways analyzed in the TEFP report. The economic results of our joint study with the

Conference Board will point clearly to any regional or industrial benefits or dislocations and pressure points related to each scenario and include a comparative analysis of the scenarios as well as policy recommendations regarding the combinations of initiatives that provide the most attractive results. The social impacts will be based on combined technology and economics analyses, and will consider changes in the future composition of the economy and their effects on skills, regional employment, and migration patterns within Canada.

Combining the strength of our organizations will ensure that the conclusions of this study provide the elements necessary for an informed debate and a comprehensive and sound basis for decision-making in the public and private sectors.

Another important achievement was the publication of the report from the Task Force led by Ian Jordaan and his colleagues, Ken Croasdale, Robert Frederking and Peter Noble, entitled "Engineering in Canada's Northern Oceans Research and Strategies for Development".[3] They examined the engineering needs for future development in northern marine waters. The focus of their study is primarily on natural resource development and infrastructure needs for other critical activities such as Arctic community re-supply, Arctic shipping, and maritime safety and security.

As many experts have warned, they observe that Canada is ill-prepared to address the challenges it faces in the Arctic. In the 21st century, the responsibilities that accrue to a coastal Arctic state can only be satisfied by the (a) extensive use of technology, including ships, aircraft and remote monitoring systems; (b) an active economic and scientific presence in the region; and, (c) by ensuring that a significant pool of highly qualified personnel is trained in the peculiarities of Arctic conditions and circumstances, is readily

[3] This Report is available at https://www.cae-acg.ca/publications-of-the-academy/ .

available, and, nurtured by experience in completing projects in the Far North and Northern Oceans.

The Council of Canadian Academies

There are very few examples where natural science and technology can alone inform sound public policies. The establishment of the Council of Canadian Academies ("CCA") in 2002, an umbrella organization formed to coordinate and facilitate the participation of Fellows of the Royal Canadian Society, the Canadian Academy of Engineering and the Canadian Academy of Health Sciences who are recognized experts of the topic under study, was the institutional answer to the need to ensure that the breath of expert advice required to ensure a comprehensive analysis of the issues for study put forward by the Federal government was assembled. The assessments made over the years under the aegis of CCA in response to government requests have generally complied with the standards of balanced, evidence-based and independent advice. The CCA fulfills an important and valuable role in this capacity; the CAE contribution to this work is in line with the mission of our Academy.

Under the able leadership of CCA Chair Margaret Bloodworth, CCA has secured from the Canadian government the annual funding of its operations. Following this agreement, CAE has signed a collaborative agreement with the CCA whereby the latter will, on a going forward basis, pay for the services CAE contributes to the CCA activities. I take this opportunity to thank CAE's nominees on the Board of CCA, Axel Meisen and Richard Marceau, for their wise counsel and unfledging support throughout.

Notwithstanding these positive developments, it is fair to say that, in recent years, the relations between the CCA and the three national Academies have not been as constructive as one would have hoped.

We, at CAE, were very pleased with the appointment of Dr. Eric Meslin as President of the CCA. A Fellow of the CAHS, Eric brings to the organization, and in fact to all three Academies, a wealth of experience gained in research organizations and academia in Canada and abroad and in public policy making at the highest levels in the United States. Eric is determined to find practical solutions to alleviate the tensions that exist between the CCA and its Members. To this end, under his leadership, the CCA has established a Task Force to address the issues. Yves Beauchamp is the CAE representative on this Committee. He has been – and is considered – a very constructive voice in the deliberations of the Task Force. We wish Eric great success at the helm of CCA and sincerely hope that under his leadership, CAE and CCA can become a forceful voice in policy making within the Canadian government on issues where the expertise of our Fellows can make a difference.

Addressing Canada's Innovation Conundrum

At our 2013 AGM in Montreal, Jamieson Steeve, Executive Director at Martin Prosperity Institute and the Institute for Competitiveness and Prosperity, captured the main challenge that besets Canada in just a few words:

> "Canada's prosperity gap in a productivity gap, and the productivity gap is an innovation gap."

