

The
BIG Debate
Canada's Oil Future **NOW**,
Refine it, or Sell it?

May 5-6, 2015
Holiday Inn
Sarnia, ON



THEBOWMANCENTRE

The BIG Debate is possible through the historic collaboration with the Canadian Academy of Engineering and financing by The Bowman Centre

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*

Canada: Becoming a Sustainable Energy Superpower

Industry Leaders' 24 hour meeting in Sarnia on May 5 and 6 will debate alternative pathways for capturing value from Canada's energy resources. The pathway chosen will have enormous impact on jobs and wealth generation for decades to come.

"Be it resolved that provincial and federal governments in Canada should take pro-active measures to encourage greater refining and processing of Canada's petroleum resources within Canada than would occur through private market decisions alone."

The issues involved were defined in the Canadian Academy of Engineering's book 'Canada: Becoming a Sustainable Energy Superpower', documenting key findings in the Academy's ten-year analysis of Canada's energy future.

It will be argued that a pivotal first step will be the construction of a \$10 billion refining complex in Sarnia/Lambton using the latest technology in environmental protection. An essential feature will be a dramatic expansion in Canada's manufacturing industry to capture the almost unlimited opportunities in the supply of equipment needed by our energy industries, now largely provided through imports.

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Pat Davidson

Member of Parliament for Sarnia – Lambton

Official Greetings from Sarnia-Lambton MP Pat Davidson

Dear: Honoured Alberta and Ontario stakeholders, Industrial leaders and Community Representatives,

Several years ago, a group of constituents met with me to discuss working towards locating a new refinery in our community. This proposal was brought forward by a group of former industry stakeholders who wanted to work together to bring this opportunity to Sarnia-Lambton.

The proponents, including Dr.'s Clem Bowman and Walter Petryschuk, have put much effort into building the case for a new refinery project in our community and have taken all opportunities possible to advocate towards this objective. Working in conjunction with a growing group of community partners and supporters, this idea grew into the Sarnia-Lambton Advanced Bitumen Energy Refinery project, more commonly known now as “the Saber Project.”

Over the past several decades, the energy markets have dictated investments into the industry, and for the most part the strategy taken by Refining companies has been to close many refineries while expanding others. The fact remains that it has been decades since a new refinery was built in Ontario – something that the Saber project would rectify. It is a simple fact that Sarnia-Lambton has the quintessential ingredients required for such a proposal– we have the experienced workforce, we have the pipeline capacity in and out of the community, and we have the expertise in our business community to steer such a large-scale project towards prosperity and overall success.

I would also add that we have elected Officials who understand the importance of the oil and gas industry in Sarnia-Lambton to not just our localized community, but to the entire nation as well.

This is important, because it will take the commitment and focus of all the afore-mentioned groups to work in solidarity to ensure that this project becomes a reality.

Already, we know the tangibles for success are present. The end result will be an achievement quite worthy of consideration: billions of dollars in direct investment into Sarnia-Lambton, with spillover across the entire South West Ontario region as the industrial impact of such a large-scale project becomes reality. This would equal thousands of jobs, ensure long-term and well-paying employment opportunities across the region, and give Canada a foot-in on the value-added side of domestic energy production.

I would like to take this opportunity to thank the numerous proponents behind the Saber Project who have put in so much time and energy to try to move this proposal forward, and those in attendance today. I hope that you are able to enjoy the Conference in our beautiful community of Sarnia-Lambton.

Thank you,

Pat Davidson
Member of Parliament: Sarnia-Lambton





LEGISLATIVE ASSEMBLY

BOB BAILEY, M.P.P.
Sarnia-Lambton

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Legislative Building	Sarnia, Ontario
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Tel: 416-325-1715	Fax: 519-337-3246
Fax: 416-325-1852	

May 5, 2015

Welcome,

As Member of Provincial Parliament for Sarnia-Lambton it is my pleasure to extend greetings to all attendees of *The Big Debate*. I commend the Bowman Centre and the team leading the Sarnia-Lambton Advanced Bitumen Energy Refinery Petrochemical Project for organizing this important event.

