New upgrading technology in Alberta oil sands could yield billions in revenue - New School of Public Policy Report

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CALGARY - In 2015, almost 60 per cent of Alberta oil sands production was non-upgraded bitumen. It is costly to transport and costly to process into refined petroleum products compared to lighter types of crude oil. The market for synthetic crude oil produced by full upgrading is only getting tougher.

One of the four recommendations from Alberta's 2015 royalty review panel was for the government of Alberta to examine opportunities to accelerate the development and commercialization of partial-upgrading technologies. Why? To add value and keep jobs in Alberta. Full upgraders have proved uneconomical without substantial public subsidies but partial upgrading offers a potentially economical middle ground.

A new report released today by authors G. Kent Fellows, Robert Mansell, Ronald Schlenker and Jennifer Winter and published by The School of Public Policy, examines whether partial upgrading is a viable option for the oil sands, whether additional effort and resources should be expended to develop its commercial viability and what it could mean for Alberta's economy.

According to the authors "The market for the synthetic crude oil produced by full upgrading is only getting tougher. Any Alberta bitumen fully upgraded here would compete directly with the rapidly expanding supply of light U.S. unconventional shale oil. Partial upgrading does not upgrade bitumen to a light crude, but to something resembling more of a medium or heavy crude, and at a lower cost per barrel than full upgrading. Currently there are gaps in several North American refineries that could be filled by this partially upgraded Alberta oil."

Based on the model of a single 100,000-barrel-a-day partial upgrader, the value uplift could be **$10** to **$15** per bitumen barrel. Meanwhile, there could be an average annual increase to Alberta's GDP of **$505 million**, and as many as **179,000** person-years of employment created (assuming a 40.5-year operating period). The increase in taxable earnings would increase provincial revenues by an average of **$60 million** a year, not including additional federal tax revenues. If successful, there would be many such partial upgraders with corresponding multiplication of these benefits.

The report can be found online at www.policyschool.ca/publications/

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To request an interview with the authors or for more information please contact:

Morten Paulsen
403.220.2540
Morten.paulsen2@ucalgary.ca