As I look to the future, I strongly believe the CAE must marshal its resources to address Canada's innovation deficit, a shortcoming that has plagued our economy for many years. Quite frankly, the Canadian performance on innovation is disappointing.

Despite having a number of strong innovation precursors - a highly educated general population, very generous research and development and incentives, competitive corporate taxes (well below the U.S.) and relatively low capital gains taxes, Canada is an

OECD innovation laggard. White Canada's higher education investment in R&D is still in the top 10 of OECD countries, our private sector investment in R&D is troubling – Canada is ranked 22nd of OECD countries (less than half the OECD average spending). The World Economic Forum ranks Canada 27th for private sector innovation performance, and cites this as a major factor in our declining overall competitiveness ranking. Canada also shows lagging results in terms of knowledge transfer from universities measured by indicators such as licensing agreements and spin offs, and, Canada's performance in employing STEM graduates in the labour force, particularly in manufacturing, is low.

In 2013, the CAE focused on the future of manufacturing in Canada. The threads and promises stemming from the rapid deployment of digital technologies and the use of "big data" methodologies were singled out as the drivers of major paradigm shifts. We must now face the fact that these technologies are playing an increasingly important role and spreading at an increasing speed.

PENETRATION OF SMART AND CONNECTED DEVICES

	The world in 2014	The world in 2025
Internet penetration (% global population)	35%	>80%
Smartphone subscription (% global population)	31% (all mobile: 93%)	>80%
Social networks users (% global population)	26%	>70%
Connected objects (billion)	15	80
E-Commerce: Penetration in all sectors (% GDP G7)	5%	>10%

Source: Oliver Wyman, May 2016

Canada's productivity is dismal, especially compared with that in the United States. While our overall productivity gap was as close as 10 percent in the 1970s and 1980s, it has grown to about 25 percent more recently, and virtually all of that deterioration is attributable to multifactor productivity (MFP) which serves as a proxy for innovation, competitiveness and superior management. Over a 30-year period until 2011, the quality of labour and capital intensity increased at about the same rate in Canada as in the United States, but MFP grew by only about a fifth of the rate in the United States. In a nutshell, "Canada's subpar productivity growth is largely attributable to relatively weak business innovation."[4] Let's not kid ourselves, the years of low innovation input by businesses are unsustainable in the face of volatile resource prices, shifting global trade patterns and increased competition.

Science-base and technological innovations are first and foremost the domain of engineering. They call upon all the disciplines. Several of our engineering faculties have programs that address innovation and the future of manufacturing in different sectors. The time is long past to bring this expertise in the limelight and for engineers to move the discussion concerning means to spur innovation capabilities on the public agenda. I strongly believe that improving Canada's innovation performance is a matter of great importance and that it should be the major focus of CAE attention in the next few years.

Concluding remarks

I would be remiss if my last words as President of CAE did not salute the outstanding achievements that have earned CAE Fellows prestigious honours in the months following last year's AGM. These awards recognize the contributions these outstanding engineers have continued to make to the advancement of applied scientific knowledge

[4] Government of Canada, "Innovation Canada: A Call for Action", 2011.

and the engineering profession and, as fully engaged citizens, to the betterment of Canadian society. These outstanding Fellows include:

- Our former President, P. Kim Sturgess, who received the Order of Canada in February 2016 recognizing "her outstanding achievement, dedication to the community, and service to the nation".
- Elizabeth Edwards (University of Toronto), who received the 2016 Killam Award.
- Yusuf Altintas, who received the Georg Schlesinger Production Engineering award in Berlin on February 25, 2016.
- Indira V. Samarasekera, who received an honorary degree from the University of Alberta for leading the massive growth of the University and the endowment.
- Pierre Lassonde, who was awarded an honorary degree by Concordia University "for his engineering expertise and philanthropic spirit".
- Tom Jenkins, who received an honorary Doctor of Law from the University of Toronto.
- Dr. Fed Otto FCAE, who received the 2016 Sage Award for Science & Technology.
- University Professor Michael Sefton (University of Toronto), who, in 2016, was the recipient of the Terumo Global Science Prize, the prestigious International Award from the European Society for Biomaterials.
- Chris Twigge-Molecey recipient of the 2016 Airey Award, the most prestigious award in Canadian metallurgy, from the Canadian Institute of Mining.
- Shiping Zhu (McMacter University), who is the recipient of this year's R.S. Jane Award from the Canadian Society in Chemical Engineering.
- Keith Hipel, Kerry Rowe and Molly Shoichet who have been elected as Foreign Members of the US National Academy of Engineering.