Sarnia-Lambton has a long and storied history as the hub of energy procurement for the Province of Ontario and the industrious Great Lakes region. From the development of North America's first commercial oil well, just down the road in Oil Springs back in 1858, to the kickoff of today's *Big Debate* on the future of Canada's petroleum industry, the Sarnia-Lambton community has always taken the lead in developing the people, technologies, and ideas necessary to strengthen not just the industry, but the country.

Sarnia-Lambton is the perfect setting to debate Canada's energy future and the critical question of what to do with our nation's wealth of petroleum resources: refine it, or sell it?

I look forward to the discussions that will take place during both days of *The Big Debate* and the opportunity to take these important ideas back to Queen's Park to share with the political leadership of Ontario.

Yours truly,

Bob Bailey, MPP
Sarnia-Lambton



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May 5, 2015

Greetings,

As Warden of Lambton County, it is my pleasure to welcome you to The Big Debate. As you know, Lambton County's history is rooted in the discovery of oil, a discovery that has grown to have a profound impact on how this community has matured and developed over time.

Over the next two days, it's my hope that you will diligently contemplate the views presented and the prospects of refining more of Canada's oil here in Lambton County. I challenge you to consider how you can be a part of moving this initiative forward.

I wish to express my thanks to The Bowman Centre and those who have played a role in organizing this important event and invite you to explore the natural and cultural assets of Lambton County in your spare time.

Sincerely,

Warden Bev MacDougall

BM/jvk



Caring ♦ Growing ♦ Innovative





Village of Point Edward

135 Kendall Street, Point Edward, Ontario N7V 4G6
Phone (519) 337-3021 • Fax (519) 337-5963
www.villageofpointedward.com

April 30, 2014

Re: The Big Debate

On behalf of the residents and Council of the Village of Point Edward I would like to take this opportunity to welcome all delegates for the Big Debate to our wonderful community.

The issue at hand is of great importance to our greater community, and in fact, our Country and I hope that you are able to garner valuable information at the conference that will help us all to make sense of the Big Debate.

While I am sure you have a very busy agenda for the next couple of days I hope that you are able to have some free time to look around our little gem of a Village that is Point Edward and that you are able to return at a later date with your entire family so that you are able to share with them the treasures that we have here in Lambton County. Please have a look at our Tourism Sarnia Lambton Guide which shares with you all the area has to offer to keep your family entertained and fascinated.

Once again, enjoy your time here and we look forward to seeing you again.

Yours truly,

Larry MacKenzie, Mayor
Village of Point Edward

Tuesday, May 5, 2015

SPONSORS

4:00 pm - 5:00 pm **Registration open**

5:00 pm - 5:15 pm

Welcome and Introduction to the Conference

Walter F. Petryschuk, Conference Chairman

Deputy Mayor Bev Hand, County Warden Bev MacDougall

West Hall

5:15 pm - 7:00 pm

The BIG Debate - Introduction by the Moderator

MODERATOR:

Jeffrey Simpson, National Affairs Columnist, Globe and Mail

DEBATERS:

Dr. Jim Stanford, Economist, Unifor

Dr. Andrew Leach, Economist, University of Alberta

Q & A - Open to floor for discussion



7:00 pm - 7:30 pm

Networking Reception

Centre Hall



7:45 pm - 9:30 pm

Dinner - Charles Fairbank, Remarks regarding the
Lambton County history in Oil

West Hall



Program subject to change.

“Be it resolved that provincial and federal governments in Canada should take pro-active measures to encourage greater refining and processing of Canada’s petroleum resources within Canada than would occur through private market decisions alone.”

