



SPONSOR . SUPPORTOR . NEWS

“Catalyze big energy projects which drive Canada’s energy strategy and generate sustainable wealth and jobs”.



Special Points of Interest:

- *Gary Locke took the reins as Director of Bowman Centre in Jan/16*
- *The Bowman Centre has a new nameSee below.*

GARY LOCKE PROVIDING BROAD PERSPECTIVE FOR THE FUTURE

Dear Friends and Supporters:

Welcome to this Newsletter! The purpose is to keep you well informed of our activities and progress. We are pleased to advise you that the Bowman Centre is now incorporated as a Not-for-profit Corporation, with a new name **The Bowman Centre for Sustainable Energy**.

In 1978, I began my career in the Oil & Gas industry here in Sarnia. In retirement, I returned to this city, and could not help to notice the lack of energy projects being built here. There is a similar problem in all of Canada! And yet, the opportunities are there! Bowman Centre members are volunteering their time and effort to correct this issue and break down the barriers that are keeping us from enjoying this added prosperity.

Thank you for your continued support. We would like to hear from you!

Sincerely,
Gary Locke



Gary Locke
Director of The Bowman
Centre for Sustainable Energy

Inside this issue:	
SABER & now LAMP2I	2
Energy as a System	2
Looking Back	3
Resource Award	4
About Us	5

FIRST THERE WAS SABER, NOW LAMP21...READ ON

Initially the Bowman Centre developed the business case for a profitable refinery to process bitumen into fuels known as the Sarnia Advanced Bitumen Energy Refinery (SABER) and presented it to 74 global energy company Chief Executive Officers.

Facing one of Canada's toughest challenges to reduce GHG emissions we needed a 21st century alternative.

In January 2016 a group of highly qualified people participated in a London Ontario workshop to study innovative and paradigm shifting ways to process bitumen

into non-fuels materials. This initiative has been named **Lambton Advanced Materials Project for the 21st century, or LAMP21.**

The workshop identified bio-based potential feedstock's in addition to bitumen, a wide array of non fuel products, new potential customers, ways to minimize grid load balancing impacts, and ways to improve time to market.

Work is ongoing.....

*Looking at
Bitumen to yield
value added
non-fuel products'*

ENERGY AS A SYSTEM

While work continues on the Bowman Centre Projects:

Project 1) SABER Petrochemical Refinery

Project 2) Electric Grid

Project 3) Manufacturing Equipment for the Energy Industry

Project 4) LAMP21 Advanced Materials Project

The Bowman Centre, along with its local and far reaching associates is utilizing ProGrid Evaluation Solutions for Selecting and Monitoring Big Canadian Energy projects, against key economic and environmental objectives. SABER is the first of approximately twelve projects to be evaluated.

This initiative is a '**systems plan**' which is the outcome of two major studies undertaken by the Canadian Academy of Engineering ('Canada: Winning as a Sustainable Energy Superpower' and 'Canada: Becoming a Sustainable Energy Powerhouse'), now being followed up by the Associates of the Bowman Centre.

On February 23, 2016 the Bowman Centre released its report "**Leading Innovation in Canada's Energy Sector**" which outlines the pathways for implementing many of the recommendations in the Premier's energy strategy.

*ProGrid Evaluation
Solutions;
As a ProGrid
partner, the Bowman
Centre offers the full
range of ProGrid
project and
technology evaluation
services & software*

Reference:

<http://www.bowmancentre.ca/SupportMaterials/LeadingInnovationinCanada'sEnergySector-February2016.pdf>

“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”

LOOKING BACK AT THE BOWMAN CENTRE

The Bowman Centre has hosted three successful gatherings/conferences since 2013. The last of which was **The Big Debate Canada’s Oil Future NOW, Refine it, or Sell it? May 5-6, 2015.**

Keynote speakers included Dr. Jim Stanford and Dr. Andrew Leach.

The debate argued the pros and cons of building a \$10 billion refinery in Sarnia Lambton using the latest technology in environmental

protection. This refinery would process bitumen for value added products and would be a first step in creating wealth generation and jobs for Canada.

This debate was an opportunity for the community including supporters and stakeholders to ask questions, voice concerns and engage in dialogue with guest speakers and Bowman Centre senior leadership. Check out our website!

www.bowmancentre.ca



From left to right: **Andrew Leach**, Economist and Debater, taking the CON side of the argument; **Jeffery Simpson**, Moderator of the Big Debate; **Walter Petryschuk**, Chairman of the Big Debate conference; and **Jim Stanford**, Unifor economist and debater, taking the PRO side of the Big Debate argument.