- Brahim Benmokrane (Université de Sherbrooke), who received the 2016 OIQ Grand Prix d'excellence, the highest distinction given by the Ordre des Ingénieurs du Québec.
- Dr. Ralph Sultan and Dr. Edward McBean (University of Guelph), for their Lifetime Achievement Engineering Excellence Award from the UBC Faculty of Applied Science.
- Prof. Donald Mavinic (UBC), for the 2016 Engineers Canada Gold Medal Award.
- Dr Liuchen Chang (University of New Brunswick), for receiving the New Brunswick Innovation Foundation R3 Innovation Award.

I also want to thank Kevin Goheen for his unflinching support as Executive Director of CAE and Roxanne Lepage for her work as our CAE's Office Manager. They have been efficient partners throughout.

As I pass the *bâton* to Doug Ruth, I wish him great success at the helm of CAE. I harbour no doubt that he will lead CAE to new heights. I also want to express my most sincere thanks to Richard Marceau who will be leaving the Board of Directors of CAE. Despite a life-threatening challenge, Richard has never ceased to play a constructive and influential role in the affairs of the CAE. His sense of duty is remarkable; an example for whomever accepts a position of responsibility in a non-profit organization.

Richard, you are a tough act to follow; Doug, all Fellows join me in wishing you great success at the helm of CAE.

Thank you.

THE CANADIAN ACADEMY OF ENGINEERING
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L'ACADÉMIE CANADIENNE DU GÉNIE
Chef de file en matière d'expertise-conseil en génie pour le Canada

Financial Statements 2015

&

Budget 2016

Annual General Meeting
Winnipeg, Manitoba
June 27th, 2016

THE CANADIAN ACADEMY OF ENGINEERING
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Financial Statements
December 31, 2015

REVENUE	2015	2014
CAE	255,289[1]	232,339
TEFP	561,587	490,674
Total	**816,876**	**735,090**
EXPENSES		
CAE	219,847[2]	189,378
TEFP	561,587	490,674
Total	**781,434**	**680,052**
EXCESS OF REVENUE OVER EXPENSES	**35,442**	**55,038**

Balance, beginning of year	**723,439**	**668,401**
Excess of revenue over expenses	**35,442**	**55,038**
Balance, end of year	**758,881**	**723,439**

Financial Statements
December 31, 2015

REVENUE[1]
2015

The **revenue** of **255,289**$ were as follows :

o Membership dues (**477** actives & **188** emeritus = **665** paying Fellows) :	179,861
o Investment (interest, dividends)	18,756
o Gain (Loss) on disposal of investment	(1,099)
o Unrealized losses on investments	(23,782)
o Sponsors	62,750
o Donations	9,661
o Annual meeting and other revenue (registrations)	9,142

Financial Statements
December 31, 2015

EXPENSES[2]
2015

The **expenses** of **219,847**$ were as follows :

o Operations (Office Manager, Executive Director):	147,465
o Annual meeting and seminar	18,310
o Communications and office expenses (supplies, photocopies, insurance, telephone, postal, bank charges)	15,491
o Rent and parking	16,576
o Travel and meeting (teleconference, travel)	5,851
o Reports and publications	874
o Associations (PAGSE & CAETS)	4,211
o Promotion and external relations	1,123
o Professional fees	5,651
o Interest and service charges (Moneris service, VISA, MC)	4,295

Financial Statements
December 31, 2015

Remarks

- These statements have been prepared by our auditors (Frouin Group – 1st year).
- The net result for 2014 was an operating excess of revenue over expenses of $ 35,442; this was due to careful control of operations expenses and greater than budgeted revenue (CAE).
- These look different from the Budget 2015 document which has been presented to the 2015 Annual General Meeting, Board and Executive. There are two primary reasons for this:
  - The overhead from projects from projects like the TEFP are netted off operations in the financial statements ($67,751 in 2015). We keep track of them separately.
  - The accounting for the realized and unrealized gains and losses for the investment account is not considered on our internal budget.
- The recommendation of the Board is to approve the 2015 Financial Statement.

