NATURAL GAS, THE NATURAL NEXT STEP

Supply and demand…concerning natural gas, Newfoundland and Labrador has the "supply". International markets exhibit the "demand". This bodes well for the province, considering nearly 10 trillion cubic feet (tcf) of stranded natural gas reserves and 436 million barrels of natural gas liquids (NGL) have so far been discovered within the province's seabed. Of these natural gas quantities, it has been proven that 3.5 tcf lie within the bowels of the Jeanne d'Arc Basin of Newfoundland's Grand Banks and 4.2 tcf rest inside the Labrador Shelf. Michael Enachescu is senior fellow in exploration for Husky Energy Inc. and an associate professor of geosciences at Memorial University (MUN). He and his graduate students research the geology and geophysics of Atlantic Canada, hoping to determine new areas where exploration may lead to production. Enachescu believes "at least five to 10 times more" natural gas is waiting to be spotted. "There is potential in all the other basins: the southern Grand Banks, the Flemish Pass, the Orphan Basin, and again, the Large Labrador Sea," he says, in a Romanian accent, from his office at MUN. "And there is potential on the west coast of Newfoundland in the Paleozoic basins and there is potential on land in Newfoundland in about two or three Paleozoic basin areas where all these small companies are involved; mostly Newfoundland companies."

Add to the above optimistic figures advancing technologies, which are reducing the cost of developing, producing and transporting the energy source, plus an apparent desperation for it—especially by commercial and residential consumers on the Eastern Seaboard—and Newfoundland and Labrador may become a natural gas producer sooner rather than later. Time, though, is relative in the hydrocarbon industry. Enachescu says, "Technology is in place, gas prices are edging all the time and hungry markets are starting to get restless." He then points out, "In exploration and production terms, sooner is no less than five years and later is maybe 10 to 15 years."

The province also possesses a labor force specializing in fabricating and installing oilrig components. The workers have garnered world-class recognition and are complemented by approximately 500 local companies with a stellar reputation for effectively supplying and servicing a Atlantic Canada's offshore hydrocarbon sector.

All of this may meld into a matrix for a natural gas industry, but while proponents of compressed natural gas (CNG), pipeline transit and liquefied natural gas (LNG) say they are ready to bring the product ashore, there are no fields being developed off Newfoundland and Labrador's coast. TransCanada PipeLines Limited spokesman Greg Cano is confident the company can build a pipeline system for White Rose, located 350 kilometers east of St. John's and in the Jeanne d'Arc Basin of the province's Grand Banks. "We presented a joint proposal to Husky with our plan to move gas from White Rose to various places onshore and to various markets within North America. The fact that we submitted this proposal shows that we do believe it is feasible and economically possible to do that," says Cano. He claims TransCanada PipeLines can do the same for the Labrador Shelf. Having laid 41,000 kilometers of pipe, TransCanada Pipelines is well-established and known for its capabilities. "Labrador is a little bit more difficult,

because of the fact that there is pack ice in the well areas," Cano says.

The Big Land's offshore natural gas, by the way, was discovered by fluke when in the late 70s and early 80s 27 wells were drilled in hopes of finding oil. Instead, four significant natural gas deposits, totalling 4.2 tcf, appeared. Paul Einarrson, chief operating officer and chairman of Geophysical Service Inc.—a company that, last year, using 2-D technology, seismically surveyed 9,000 kilometers of Labrador seafloor says, "They weren't even exploring for gas. All of these discoveries were accidental." He feels Newfoundland and Labrador has so much combined resource that once fully tapped the wealth derived from it, within the next decade, will change the province into a place "unrecognizable"

Meanwhile, TransCanada PipeLines can do little until it receives a detailed plan to construct a pipeline, from an interested oil company. Company officials are optimistic that this will happen. Why? Because last August the Centre for Marine CNG Inc., touted as "the world's first research and development facility dedicated to the efficient, safe and competitive transportation, storage and usage of compressed natural gas, held, at Memorial University campus, St.John's, NL a "very encouraging" international forum on CNG technology. The organization has partnered with the university to facilitate its mandate. Attending the event was Chris Laing, Husky Energy's manager of East Coast natural gas development. He implied his company might soon pioneer natural gas development in the Jeanne d'Arc Basin. "Work on the Grand Banks has largely been focused on oil to date, but interest is beginning to turn to gas," he said.

Before that, on August 19, Husky's floating production, storage and offloading (FPSO) vessel set sail for White Rose from the Cow Head offshore fabrication facility, where workers built 14 topside modules that they fastened to the rig. The FPSO will by year's end begin extracting the more than 250 million barrels of crude contained within the field.

There are also 2.7 trillion cubic feet, minimum, of recoverable natural gas there too. The problem is getting it to the buyers. "We can certainly sell it," said Laing. "We can certainly produce it. But how do we get it from point A to point B?" He means in a feasible manner.

For White Rose, and those at TransCanada PipeLines, contend that CNG is the answer. That technology involves pumping natural gas into pressurized containers stored on ships for transport to market. "We believe, right now, with the White Rose gas volumes that CNG is the only viable alternative to bring it to market.

What ever way they do it, the "demand" certainly won't subside, and it looks like Newfoundland and Labrador is positioned perfectly to help feed that demand in the near future.