



**PAN•GLOBAL•LINK**

# **Midstream Initiative — A Real-Time Seamless Transition**

*The Initiative unites the world's highest-quality heavy bitumen source with an IP-exclusive sustainable solution, the lowest In-Delivery Cost (IDC), and the earliest In-Service Date (ISD) — establishing Athabasca (AOS) as a global bitumen-export superpower.*

**A Disruptive, Proven, Global, Total Solution**

# Expression of Interest

**Athabasca Oil Sands heavy bitumen — delivered solid-state, diluent eliminated.**

*A 21st-century solution to a 20th-century problem.*

Dear Sir or Madam,

The Athabasca Oil Sands (AOS) and the Orinoco Belt (VZ) are the two largest extra-heavy reserves globally, larger than everything else by factors. Since the turn of the century, both have been developed with success.

For over 15 years our industry has worked at one problem: moving that bitumen without diluent. Diluent is more than thirty per cent of the operating cost and takes up over 30% of the storage and transport payload. The effort has been serious and well funded. Until now, nobody had solved it cost-effectively.

RBITTT has eliminated the requirement for diluent, and more than thirty per cent comes out of the cost base with it. Taking the diluent out of bitumen is what taking the inner tube out did for the tire — a component the whole industry had accepted as permanent for over 50 years, turned out never to have been necessary at all.

**AOS heavy bitumen becomes the lowest-cost heavy barrel in global trade.**

**Due diligence will illustrate a transportation journey that has clearly eliminated risk impacts from all natural and geopolitical events globally.**

The Expression of Interest behind this note sets out the terms. It runs to eight pages and will take ten minutes.

Should it belong with a colleague, we would be grateful if you would pass it on, or point us to the right desk.

Sincerely,



**Paul Giannelia**

Founder · RBITTT · PAN·GLOBAL·LINK  
[pg@rbittt.com](mailto:pg@rbittt.com) · +1 (403) 604-8007

Dear Sir or Madam,

**Re: The RBITTT Initiative — an IP-protected solution that eliminates the obsolete use of diluent, the single largest cost line on a producer's income statement.**

We are writing to introduce the enclosed Expression of Interest (EOI) for the Initiative — heavy bitumen delivered solid-state, diluent eliminated. It is a 21st-century solution to a 20th-century problem, and turns on five things that matter.

## **The Transition — Five Steps that Matter**

- 1. It is a deletion, not a discount.** The tubeless tire did not improve the inner tube — it eliminated it. RBITTT does not lower the cost of diluent — it eliminates the need for it.
- 2. One change, multiple deletions.** Moved in its native solid state, bitumen needs no diluent, no heat, no pipeline — and their costs vanish with them. Cleaner, and zero-carbon (0 CO<sub>2</sub>e) delivery, in a single step.
- 3. The value accrues directly to the customer.** A deleted cost does not dissipate into the system — it falls straight to the transitioning party's bottom line, dollar for dollar, for the life of the offtake.
- 4. RBITTT funds the acceleration itself.** A direct US\$1.4 billion investment accelerates the transition of the first 2 million barrels a day — RBITTT's capital, customer's gain.
- 5. The transition will not stop and will not slow.** Every entrant, existing or new, carries a day-by-day cost advantage over every successor, for life — and because it compounds from the day you enter, waiting does not hold your position, it deletes it.

The Initiative is entirely self-funding, requires no subsidy or government financial support.

The enclosed EOI sets out the specification, commercial terms and next steps. It is standard in form and straightforward to complete and reserves your place while the details are confirmed at due diligence. We welcome a conversation.

Sincerely,



**Paul Giannelia**

Founder · RBITTT · PAN-GLOBAL-LINK · pg@rbittt.com · +1 (403) 604-8007

# Introduction and Purpose

- A formal, non-binding Expression of Interest to procure long-term, firm volumes of AOS heavy bitumen (API < 10°), delivered and liquefied at the customer's refinery custody gate.
- Existing offtake transitions without a missed barrel; no capital is put at risk and no asset is stranded — completion risk sits with the Initiative, not the Customer.
- The reward is fixed for the life of the offtake, from the very first barrel — plus an Early Adopter Value in transition speed for those who move first.
- Purpose: register serious commercial interest, convey the principal commercial parameters, and join the next stage of offtake origination toward a License Offtake Agreement (LoA).

**Date Certain — 4 May 2030.** The Initiative is self-funding against a fixed date on which its toll-revenue obligations begin. Held by sequencing and parallelism rather than by spending — No \$ Impact Acceleration — and Date Certain does not move.

