



Sturgeon Refinery Update

For

Life In The Heartland event

Oct 20th, 2016



Forward-Looking Statements

Certain information set forth in this document contains forward-looking statements including management's assessment of future plans and operations, expected activity levels, timing of completion of facilities construction and the effects thereof, capital expenditure plans and the impact thereof. By their nature, forward looking statements are subject to numerous risks and uncertainties, some of which are beyond the company's control, including the impact of general economic conditions, industry conditions, volatility of commodity prices, changes to regulatory requirements, risks associated with oil and gas exploration, development, exploitation, production, marketing and transportation, loss of markets, delays resulting from or the inability to obtain required regulatory approvals, environmental risks, competition from other industry participants, the lack of availability of qualified personnel or management and ability to access sufficient capital from internal and external sources. The foregoing list is not exhaustive. Additional information on these and other risks that could affect operations and financial results are available on request.

Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. The actual results, performance or achievements of the company could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward looking statements will transpire or occur, or if any of them do so, what benefits the company will receive. The company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.



Our Vision

for a diversified, value-added economy for Alberta

- **Maximize the value of Alberta's energy resources – best products to best markets**
- **Build a refinery with the world's best environmental performance**
- **Keep jobs and value here in Alberta**



Mission Statement

To build, operate and grow a safe, profitable and environmentally responsible bitumen refinery creating high value products for Alberta and the world.



Plan to Maximize Value

- ✓ **Make products that the best markets want**
 - Make high value consumer-ready products (diesel fuel)
 - Recognize increasing market demand for low-carbon products
- ✓ **Minimize cost of capital : lower credit costs**
 - Long-term contracts with credit-worthy counterparts minimizes cost of capital (better return to toll payers)
- ✓ **Ensure infrastructure access to best markets**
 - Use existing truck (local market) and rail (distant market) infrastructure
- ✓ **Ensure sustainability**
 - Strive for environmental gold standard performance
 - Turn waste streams into value streams – Captured CO₂ used for Enhanced Oil Recovery
 - Phase 1 CO₂ capture equal to removing 300,000 cars off the road
 - Minimize water use (air cooling + max recycle), maximize sulphur recovery
- ✓ **Minimize waste**
 - [Gasification/hydrocracking > 100% yield] vs [coking < 85% yield] = no petroleum coke
 - Recycle 98%+ of construction waste >> revenue to Community and Charitable Donations
 - Mass transit reduces regional traffic – 70% of workforce transport to site by bus



Business Structure

Refinery Owners (50/50)



REFINING



Canadian Natural



75%

Toll agreement
(fee for
processing)

25%

Feedstock Suppliers/
Owners of Refined
Products (Ph 1)

Alberta Petroleum
Marketing Commission
(APMC)

Canadian Natural



Mega-Project Under Construction



Looking East at Site



Administration area





Tank area





Process area





Putting Albertan's to Work!

- ~7,000 personnel working at site spread over 2 shifts/day
- ~3,000 personnel worked to build approx. 1,000 modules in fabrication shops in Capital region
- Approx 250 staff + contractors required to operate Phase 1
- NWR sponsors training programs in partnership with *Women Building Futures* to train women in Ironworker, Carpentry and Scaffolding trades
- Engineering/Project execution team has employed 1,000's
- 3 year construction cycle per phase – high value Operations jobs last for generations



Construction of Phase 2+??

- Further phases are 'shovel ready' with regulatory approval, land, design and team all in place
- Partner sanction (final investment) decision is pending feedstock availability and economic climate review
- Construction represents opportunity for greater value-added processing of Alberta's energy resources and diversification of Alberta's economy – investment that would create more high value jobs in Alberta instead of exporting them to US gulf coast



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SCORECARD



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