→ *Formal approval is required*

Budget 2016

REVENUE	Budget 2016	Results 2015	Budget 2015
Membership dues [a]	188,144	179,861	178,908
Investment	18,000	18,756	16,000
Sponsors	55,000	62,750	50,500
Donations	10,000	9,661	14,000
Annual meeting and others	8,000	9,142	6,500
Local section		-	5,000
TEFP (Completion phase)	-	561,587	95,000
Total	**279,144**		**365,908**

[a] **477** actives & **188** emeritus = **665** paying Fellows

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Budget 2016

EXPENSES	Budget 2016	Results 2015	Budget 2015
Operations	168,149	**215,216** [b]	163,579
Annual meeting	30,000	18,310	40,000
Communications and office expenses	18,000	15,491	18,000
Rent and parking	14,823	16,576	15,600
Travel and meetings	8,000	5,851	7,000
Reports and publications	1,000	874	1,000
Associations (PAGSE & CAETS)	4,000	4,211	5,000
Promotion and external relations	1,000	1,123	1,000
Strategic plan	1,000	0	1,000
Professional fees	8,000	5,651	10,000
Interest and service charges	4,000	4,295	3,000
Transfer to Endowment fund	10,000	9,661	14,000
Energy Pathways	-	0	-
TEFP (Completion phase)	10,000	561,587	80,750
Total	**277,972**		**359,929**
EXCESS OF REVENUE OVER EXPENSES	1,172		5,979

[b] Includes the portion allocated to projects – **67,751$**

Budget 2016

Remarks

- The major differences between the draft 2016 Budget and the 2015 Budget are as follows:

i. a 2.8 % increase in contractors and employees,

	Budget	Results	Budget
EXPENSES	2016	2015	2015
Operations	168,149	**215,216** [b]	163,579

Budget 2016

Remarks

- The major differences between the draft 2016 Budget and the 2015 Budget are as follows:

i. a **2.8 %** increase in staffing costs,

ii. The AGM is now a «one day» event.

EXPENSES	Budget 2016	Results 2015	Budget 2015
Annual meeting	30,000	18,310	40,000

Budget 2016

Remarks

- The major differences between the draft 2016 Budget and the 2015 Budget are as follows:

i. a 2.8 % increase in staffing costs,

ii. The AGM is now a «one day» event.

iii. We have assumed that there will be $10,000 of residual spending on the TEFP project.

EXPENSES	Budget 2016	Results 2015	Budget 2015
TEFP (Completion phase)	10,000	561,587	80,750

Budget 2016

Remarks

- The major differences between the draft 2016 Budget and the 2015 Budget are as follows:

i. a **2.8 %** increase in staffing costs,

ii. The **AGM** is now a «**one day**» event.

iii. We have assumed that there will be **$10,000** of residual spending on the **TEFP project**.

iv. We are projecting a small excess of revenue over expenses ($ **1,172**).

	Budget	Results	Budget
EXPENSES	2016	2015	2015
EXCESS OF REVENUE OVER EXPENSES	1,172		5,979

Budget 2016

Remarks …

- On the **revenue side**, an approximate **2 %** increase in annual dues for **Active** and **Emeritus Fellows** (from **$360** and **$62** to **$368** and **$64**) + increase number of **paying Fellows**.

	Budget	Results	Budget
REVENUE	2016	2015	2015
Membership dues [a]	188,144	179,861	178,908

Budget 2016

Remarks …

- On the **revenue side**, an approximate **2 %** increase in annual dues for **Active** and **Emeritus Fellows** (from **$360** and **$62** to **$368** and **$64**) + increase number of **paying Fellows**.
- The **revenue** from **sponsorship at the AGM** is expected to be remain **close** to **historical levels**.

