

Newsletter Winter/Spring 2015

The Bowman Centre, a national research and technology centre with its principal organization node at the Sarnia/Lambton Research Park, has been vigorously advancing three major 'big energy projects' which will generate substantial and sustainable wealth and jobs for Canada. These are 1) adding value to our hydrocarbon resources, with particular focus on bitumen from the Alberta Oil Sands, 2) catalyze the development of a national electrical grid to facilitate the expansion of renewable energy and to capture the growing US market for low greenhouse gas power, and 3) re-energize our manufacturing industry as a supplier of the equipment needed by our energy industry.

Big Debate

Our major project in 2015 has been the Big Debate held in Sarnia on May 5/6, with Jim Stanford and Andrew Leach debating the resolution *"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."* With regard to the options of selling petroleum resources raw or refining it within Canada to higher value products, the consensus of the Delegates was Canada should do both. We should use our extraction expertise to contribute to global energy supplies and our refining/petrochemical technology to provide high value jobs and national wealth, both pathways adding to Canada's GDP. The full set of Consensus Statements from the Debate can be found on our web site, www.bowmancentre.ca.

Ongoing Program

The Bowman Centre has prepared a \$900k technology development program for 2015/2016 to further the development of our Big Project Vision. The program is documented on our web site. We have secured \$450k from the local private sector as a contribution toward this program. We now recognize that it will be essential to confirm that this program is consistent with Ontario's energy and industrial strategy and have asked the Ontario Government to provide matching support.

We sent a letter to Premier Wynne on Nov. 20 2014, requesting a meeting with her to discuss our program, with a formal request for \$450k matching support. She connected us directly with Energy Minister Bob Chiarelli, which led to meetings with his Deputy Minister and Chief of Staff. Co-incident with this meeting, Associates of the Bowman Centre had an opportunity to meet with Minister Chiarelli and representatives of other Ontario Government departments at a venue hosted by the Ontario Chamber of Commerce. *A meeting with Minister Chiarelli to receive his response to our financial request is pending.*

The ongoing program of the Bowman Centre will focus on:

- With respect to the project for adding value to Alberta bitumen (the SABER project), the Associates will update project economics and seek a private sector Proponent. It is not assured that Sarnia/Lambton would be the location that a Proponent would select. There are several U.S. states which also have access to diluted bitumen, such as Illinois, Ohio, and Kentucky. Our region will have to demonstrate its excellent engineering and construction capability, and its strong labour and community support. The Ontario Government will also have to demonstrate that the project is in Ontario's strategic interest.
- With respect to the national grid and low greenhouse gas target, Associates co-authored a presentation to the EIC's 4th Climate Change Technology Conference on May 26 outlining an incremental approach to building the full grid – see www.bowmancentre.ca for the full paper.
- With respect to re-energizing manufacturing to meet the supply chain needs of the energy industry, Associates will build on local module-building expertise and identify potential partners to further this endeavor, such as Canadian Manufacturers and Exporters.

The Bowman Centre, with its representation from four provinces is in a unique position to lead a national technology initiative on these three Big Projects. Many of our Associates were active participants in the Canadian Academy of Engineering's ten-year investigation of Canada's strategic energy system. Some also participated in the pioneering technology development work of the Alberta Oil Sands Technology and Research (AOSTRA). All of our projects will involve joint funding by the public and private sector, essentially following the AOSTRA model. Jim Balsillie, co-founder of Blackberry, stated in the Globe and Mail on May 9, that 'our best 20th-century example of mission oriented economic development was Alberta premier Peter Lougheed's 1974 establishment of AOSTRA'.

The Bowman Centre will continue to seek private and public sector support to continue its catalytic role on these projects, including the acquisition of a \$15 million 'foundation grant' to enable longer term funding on completion of our 2015/2016 program.