On November 13, 2015 The Canadian Chamber of Commerce presented the Bowman Centre with Canada's Resource Champions Award

Highlights from the Bowman Centre's Nomination

The Bowman Centre has worked with over 100 experts from across Canada to identify three big, nation-building projects to solve the challenge of increasing global energy demand and climate change.

The three projects are:

- 1)** Establishing a national energy grid to lower and stabilize power costs while advancing low GHG energy resources.
- 2)** Boosting the manufacturing sector and advancing technology by producing highly sought after oil sands modules and electric power equipment in Canada to meet world-wide demand for these products while creating wealth at home.
- 3)** Adding value to Canada's resources rather than shipping jobs and wealth south of the border to generate wealth while reducing the risk and negative environmental impacts.



From left to right: Don Wood, Rob Taylor, Katherine Albion, Walter Petryschuk

About Us

The Associates of the Bowman Centre have participated actively in the Canadian Academy of Engineering's Energy Pathways work, in particular two planning studies identified on the home page of our website. They have been part of a network of over 100 public and private sector engineers and executives who have contributed to identifying a number of new big energy projects that will create wealth and jobs for Canadians over this current half century. These are the visionaries who contribute the tradition of nation building through big innovative energy projects.

The Bowman Centre For Sustainable Energy

Gary Locke
Director

Lynne Hicks
Business Administrator

Joe Simon
Treasurer

Marshall Kern
Assistant Director and Communications

Associates

Clement Bowman
Former Chair, CAE Energy Task Force, Founding Chair, AOSTRA

Ed Brost
President, JE&M Consulting Ltd.

Gordon E. Currie
Financial Executive, Gennum, Emco, Nova (retired)

Duke du Plessis
Senior Advisor, Energy Technologies, Alberta Innovates - Energy and Environment Solutions

F. Pierre Gingras
Hydroelectricity Specialist, Hydro-Quebec (retired)

Terrence Hoffman
Principal Chemical Engineer, Polysar Ltd. (retired)

Eddy Isaacs
Former CEO, Alberta Innovates—Energy and Environment Solutions

John Kramers
President, ProGrid Ventures Inc.

George Mallay
General Manager, Sarnia-Lambton Economic Partnership

Tim Bechard
Business Executive - Environmental Services, Waste Management and Recycling Industries

Guy Van Uytven
Power Systems Consultant

Richard Marceau
Past President, Canadian Academy of Engineering, Vice President Research, Memorial University

Aung Oo
Commercialization Consultant, Western Sarnia-Lambton Research Park

Walter Petryschuk
Former Polysar, Suncor, NRC Executive

Marty Raaymakers
President, MIG Engineering Limited

Surindar Singh
Executive Director, Renewables and Emerging Technologies, Alberta Innovates - Energy and Environment Solutions

Peter R. Smith
Energy Consultant, TransAlta (retired)

Don Wood
Vice-President, Logistics and Business Development, Polysar (retired)

Maike Luiken
Director, Bluewater Technology Access Centre

John M. Ward
Vice president, BlueGreen Innovation Group

Mike Priaro
Independent Professional, Calgary

BOWMAN CENTRE NEWS



“Dr. Clement W. Bowman Award for Energy Innovation” This award funded by Dr. Bowman is awarded annually to a full-time student in the Faculty of Engineering who is in their final year of an undergraduate program, has achieved a minimum 75% average, and has worked on a project that is related to energy innovation.”

Natalie Connell, 2015 recipient receives the cheque from Don Wood on behalf of Dr. Clement Bowman.



In Memoriam

The Bowman Centre for Sustainable Energy is saddened by the sudden passing of Dr. Richard Marceau, charter Associate of the Centre, and inspiration behind many of our key Canadian energy initiatives.



Dr. Clement Bowman

Check us out on the web!

www.bowmancentre.ca

THE ASSOCIATES OF THE BOWMAN CENTRE, AS UNPAID VOLUNTEERS, ARE COMMITTING THEIR PERSONAL TIME & EFFORTS TO THE MISSION OF THE CENTRE

Mail:

**The Bowman Centre for Sustainable Energy
Western Sarnia-Lambton Research Park
1086 Modeland Road
Sarnia, Ontario N7S 6L2**

**Phone: Gary Locke 519 381 9235
Email: glocke@bowmancentre.ca**

lhicks@bowmancentre.ca