REVENUE	Budget 2016	Results 2015	Budget 2015
Sponsors	55,000	62,750	50,500

Budget 2016

Remarks …

- On the **revenue side**, an approximate **2 %** increase in annual dues for **Active** and **Emeritus Fellows** (from **$360** and **$62** to **$368** and **$64**) + increase number of **paying Fellows**.
- The **revenue** from sp**onsorship at the AGM** is expected to be remain **close** to **historical levels**.
- The **TEFP** project is completed, **no revenue** therefore expected.

REVENUE	Budget 2016	Results 2015	Budget 2015
TEFP (Completion phase)	-	561,587	95,000

Budget 2016

Remarks …

- On the **revenue side**, an approximate **2 %** increase in annual dues for **Active** and **Emeritus Fellows** (from **$360** and **$62** to **$368** and **$64**) + increase number of **paying Fellows**.
- The **revenue** from sp**onsorship at the AGM** is expected to be remain **close** to **historical levels**.
- The **TEFP** project is completed, **no revenue** therefore expected.
- **Year to date**, I can report that **we are performing very well** with respect to overall excess of revenue over expenses, greater than budget.

→ *Formal approval is **not** required*

Appointment of Auditors 2016

Remarks

- Frouin Group Professional Corporation was our auditors for the 1st year.
- The recommendation of the Board is that we appoint them again for the year 2016.

→ *Formal approval is required*

THE CANADIAN ACADEMY OF ENGINEERING

AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2015

INDEPENDENT AUDITOR'S REPORT

To the Directors of:
The Canadian Academy of Engineering

Report on the Financial Statements
We have audited the accompanying financial statements of The Canadian Academy of Engineering, which comprise the statement of financial position at December 31, 2015, and the statements of revenue and expenses and changes in net assets and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in Canada, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Basis for Qualified Opinion
Some project expenditures related to the 2014 fiscal year were paid during the 2015 fiscal year on a cash basis due to the timing of their receipt. This is not in accordance with the accrual basis of accounting that is required by Canadian generally accepted accounting principles. The total of the expenditures accounted for on a cash basis at the beginning of the fiscal year were approximately $70,785. Had these expenditures been recorded on an accrual basis, the adjustment to the 2015 audited financial statements as presented would see a decrease in total expenditures and a corresponding decrease of recognized deferred revenue of approximately $70,785. The 2014 comparative financial statements would be restated to increase expenditures as well as a corresponding increase of recognized deferred revenues by $70,785. The net effect on net income over the 2014 and 2015 period would have been nil due to the recognizing of deferred revenues in relation to project expenses incurred.

Qualified Opinion
In our opinion, except for the effects of the matter described in the Basis for Qualified Opinion paragraph, the financial statements present fairly, in all material respects, the financial position of The Canadian Academy of Engineering as at December 31, 2015 and the results of its financial performance and its cash flows for the year then ended in accordance with accounting principles generally accepted in Canada.

Other
The financial statements of the prior period were audited by a previous auditor. The auditor expressed an unqualified opinion and the audit report was dated April 17, 2015.

Licensed Public Accountants
Ottawa, ON
To be dated upon approval

THE CANADIAN ACADEMY OF ENGINEERING

AUDITED STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 2015

	Endowment Fund	General Fund	2015	2014
CURRENT ASSETS				
Cash	$ 0	$ 156,924	$ 156,924	$ 398,877
HST rebate receivable	0	42,015	42,015	43,782
Prepaid expenses	0	2,274	2,274	85
Current portion of investments (Note 3)	150,000	0	150,000	100,000
Due from General Fund	42,194	0	42,194	15,990
	192,194	201,213	393,407	558,734
INVESTMENTS (Note 3)	479,997	0	479,997	449,516
TOTAL ASSETS	$ 672,191	$ 201,213	$ 873,404	$ 1,008,250
CURRENT LIABILITIES				
Accounts payable & accrued liabilities (Note 4)	$ 0	$ 43,028	$ 43,028	$ 20,863
Deferred revenue (Note 5)	0	29,301	29,301	247,958
Due to Endowment Fund	0	42,194	42,194	15,990
TOTAL LIABILITIES	0	114,523	114,523	284,811
NET ASSETS				
Internally restricted	672,191	0	672,191	662,530
Unrestricted	0	86,690	86,690	60,909
TOTAL NET ASSETS	672,191	86,690	758,881	723,439
TOTAL LIABILITIES AND NET ASSETS	$ 672,191	$ 201,213	$ 873,404	$ 1,008,250

