

**Technical Luncheon – Reservoir & Production**  
**Tuesday, February 10, 2009 11:45 am to 1:00 pm**  
**Nexen Conference Centre**  
**801 - 7 Avenue S.W., Plus 15 Level**

## **Tar sands: Key geologic risks and opportunities as related to “An Inconvenient Truth” or, Hybrids, Heartburn and Hope**

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As conventional oil becomes scarcer, more exploration is occurring in heavy oil, tar sands, and bitumen deposits. While these contribute significantly to the global energy budget, they also contribute a greater share to the global carbon budget and to the detriment of the global environment. The balancing act between economics and environmental concerns is demonstrated on a grand scale in the evaluation of these geologic deposits.

This paper presents the concerns relating to the “carbon footprint” in the development of these deposits in northern Alberta and outlines opportunities for more balanced tar sands development by improved integration of geoscience and engineering disciplines. Plans have to be initiated that develop the least carbon-rich tar sands with a practical transition of effective exploratory and development drilling for undiscovered, conventional energy resources in the Western Canada Sedimentary Basin (WCSB). Such interim transitions can lead to greener, economic and sustainable energy supplies for future generations.

Former Vice President Al Gore made the public aware of the global climate crisis with his academy award-winning film, “An Inconvenient Truth”. In April 2008, 250 volunteers from across Canada were Presenters of “An Inconvenient Truth” as part of The Climate Project-Canada (TCP-Canada) program in Montreal. A review of this weekend TCP-Canada training session personally conducted by Mr. Gore will also be discussed.

**Jack Century** has been active as a global petroleum, minerals and environmental geologist for over 56 years. In 1952 he earned an M.S.degree from the University of Illinois and began his career as an exploration geophysicist with Standard Oil of Indiana in the Anadarko Basin. In 1954 he was transferred as a petroleum geologist to work the Paradox Basin and other regions of the Colorado Plateau. In 1959 Jack transferred to Calgary to work on the Devonian reefs of the WCSB, eventually leading the Amoco Canada Geological Technical Group. He started his own company in 1973. Jack was Founding Chair of the CSPG Environmental Geology Division (1990) and charter member of the AAPG Division of Environmental Geoscience (1992). He is emeritus member of the CSPG, AAPG and a Life Member of APEGGA. In 2008 he was an official presenter of “An Inconvenient Truth” along with 30 other Albertans for TCP-Canada.