

A concern about Canadian gas and the oil sands

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Topic: Supply/Production

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The current intermediate-term answer to the coming shortage of fuel oil in both the U.S. and Canada seems to be increasingly tied to the production of greater amounts of oil from the oil sands of Canada (from the CIBC January report - a pdf file).

		New Capacity	Est. Production
Project Name	Type	('000 bbl/day)	Startup
Voyageur	In situ	250	2010-2012
Christina Lake	In situ	250	2009-2015
Horizon Project	mining	240	2008-2012
Jackpine Mine Phase I	mining	200	2008-2010
Kearl Oil Sands Phases II & III	mining	200	2012-2018
Sunrise Thermal Project Phase II	In situ	200	2008-2010
Muskeg River	mining	140	2009-2010
Syncrude Stage 3	mining	110	2004-2006
Surmont	In situ	100	2006-2012
Northern Lights	mining	100	2010-2012
Kearl Oil Sands Phase I	mining	100	2010-2011
Borealls	In situ	100	2013-2015
Joslyn Project Mine Phases I & II	mining	100	2008-2014
Jackpine Mine Phase II	mining	100	2012-2015
Foster Creek	In situ	115	2006-2015
Long Lake Phase I	In situ	70	2007-2008
Subtotal		2375	
Other Projects		260	
Total, All Years		2635	

Natural gas is an important part of the way these resources are being developed, and until now that has not been much of an immediate concern. However, just as we have seen growing worries about the chances of gas being able to keep up with demand in the U.S., so now there is a warning from Ziff Energy via Dow Jones (and Schlumberger) of a growing problem with Western Canadian natural gas supply. As with many regions of the continent, current fields are running out and new ones are getting harder to find. Further the fields that are being found are smaller, so greater numbers of wells are being needed to produce them, and , as with the US, they are then running out faster.

Western Canada produces 16.6 billion cubic feet of gas a day, representing the lion's share of the nation's total output. About 75% of the region's gas is extracted from easy-to-produce conventional reserves, with the remainder coming from "unconventional" reserves - gas deposits located in formations such as coal beds - that require more expensive production techniques.

To maintain current levels of production, 2.5 bcf/d of new production must be found to match current depletion. This will require both conventional and unconventional sources. Since unconventional is less productive the report suggests that either 17,000 conventional, or 25,000 unconventional wells will be needed. Contrast this with the 15,645 wells drilled in 2004 and with the 658 rigs drilling in Canada last week. The Canadian rig count is up some 329 rigs over this time last year.

As with the US production in Canada is relatively flat, despite the increased drilling activity, which is turning increasingly toward unconventional sources. There are 3,500 exploratory wells already planned for 2006, with the hope that this will increase unconventional production from 0.45 to 0.7 bcf/day by the end of the year. To put this in context, the oil sands operations are currently using around 1 bcf/day, and are seeking to treble this in the years ahead. Must be time to watch We Were Warned

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