# The Interested Party

| Item                   | Detail                                   |
|------------------------|------------------------------------------|
| Legal entity           | XX XXX Oil Corp.                         |
| Receiving facility     | [REFINERY NAME, CITY / STATE / COUNTRY]  |
| Refining configuration | [coking / hydrocracking capacity, bbl/d] |
| Authorised contact     | [NAME, TITLE, EMAIL, TELEPHONE]          |

*The Customer's particulars for the purpose of this EOI (to be completed on customer letterhead).*

# Summary of Requirement

| Parameter            | Customer requirement                                                                                                                                |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Product              | AOS Heavy Bitumen (raw Athabasca bitumen), API gravity < 10°                                                                                        |
| Quantity (firm)      | xxx,xxx,xxx BPD — approximately xxx million barrels per annum                                                                                       |
| Delivery form        | IP solid-state transport, on-demand liquefaction at refinery custody gate, via Refinery Transition Module (RTM-IM)                                  |
| Term                 | 20 years firm from first delivery, thereafter renewing automatically                                                                                |
| Commencement         | Earliest In-Service Date from execution of the LoA; continental <2 yrs, offshore <3 yrs                                                             |
| Delivery point       | Refiner user gate (downstream custody boundary) at [DELIVERY POINT / TERMINAL]                                                                      |
| Transport corridor   | Continental rail grid to domestic customers plus redundant tidal export terminals; PAN·GLOBAL·LINK-dedicated marine fleet linking all PGL customers |
| Early Adopter intent | Customer wishes to be considered for the EAV pool — first 2,000,000 BPD across 180 days — allocated by binding time-date priority (§11A)            |

# Product Specification

| Property                   | Unit              | Typical / target                     |
|----------------------------|-------------------|--------------------------------------|
| API gravity                | °API              | < 10 — reservoir-determined          |
| Density @ 15°C             | kg/m <sup>3</sup> | 990 – 1,015 (observed)               |
| Sulphur                    | wt %              | 4.0 – 6.0 (typ. ~4.8)                |
| Total Acid Number (TAN)    | mg KOH/g          | 3.0 – 4.0                            |
| Nickel                     | ppm (mg/kg)       | 75 – 200                             |
| Vanadium                   | ppm (mg/kg)       | 150 – 400                            |
| Asphaltenes (C7)           | wt %              | 14 – 18                              |
| Micro-carbon residue (MCR) | wt %              | 12 – 15                              |
| Water & sediment (BS&W)    | vol %             | ≤ 0.5                                |
| Native viscosity @ 15°C    | cP                | ~1,000,000 (transported solid-state) |

Values are typical for Athabasca bitumen, for reference only; final specification and tolerances confirmed in the LoA.

# Volume, Delivery Profile & Term

## Volume & Delivery Profile

- A modular ramp to the firm plateau rate — each RTM-IM module is standalone 16k BPD, enabling staged commissioning without disruption.
- Earliest continental shipments within two (2) years of an executed LoA.
- Customer confirms readiness to transition existing offtake to generate the earliest possible Diluent Elimination Value (DEV).

## Proposed Term & Tenure

- Initial term: 20 years of firm offtake, commencing at first delivery (earliest ISD).
- Renewal: successive terms renew automatically, carrying the lifetime upgrades and warranties of the IP RTM EX-IM robotics technology, for generations.
- Alignment: term runs coterminously with, or beyond, the design life of the transition and corridor assets — supporting financeability and reliable delivery.

# Commercial Framework

## US\$28 / bbl

Diluent Elimination Value (DEV) — fixed for the life of the offtake; a term of the offer, not an estimate

## US\$4 / bbl

Early Adopter Value (EAV) — first 2,000,000 BPD across 180 days (a 360-million-barrel pool)

- Pricing basis: four permanent regional bases applied by customer region — WTI (inland N. America), ASCI (US Gulf), Brent (Atlantic), Dubai/Oman (Asia). A customer's basis does not change as the Initiative extends.
- Commercial linkage: RTM-IM provided under IP License (IPL#3-RTM-IM) per 16,000 BPD module; one-time IPL set-up of US\$16 million/module includes the licensee's ownership position in the RBITTT Initiative IP company.
- Completion risk is assumed by RBITTT and PAN·GLOBAL·LINK — not passed to customers, producers, or governments. All RTM-IM assets are owned outright by the Customer.
- Post-refinery: RTM-EX applications downstream (including solid-state polymer-modified bitumen, PMB) are available and addressed separately.

# Indicative Commercial Terms (1 of 2)

| Item                                   | Indicative position — to be reflected in the LoA                                                                                                                                                                                                                                                          |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Offtake structure</b>               | License Offtake Agreement on a <b>take-or-pay</b> basis; minimum annual quantity (MAQ) of <b>90%</b> of contract volume, with make-up rights for any shortfall.                                                                                                                                           |
| <b>Asset ownership</b>                 | All RTM-IM assets owned outright by the Customer from commissioning, in perpetuity and free of lien. The IP License is integral to the LoA; all upgrades, improvements and warranties (including new hardware) are included in the licence fee. No buy-back or reversion rights reserved.                 |
| <b>Reservation deposit (EOI stage)</b> | Refundable good-faith deposit of US\$50,000 per 100k BPD (US\$0.50/BPD), payable on Binding election into the client/trust account of Dentons Canada LLP, Calgary. Date and time of cleared funds fixes reservation priority. Fully refundable if no LoA is executed, or credited against first invoices. |
| <b>Deposit / prepayment (LoA)</b>      | Performance deposit or advance payment of 15 days of contract value, credited against deliveries and released on agreed milestones.                                                                                                                                                                       |

