

# Intelligence MEMOS



From: G. Kent Fellows  
To: Oilpatch Observers  
Date: January 17, 2023  
Re: **OIL SANDS ARE RICHER THAN YOU THINK**

---

Canadian and global climate change ambitions are generally associated with a reduction of fossil-fuel reliance as a mechanism to reduce carbon emissions. Many major energy authorities including The International Energy Agency and BP Energy (via their Global energy outlook) now project declining global crude oil consumption at some point before 2050.

Based on these trends and projections policy makers observers and even government reports often assert that Canadian oil sands are too expensive to maintain production as global oil demand falls and will be one of the first casualties of this energy transition.

But the oil sands are not high cost, especially in a way that matters for the relationship between global demand and domestic production.

As I outline in my recent C.D. Howe Institute [report](#), nearly all oil sands producers will continue to produce as long as the prevailing price of Western Canadian Select (WCS) crude stays above \$40 per barrel. In contrast, non-oil sands production will likely require prices above \$40 per barrel for long-term stability.

This difference in price responsiveness is due to the unique cost structure of oil sands projects which require substantial up-front capital investments but can maintain (or slightly increase) production while incurring relatively small marginal costs per barrel. This contrasts with other producers where individual well productivity falls much faster over time, requiring new annual capital investments to maintain production.

That means legacy oil sands production is more resilient in the face of potential global demand reductions than is commonly understood. The oil sands sector will also continue to weather short-term price dips as long as the expected price doesn't dip persistently below \$40 (and even then, some producers will continue to produce at any expected price above the \$15-\$20 range.) In contrast, non oil-sands producers have exhibited dramatically reductions in new production at West Texas Intermediate (WTI) prices below US\$45 – roughly equivalent to a WCS price of C\$40, adjusting for the exchange rate and quality and transportation differences between WCS and WTI.

This means that Canada cannot rely on the expected reduction in global crude oil demand to reduce the oil sands emissions footprint in the short or medium term. Reductions in oil sands emissions will have to result from policies intended to reduce emissions intensity in the sector (such as the existing carbon price) or non-market policies intended to artificially constrain and reduce overall production.

The federal oil and gas emissions cap, which aims to reduce emissions by 31 percent below 2005 levels by 2030, might end up an example of the latter, depending on how it is implemented. But if emissions reductions occur through output cutbacks, Canada will forgo the significant economic potential of continued production from legacy oil sands assets that are otherwise set to remain profitable, and to generate beneficial public revenue through royalty payments, for decades.

*G. Kent Fellows is a professor at the University of Calgary, director of the Master of Public Policy Program at The School of Public Policy and Fellow in Residence at the C.D. Howe Institute.*

*To send a comment or leave feedback, email us at [blog@cdhowe.org](mailto:blog@cdhowe.org).*

*The views expressed here are those of the author. The C.D. Howe Institute does not take corporate positions on policy matters.*