Lets get honest about the outlook for the Alberta oil sands and Trans Mountain

By Wal van Lierop May 20, 2018 – *The Globe and Mail*

There is growing consensus that the world is going through an energy transition. Everybody has heard politicians or CEOs of large energy companies making that statement. But then, most of them add the disclaimer: "But it won't happen overnight." That, of course, begs the question: Okay, but when could it happen?

If we were to think of the energy transition as a baseball game, we could see the stages of its progression over the past decade. In the first inning, coal lost to gas in the competition for power generation in North America and Europe; solar and wind lit up the scoreboard with incredible cost reductions in the second inning; but in the third, shale oil and gas rallied, creating an energy boom in U.S. gas and making that country the international swing player -- supplanting OPEC in that position.

Now we are entering the fourth inning, with a playing field of abundant cheap energy and midway through the ball game it looks like the players highest on the cost curve will be the ones striking out. Those players will likely include both new projects in Arctic oil and the oil sands, as their business case makes them weak in a game where cost is key.

Why? Not all oils are equal:

- When oil prices rise above \$50, shale producers can make a profit. Theoretically, oil-sand producers can compete at that price level but the upfront capital intensity and long scale-up times put oil-sand producers in a very disadvantaged position for any new projects.
- The costs of converting oil-sands oil to gasoline or jet fuel means there will always be about a \$10 or more discount; so

that discount has nothing to do with pipelines: oil-sands expansions should actually be competitive at \$40 for new capital investments to make sense.

This leads to considering the business case for the Kinder Morgan pipeline:

- Terminal and shipping infrastructure adds another negative of \$2-\$3 on this line because receivers on the demand side have in the past years created new facilities to quickly load and unload massive ships of a size that cannot sail below the Vancouver bridges. As a result, Alberta needs to be able to compete below \$37, while in new projects, it most likely needs north of \$50 to be in the money.
- To make things worse, not just the cost of supply has changed in the past four years; there are also significant changes on the demand side with the targeted refineries on the east coast of China recently benefiting from the improved economic relationship with Russia, while on the other hand environmental regulations have tightened. Both give Alberta oil a further disadvantage.
- Historically, a pipeline builder would like to see off-take agreements for more than 50 per cent of the capacity for at least 15 years, preferably 20, before giving the goahead. The Chinese don't do this type of off-take contracts. At maximum you'll get an agreement for a few years, which is then followed by another round of tough negotiations. Energy is a commodity business where cost is king.

On this basis, we would have to presume that the Alberta and federal governments hadn't seen the Kinder Morgan order book before they announced an intention to financially support the company's pipeline, because that may show a rapidly deteriorating business case. Of course, some will argue that my numbers are incorrect, and there could be a margin of error. My point is that all stakeholders need clarity on this matter. They need a better understanding on how strong the business case for Kinder Morgan is, or if this investment could turn into a "soon to be stranded" asset. The departure of all oil majors and many large financial institutions from the province of Alberta is also a sign that should be taken into account.

But you may say: look, oil is at US\$75 today—sunny times are on the horizon again. However, it should be considered that the current US\$75 is not driven by normal market demand but more likely by temporary geopolitical circumstances.

The Alberta, B.C. and federal governments should form an independent committee to provide the necessary detailed analysis and cost due diligence on the business case for oil-sands oil over the next decades.

Let's get honest about the real outlook for the oil sands. Let's get some facts. The energy transition will not happen overnight, but the cold numbers may tell that the "high on the cost curve oil-sands oil" will not just strike out much sooner, but much earlier than the fans had hoped for. Are we trying to cheer on a team here that doesn't have the strategy to win the future game? As such, we may need a Plan B for Alberta sooner, rather than later.

In particular, the hard-working people in the energy industry in Alberta deserve this. It could be that they are risking their future based on the belief these are sunny times again. They may take out mortgages for new houses and have to pay for those long after the Kinder Morgan pipeline has been written off. The personal stakes are serious. Let's coach a smart game based on the hard numbers, not environmental idealism or politics, and, in turn, give all the stakeholders some investor certainty. The people of Alberta deserve that.

Wal van Lierop is president and CEO of Chrysalix Venture Capital.