Wednesday, May 6, 2015

West Hall

SPONSORS

8:00 am - 9:00 am

Continental Breakfast
Greetings and welcome - MP Bob Bailey
Introduction of Speaker



9:00 am - 9:45 am

The Saber Project - Sarnia-Lambton
Advanced Bitumen Energy Refinery
Moderator: Marty Raaymakers, President of MIG Engineering Ltd.
Donald E. Wood, B.Sc. (RMC), B.A.Sc., Bowman Centre Project Manager
Q & A - Open floor for discussion



9:45 am - 10:00 am

Break

10:00 am - 12:00 am

Panel Session - Perspectives and Implications of
Adding Value to Canada's Resources - Moderator: Marty Raaymakers
Oil Market Outlook and Prospects for Canadian Refining
Patricia Mohr, VP, Economics and Commodity Market, Scotiabank
Energy - Oil and Natural Gas Production - Beyond the Rhetoric
Hugh Moran, Executive Director, Ontario Petroleum Institute
Seizing the Opportunity: Attracting Investment in Ontario's Chemistry Sector
Bob Masterson, Vice President Responsible Care, Chemistry Industry Association of Canada
Up the Value Chain for Sustainability and Jobs
Fred Wilson, Director of Strategic Planning, Unifor
Q & A with Stakeholders in the Bitumen Resource
Financial Program Developers, Pipelines, Petroleum Producers, Chemical and Fuels Industry and Associations, Labour - construction and operating, Private Investment Organizations



12:00 pm - 1:30 pm

Lunch with Presentation on Big Projects in Canada's
Energy Future and a role for Ontario

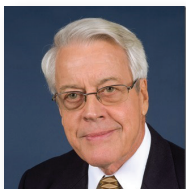


1:30 pm - 3:00 pm

Panel Session - Manufacturing Implications of an Energy-Based Renaissance
Moderator: Rory Ring, President & CEO, Sarnia Lambton Chamber of Commerce
The BIG Picture of Manufacturing In Balance with Energy Resource Development
Gord Currie, Associate, Bowman Centre
Ontario's Manufacturing Capabilities and Implications Regarding Energy Resource Development
Mathew Wilson, Vice President, National Policy for Canadian Manufacturers and Exporters
Fabrication's Contribution and Access to Energy Producers
Marilyn Gladu, Engineer, Queens University
Markets and the Potential for Expansion
Rick Perdeaux, Owner, Toolrite Engineering
Q & A - Open floor for discussion

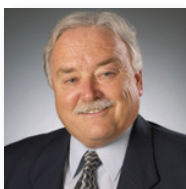
3:00 pm - 3:30 pm

Final summary statements - Clem Bowman, Founder, Bowman Centre



C.W. Bowman, Chairman, ProGrid Ventures
Dr. C.W. Bowman is Chairman of ProGrid Ventures Inc. and inventor of a methodology for evaluating intangible assets, such as intellectual capital. As Vice-President, Esso Petroleum Canada, he was responsible for the Esso Research Centre at Sarnia, Ontario. As founding chairman of the Alberta Oil Sands Technology and Research

Authority, he managed a technology fund of several hundred million dollars for joint projects with Canadian and multinational companies to recover and upgrade bitumen from the deeply buried Canadian oil sands.



Gord Currie, Associate, Bowman Centre

Gord Currie is a experienced financial executive in large multi-national public and private company environments. Excellent knowledge and experience with evolving OSC, TSX, NASDAQ and SEC regulatory requirements. Development and effective execution of

investor relations strategy and programs. Industry experience includes eleven years in manufacturing and distribution of petrochemicals (NOVA/POLYSAR) and thirteen years in manufacturing and distribution of building products (EMCO Limited). Two years in auto parts manufacturing (Wescast) and five years in the semiconductor industry (Gennum).