APPROVED ON BEHALF OF THE BOARD :

Director _____

Director _____

(See accompanying Notes to Financial Statements)

THE CANADIAN ACADEMY OF ENGINEERING

AUDITED STATEMENT OF REVENUE AND EXPENSES

FOR THE YEAR ENDED DECEMBER 31, 2015

	Endowment Fund	General Fund	2015	2014
REVENUE				
Membership dues	$ 0	$ 179,861	$ 179,861	$ 166,020
TEFP - Phase 1 - Completion	0	561,587	561,587	490,674
Sponsors	0	62,750	62,750	56,000
Donations	9,661	0	9,661	12,077
Annual meetings and other revenue	0	9,142	9,142	6,337
Investment income	0	18,756	18,756	20,132
Loss on disposal of investments	0	(1,099)	(1,099)	(1,898)
Unrealized losses on investments	0	(23,782)	(23,782)	(14,252)
TOTAL REVENUE	9,661	807,215	816,876	735,090
EXPENSES				
Operations	0	215,216	215,216	161,602
Portion of operations allocated to projects (Note 6)	0	(67,751)	(67,751)	(64,001)
	0	147,465	147,465	97,601
Annual general meeting and seminar	0	18,310	18,310	17,907
Communications and office expense	0	15,491	15,491	22,330
Rent and parking	0	16,576	16,576	17,503
Travel and meetings	0	5,851	5,851	4,497
Reports and publications	0	874	874	640
Associations	0	4,211	4,211	4,881
Promotion and external relations	0	1,123	1,123	5
Strategic plan	0	0	0	1,014
Professional fees	0	5,651	5,651	15,768
Interest and bank charges	0	4,295	4,295	3,074
	0	219,847	219,847	185,220
TEFP - Phase 1 Completion	0	561,587	561,587	490,674
Energy Pathways	0	0	0	4,158
	0	561,587	561,587	494,832
TOTAL EXPENSES	0	781,434	781,434	680,052
EXCESS OF REVENUE OVER EXPENSES	$ 9,661	$ 25,781	$ 35,442	$ 55,038

(See accompanying Notes to Financial Statements)

THE CANADIAN ACADEMY OF ENGINEERING

AUDITED STATEMENT OF CHANGES IN FUND BALANCES

FOR THE YEAR ENDED DECEMBER 31, 2015

	Endowment Fund	General Fund	2015	2014
Balance, beginning of the year	$ 662,530	$ 60,909	$ 723,439	$ 668,401
Excess of revenue over expense	9,661	25,781	35,442	55,038
Balance, end of the year	**$ 672,191**	**$ 86,690**	**$ 758,881**	**$ 723,439**

(See accompanying Notes to Financial Statements)

THE CANADIAN ACADEMY OF ENGINEERING

AUDITED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2015

	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income for the year	**$ 35,442**	$ 55,038
Cash flows from current operating items	**(196,914)**	(32,278)
	(161,472)	22,760
CASH FLOWS FROM INVESTING ACTIVITIES		
Change in investments	**(80,481)**	(156,536)
INCREASE (DECREASE) IN CASH AND EQUIVALENTS	**(241,953)**	(133,776)
CASH AND EQUIVALENTS, beginning of year	**398,877**	532,653
CASH AND EQUIVALENTS, end of year	**$ 156,924**	$ 398,877
REPRESENTED BY		
Cash	**$ 156,924**	$ 398,877

(See accompanying Notes to Financial Statements)

THE CANADIAN ACADEMY OF ENGINEERING

NOTES TO AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2015

1. STATUTE AND NATURE OF OPERATIONS

The Canadian Academy of Engineering (the Academy), a private corporation without share capital incorporated under the Canada Corporations Act, recognizes engineering achievements and service to the profession. The Academy is a charitable organization and as such, is exempt from income tax.

