## George Eynon, GEOS Energy Consulting

## Canada's Oil & Gas Resources—Surplus to Requirements, But Not Enough to Satisfy US Demand

Canadian production (approximately 17 Bcfpd and 2.4 MMbopd) more than meets a domestic demand (7.5 Bcfpd and 1.6 MMbopd) that is growing only modestly. The balance is exported. Canada's gas production has increased almost every year—until now—despite increased decline rates. Light oil production is declining significantly, but technology advances—and environmentally responsible operations—have permitted a dramatic increase in heavy crude oil Ongoing development of vast shallow gas resources in innumerable small pools, and discoveries in deeper parts of the Plains, Foothills, Front Ranges more than replaced production through the 90s; technology improvements will also enable continued development of deep tight gas and coalbed methane in western Canada and other basins over the next decade. But, for the present at least, gas additions are slowing down and may not replace production again this year. Alberta's heavy oil and bitumen resource base rivals that of light oil in the Middle East, and production is increasing in both mining and in situ recovery, but it is much more costly to produce, of course. Canada's east coast and northern frontiers are being developed; oil production from the Mackenzie corridor and offshore Newfoundland, gas from the Scotian Shelf and Liard Basin. Gas from the Mackenzie Valley and Mackenzie Delta-Beaufort Sea is possible within the decade. Offshore west coast gas resources are still under a moratorium, though even that situation is being reconsidered. US demand is growing much faster than Canada's, particularly gas for power generation and crude oil for transportation, but the US produces less than 45% and less than 85% respectively of its own oil and gas requirements. Canadian Imports of oil and gas are 8.5% and 15% of requirements respectively. Can Canada keep it up?