Charles Fairbank, Owner, Fairbank Oil

Charlie Fairbank has been the fourth generation owner of Fairbank Oil. Keeping the 350 heritage wells operating in Oil Springs, Ontario is his principal occupation but his life's work is dedicated to gaining recognition for the Oil Heritage District. Mr. Fairbank has given numerous lively speeches and media interviews, staged many events,

published books and successfully reached out to universities, and won numerous awards for the breadth of his work.



Marilyn Gladu, Engineer, Queens University

Marilyn Gladu is a professional engineer from Queen's University who has worked in the petrochemical engineering and construction industry within Sarnia Lambton for over 30 years. As a member of the Sarnia Lambton Industrial Alliance, as well as Business Development Director for the largest engineering firm

in Sarnia, and as advisory board member for the Bluewater Technology Access Centre, Marilyn is engaged in helping projects locally to move forward.



Dr. Andrew Leach, Economist,
University of Alberta

Andrew Leach is an energy and environmental economist and is the Enbridge Professor of Energy Policy at the Alberta School of Business at the University of Alberta. He has a Ph.D. in Economics from Queen's University, and a B.Sc (Environmental Sciences) and M.A. (Economics)

from the University of Guelph. Dr. Leach recently spent a year on leave from the University of Alberta as Visiting Scholar, Environment Canada, where he worked mostly on greenhouse gas policy for the oil and gas sector.



George Mallay, General Manager of the Sarnia-Lambton- Economic Partnership
George Mallay is currently the General Manager of the Sarnia-Lambton- Economic Partnership. He has been in the economic development profession for over 27 years and has experience in nearly all aspects of economic development, working in a large urban center and

smaller rural regions. Mr. Mallay has served on a number of government and industry sectors boards, and has led the initiative to establish a new Research and Development Park in Sarnia with the University of Western Ontario. Mr. Mallay holds degrees in economics-geography, urban planning and an MBA.



Bob Masterson, Vice President
Responsible Care, Chemistry Industry
Association of Canada

Bob Masterson is Vice President Responsible Care with the Chemistry Industry Association of Canada. He holds an Engineering Degree from Queen's University, and completed a Masters in Public Policy at Carleton

University. Mr. Masterson has worked in Ontario's nuclear power sector, and spent 15 years as a consultant on environment and sustainability issues within many industrial sectors, including forest products, electricity generation, cement, mining and energy.



Patricia Mohr, VP, Economics and
Commodity Market, Scotiabank

Patricia Mohr works closely with the Corporate and Investment Banking groups - including the Oil & Gas team - with Institutional Equity Sales and Global Risk Management. Ms. Mohr developed the Scotiabank Commodity Price Index – the first Index designed to

measure price trends for Canadian commodities in export markets. She is a frequent speaker at international oil & gas and mining conferences such as the 'Platts Crude Oil Markets' conference in Houston, 'China Mining 2014' in Tianjin, China, and the PDAC in Toronto.



Hugh Moran, Executive Director,
Ontario Petroleum Institute

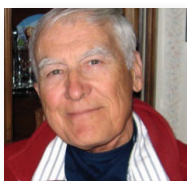
Hugh Moran is the Executive Director of the Ontario Petroleum Institute, an industry association representing companies and individuals involved in oil and natural gas production, hydrocarbon storage and salt/solution mining. Mr. Moran has been involved in

business, and public affairs for over 35 years, and is founder and president of By-Pass Ranch Ltd., a company that has operated a ranching business, a real estate brokerage, Canada Trust Moran Real Estate, and since 1991, BPR Communications, a management services firm.



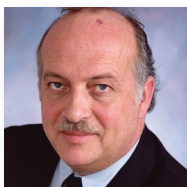
Rick Perdeaux, Owner Operator,
Toolrite Engineering

Rick Perdeaux is the owner operator of Toolrite Engineering (1964) and KGS Machine (2005), specialized in all types of Custom CNC machining and Custom Spherical grinding, and servicing the Oil and Gas Industry, Mining, Fabricating sectors locally and internationally. Mr. Perdeaux works with many different Boards and Committees, including Lambton College BTAC, Sarnia Golf and Curling Club, and Sarnia Lambton Industrial Alliance where he is Chairman for his second term.