2. SIGNIFICANT ACCOUNTING POLICIES

The financial statements were prepared in accordance with Canadian accounting standards for not-for-profit organizations and include the following significant accounting policies:

a. Fund accounting
The fund method of accounting is employed to allocate the various restrictions imposed upon the Academy. The funds are described as follows:

General Fund
This fund serves to record the day-to-day operations of the activities under the control of the Academy. The funds in this category have no external restrictions on the use of the capital.

Endowment Fund
This fund was created to segregate donations received and to finance the future operations of the Academy. The investment income earned by the Fund is recorded as revenue in the General Fund.

b. Revenue recognition
The Canadian Academy of Engineering follows the deferral method of accounting for restricted revenue. Restricted revenue is recognized as revenue only when all of the significant foreseeable expenses related to the revenue source have been incurred in a year. Otherwise, such revenue is deferred until the related expenses have been incurred

Life membership dues are deferred and taken in to revenue over a five-year period. Investment income and unrestricted revenue are recognized when earned.

c. Allocation of common costs
The Academy allocates a portion of its contractuals, salaries and benefits costs according to the budget. These cost are included under the operations category.

THE CANADIAN ACADEMY OF ENGINEERING

NOTES TO AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2015

2. SIGNIFICANT ACCOUNTING POLICIES (con't)

d. Financial instruments

Measurement of financial instruments

The Academy initially measures all its financial assets and financial liabilities at fair value, except for certain non-arm's length transactions.

The Academy subsequently measures all its financial assets and financial liabilities at amortized cost, except for investments in equity instruments that are quoted in an active market, which are measured at fair value. Changes in fair value are recognized in operations.

Financial assets measured at amortized cost include cash and accounts receivable.

Financial liabilities measured at amortized cost include accounts payable and accrued liabilities.

Financial assets measured at fair value include investments.

Impairment

Financial assets measured at cost are tested for impairment when there are indicators of possible impairment. The Academy determines whether a significant adverse change has occurred in the expected timing or amount of future cash flows from the financial asset. If this is the case, the carrying amount of the asset is reduced directly to the higher of the present value of the cash flows expected to be generated by holding the asset, and the amount that could be realized by selling the asset at the balance sheet date. The amount of the write-down is recognized in operations. The previously recognized impairment loss may be reversed to the extent of the improvement, provided it is no greater than the amount that would have been reported at the date of the reversal had the impairment not been recognized previously. The amount of the reversal is recognized in operations.

Transaction costs

The Academy recognizes its transaction costs in operations in the period incurred. However, transaction costs related to financial instruments subsequently measured at amortized cost reduce the carrying amount of the financial asset or liability and are accounted for in the statement of operations using the straight-line method.

e. Contributed services

The Academy would not be able to carry out its activities without the services of the many volunteers who donate a considerable number of hours. Because of the inherent difficulty in compiling these hours and determining their fair value, contributed services are not recognized in the financial statements.

f. Capital assets

Additions to capital assets during the year are fully expensed in the year of acquisition. There were no capital asset additions in the year.

THE CANADIAN ACADEMY OF ENGINEERING

NOTES TO AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2015

3. INVESTMENTS

	2015	2014
Fixed income securities - 0.95% to 2.11%, maturing from March 2016 to October 2019	**$ 302,847**	$ 342,678
Income trust and other equity securities	**319,090**	169,516
Mutual funds	**8,060**	37,322
	$ 629,997	$ 549,516
Less: current portion of investments	**$ 150,000**	$ 100,000
TOTAL	**$ 479,997**	$ 449,516

4. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities include amounts owing for government remittances for $2,152 (2014 - $1,108).

5. DEFERRED REVENUE

The deferred operating revenue represents membership fees collected which pertain to the upcoming year, as well as restricted operating funding for projects for which the related costs are to be incurred in the subsequent year.