# Indicative Commercial Terms (2 of 2)

| Item                                | Indicative position — to be reflected in the LoA                                                                                                                                                                                             |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Credit &amp; security</b>        | Parent-company guarantee and/or irrevocable standby letter of credit from a bank rated <a href="#">[A-/A3]</a> or better, and/or escrow; mutual representations, warranties and covenants.                                                   |
| <b>Pricing basis</b>                | Delivered price referenced to the regional public benchmark (WTI, ASCI, Brent or Dubai/Oman), adjusted for quality against the product spec, net of the DEV (US\$28/bbl) and EAV (US\$4/bbl) where applicable. All amounts in USD.           |
| <b>Delivery / custody</b>           | Gate-to-gate: title and risk pass at the refiner user gate (downstream custody boundary); measurement and quality at agreed producer- and user-gate points.                                                                                  |
| <b>Term &amp; termination</b>       | Firm term per \$6. Customary termination for uncured material default, insolvency or prolonged force majeure (>180 days), with cure and step-in periods; no termination for convenience during the firm term save on agreed break-fee terms. |
| <b>Validity of this EOI</b>         | Open for 90 days from the date above, unless extended in writing by the Parties.                                                                                                                                                             |
| <b>Governing law &amp; disputes</b> | English law; disputes finally resolved by ICC arbitration, seat London, three arbitrators, award enforceable under the New York Convention. Standard confidentiality, assignment, notices and entire-agreement provisions.                   |

# Delivery, Logistics & Transition

- Custody: delivery on a producer-gate (upstream) to refiner-user-gate (downstream) basis, with transfer at the Customer's custody delivery point.
- Corridors: continental surface transfer by PAN·GLOBAL·LINK-owned hydrogen trainsets and purpose-designed aluminium railcar fleet, over existing and new track to all refinery locations; global marine transfer by PGL-controlled specialized VLBC fleet from redundant Pacific & Atlantic export terminals.
- On-site transition: super-turnkey installation and commissioning of the RTM-IM at the Customer's facility for on-demand liquefaction; site interfaces and utilities scoped jointly.
- Schedule: earliest continental ISD in less than 2 years from execution of the LoA, with the global link commencing within the following year.

# Conditions & Key Assumptions

*This EOI is expressly conditional upon, and assumes, the following (non-exhaustive):*

- Satisfactory completion of technical, commercial, legal and financial due diligence by both parties.
- Negotiation and execution of a mutually acceptable LoA and associated transition, transport and site-interface agreements.
- Confirmation of product specification, delivery point, measurement and quality-assurance protocols.
- Receipt of all requisite internal approvals of the Customer, including board / investment-committee authorisation.
- Confirmation of the Initiative's ISD for specific installations, and RTM-IM granular delivery schedule.
- All necessary regulatory, permitting and consultation milestones remaining on track.

# Non-Binding Status & Binding Election

**§11 Non-Binding Status.** This EOI is an expression of interest only. It does not constitute an offer, acceptance, agreement, option or binding commitment, and no binding obligation arises unless and until a definitive written agreement is executed by both parties. It is provided in confidence and not to be disclosed to third parties without consent, except as required by law.

**§11A Binding Election (optional).** The Customer may elect to make this EOI binding by marking the Binding box and funding the Reservation Deposit — this time-dates the EOI and fixes reservation priority, and with it the Customer's position in the Early Adopter Value allocation. The parties then proceed to an Escrow Agreement leading to the LoA; pending execution, funds are held to the written undertaking of Dentons Canada LLP.

☐ **Non-binding** (default — §11)

☐ **Binding** (§11A — proceed to Escrow → LoA)

# Requested Next Steps

1

Acknowledgement of receipt and confirmation of the Customer's inclusion in offtake origination.

2

Execution of a mutual non-disclosure agreement and commencement of technical / commercial due diligence.

3

Provision of the draft LoA term sheet and confirmation of Early Adopter Value qualification and timing.

4

A joint kick-off session to align on delivery point, RTM-IM scope, ramp schedule and delivery milestones.

*The Customer looks forward to progressing this interest toward a definitive agreement and to participating as a foundation customer of PAN·GLOBAL·LINK.*



**PAN·GLOBAL·LINK**

# We welcome a conversation.

A handwritten signature in blue ink, appearing to read 'Paul'.

**Paul Giannelia**

Founder — RBITTT · PAN·GLOBAL·LINK

[pg@rbittt.com](mailto:pg@rbittt.com) · +1 (403) 604-8007

Suite 201, 309 1st Street East, Cochrane, Alberta T4C 1Z3, Canada