Walter Petryschuk PhD, P.Eng., FCIC, FCAE,
Conference Chairman, The Bowman Centre

Walter F. Petryschukis has a Masters and Doctorate degree in Chemical Engineering, and has been a registered professional engineer in Ontario since 1960. Dr. Petryschukis' professional career led to responsibility for Polysar Corporation's Sarnia manufacturing facilities, Suncor's refinery in Sarnia and to the presidency of Sun-Canadian Pipeline. Dr. Petryschukis completed his professional career as Director General of the National Research Council's manufacturing technology institutes in London and Vancouver.



Marty Raaymakers, President and
General Manager of MIG Engineering
(2011) Ltd. and Co-President of
pipeintel Inc.

MIG is a multi-discipline Firm in its 56th year of operation. Marty's role is Project Director for all MIG Projects. His forty two years' experience on engineering and survey projects include specialized expertise in public participation, permitting, environmental impact/routing studies, pipelines, complex oil and gas facility site projects, and transportation related projects.



Rory Ring, President & CEO, Sarnia
Lambton Chamber of Commerce

In 1997 Mr. Ring joined the Council for Economic Renewal, the predecessor of the Sarnia Lambton Economic Partnership, and lead a project building economic strength by providing guidance to local businesses on attracting non-traditional financial capital for accelerated growth. Mr. Ring has always been focused on the need for a community to build a sustainable and growing economic base from within while maintaining a strong open for global business philosophy.



Jeffrey Simpson, National Affairs
Columnist, Globe and Mail

Jeffrey Simpson has won many of Canada's leading literary prizes. His career with the newspaper began at City Hall in Toronto and later with coverage of Quebec politics. He began writing his national affairs column in January, 1984. Mr. Simpson has published eight books and is now senior fellow at the University of Ottawa's Graduate School of Public and International Affairs.



Dr. Jim Stanford, Economist, Unifor

Jim Stanford received his Ph.D. in Economics in 1995 from the New School for Social Research in New York, and also holds economics degrees from Cambridge University and the University of Calgary. Dr. Stanford is the author of Economics for Everyone, which has been translated into 6 languages. He writes an economics column for the Globe and Mail, appears regularly on CBC TV's "Bottom Line" economics panel, and is the Vice-President of the Canadian Centre for Policy Alternatives.



Fred Wilson, Director of Strategic Planning,
Unifor

In his role as Director of Strategic Planning, Mr. Wilson works with the elected officers and senior staff of the union to coordinate major projects and focus attention on Unifor's foundational goals and political priorities. Mr. Wilson is a long time social activist and volunteers on the national Board of Directors of the Council of Canadians.



Mathew Wilson, Vice President, National
Policy Canadian Manufacturers & Exporters

As Vice President, Mr. Wilson leads and coordinates the public policy and government relations activities and staff of the association. He has chaired and been an active participant on several senior government advisory committees including on international trade, customs, skills development and immigration. Mr. Wilson has authored research papers on a variety of issues including manufacturing opportunities in Alberta's oil sands, North American manufacturing competitiveness, border simplification, among others.



Donald E. Wood B.Sc. (RMC), B.A.Sc.,
Project Manager, Bowman Centre

Donald E. Wood, is Associate and Advisory Board member of the Sarnia-based Bowman Centre. He has 45 years' experience in the energy and petrochemical industries, including natural gas utility, petrochemical refinery restructuring, greenhouse gas capture, conversion and management, merger and acquisitions. Mr. Wood's efforts in the Sarnia/Lambton region have helped medium-sized organizations assess strategic alternatives. On a broader front, he has acted on behalf of owners and been involved within many business development projects.



THE BOWMAN CENTRE

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