	2015	2014
Deferred Memberships	**$ 9,000**	$ 410
Deferred project revenue, beginning of year	**247,548**	214,202
Less: amount recognized as revenue in the year	**(561,587)**	(490,674)
Plus: amounts received in the year	**334,340**	524,020
Deferred project revenue, end of year	**20,301**	247,548
TOTAL	**$ 29,301**	$ 247,958

6. ALLOCATION OF COMMON COSTS

Total contractual, salaries and benefits transferred to the Trottier Energy Futures Project are $67,751 (2014: $64,001).

THE CANADIAN ACADEMY OF ENGINEERING

NOTES TO AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2015

7. CONTRACTUAL OBLIGATIONS

The Academy has a commitment under a lease agreement to pay $901 plus tax per month until October 2018.

8. ENERGY PATHWAYS PROJECT

In previous years, the Energy Pathways Project had generated a cumulative deficit of $12,509. The Academy had absorbed the deficit incurred for this project in the prior year.

9. COMPARATIVE FIGURES

The prior year comparative figures have been reclassified to conform to this year's presentation.

CAE DRAFT OPERATING BUDGET 2016

	2015 Budget	***2016 Budget***
REVENUE		
Membership dues	*178,908*	188,144
Investment	*16,000*	18,000
Loss on disposal of investments		
Unrealized gains on investments		
	194,908	**206,144**
TEFP - Phase 1 - Start	-	-
TEFP - Phase 1 - Completion	*95,000*	-
Energy Pathways/CCA	-	-
Sponsors	*50,500*	55,000
Donations	*14,000*	10,000
Annual meeting and other revenue	*6,500*	8,000
Local sections/Cboc/IRPP	*5,000*	-
	365,908	**279,144**
EXPENSES		
Operations	*163,579*	168,149
Portion of operations allocated to projects*		-
	163,579	**168,149**
Annual meeting	*40,000*	30,000
Communications and office expenses	*18,000*	18,000
Rent and parking	*15,600*	14,823
Travel and meetings	*7,000*	8,000
Reports and publications	*1,000*	1,000
Associations	*5,000*	4,000
Promotion and external relations	*1,000*	1,000
Strategic plan	*1,000*	1,000
Professional fees	*10,000*	8,000
Interest and service charges	*3,000*	4,000
Transfer to Endowment Fund	*14,000*	10,000
	279,179	**267,972**
TEFP - Phase 1 - Start	-	-
TEFP - Phase 1 - Completion	*80,750*	10,000
Energy Pathways	-	-
	359,929	**277,972**
EXCESS OF REVENUE OVER EXPENSES	*5,979*	1,172
** Total contractual, salaries and benefits transferred to the Trottier Energy Futures*		
2016 Draft Budget v 1 to be presented to the Board 21 December, 2015		

THE CANADIAN ACADEMY OF ENGINEERING
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L'ACADÉMIE CANADIENNE DU GÉNIE
Chef de file en matière d'expertise-conseil en génie pour le Canada

DRAFT NOMINATING COMMITTEE REPORT – 2016/2017

For Officers:

President:	Douglas Ruth
President-Elect:	Eddy Isaacs
Secretary-Treasurer:	Yves Beauchamp
Past President:	Pierre Lortie

For Directors-at-Large:

Continuing:	Sara Jane Snook
Continuing:	Colin E. Smith
Continuing:	Charles Randell
Continuing:	Bruce Burlton
New:	Andre Corbould
New:	Peter Frise

For Fellowship Committee:

Chair (Continuing):	David Coleman
	President
	President-Elect
	Secretary-Treasurer
Members-at-Large:	
New:	John Dinsmore
New:	Ray Gosine
New:	Andrew Hrymak

For Honours and Awards Committee:

Chair:	Axel Meisen

For Council of Canadian Academies Board of Governors (September 2016):

Continuing:	Axel Meisen
Continuing:	Richard Marceau

For CAETS Board of Directors (June 2015 to June 2017):

Continuing:	Robert L. Evans