DAVE HUER



EXECUTIVE SUMMARY

Update March 2014

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"Float Rights" (Crown Oil Sands Insurance Float Rights)



Governments lease land rights that are divided into air rights, surface rights, and subsurface rights. Provinces earn leasehold royalty by licensing subsurface mining, quarrying, Oil Sands, and Oil and Gas (O&G) rights. Oil resources are valuable but the value of O&G and ore mining rights do not come forward until the resource has been extracted. Drilled O&G is especially hard to value. The drilling industry is replete with stories of dry holes being beside wet holes, with no easy geological explanation. Even when a well is producing, it must be tapped and flow volume measured for one-year's duration after cap-off to assess commercial value.

But we know the Oil Sands are exactly where they are, and because we know roughly what the volume is, we can calculate what the spot market value of that resource will be.

Un-extracted Oil Sands therefore have an anticipated value that can be leased as a separate royalty, before scheduled extraction. This rights stream could have any purpose. One purpose could be to backstop insurance, through a *Crown Oil Sands Insurance Float Right ("Float Right")* mechanism, that is leveraged for other purposes; for example, leasing the risk to the federal government to backstop 100% of Combat PTSD care costs.

Outcomes for Government & Policy Sector

- Oil Sands resource divided into two royalty streams:
 - Anticipated value of unextracted resource: *Crown Oil Sands Insurance Float Right ("Float Right")*
 - Actual value of extracted resource: Crown Oil Sands Liquid Oil Right ("Liquid Right")
- New royalties and taxes for Alberta, Saskatchewan, and federal government; and AB could avoid PST
- Creates value during lean market years and while waiting for new pipeline capacity
- Backstopping a move of insurance industry headquarters to Alberta and Saskatchewan
- Strategic control of the final destination of the liquid resource
- Offers "good works" investment consortium options
- Policy, Law, and Legislative

Similar strategic opportunities exist in other Oil Sands regions

- USA (Green River Basin)
- Russia
- Kazakhstan

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Direct Outcomes for Industry

- Float Rights can be leveraged for any sort of business.
- Effect on global oil, insurance, and finance market (tradeable as new spot market segment)
- Float Right leverages 10% of resource that is extractable using current technology
- As collateral, could Float Right leverage the other 90% until it is extractable?
- "100% Capture" Target (100% of extractable liquid resource) becomes a value-added activity
- "Zero Waste" Target (100% pollution prevention of extractable resource) becomes a value-added activity
- Float Right Licensee does not necessarily have to be Liquid Right Licensee
- Leaseable by Provinces to Sovereign States, to collateralize other risks
- No need to depend on export or hold-ups in pipeline capacity
- Extraction owners could profitably backstop their insurance costs and rent risk coverage to other players

Numerous spin-offs for supporting industry

- Cyberinfrastructure
- Digital technology
- Drilling technology
- Electronics
- Emerging technologies
- Energy technology
- Environmental technology
- Lubrication & Machinery
- Microtechnology
- Mining techniques
- Nanotechnology
- Radio technology
- Remote sensing technology
- Waste treatment technology

Remote Sensing – Industry Drill-Down Example

- Feasibility studies
- Global benchmarking
- Supply-chain design & risk analysis
- Real Estate & Resource Tenure Consolidation
- Site Modeling & geotechnical engineering
- Earthworks, drainage & stormwater management
- Temporary and permanent accommodation
- Industrial & commercial building construction
- Site Planning, Grading & Utility Development
- Construction / Post Construction Management
- Erosion and Sedimentation Pollution Control
- Integrated logistics for capture mapping
- Extraction vapour loss monitoring
- Information technology

- Remote sensing of royalty properties
- Monitor outgassing as royalty value capture/loss ratio
- Build the tool and partnerships, test locally, leverage globally
- Data flows could post to spot market (ie. data reports affect materiality)
- Develop Stock Trading Data Board to leverage the data for capital markets reporting
- Leverage tool to monitor other outgassing properties for a variety of customers

Image source:

http://upload.wikimedia.org/wikipedia/commons/thumb/7/7a/Athabasca_Oil_Sands_map.png/410px-Athabasca_Oil_Sands_map.png