



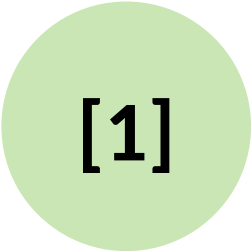
PAN·GLOBAL·LINK

RBITT Midstream ‘Initiative’ • Refinery Bitumen Transition Transfer

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

Commercial Framework: Five Steps that Matter



[1]

The Commercial Reset

Reset the economics —
AOS must lead on
In-Delivery Cost.



[2]

The Technology Reset

Solid-state transport:
no diluent, no heating.



[3]

The Critical Deliverable

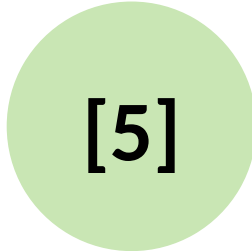
A financeable, zero-
carbon, Date-Certain
execution plan.



[4]

Transition Time Strategy

Rapid modular ramp
across a redundant
global grid.



[5]

Frequently Asked Questions

The proof, in the numbers
— tables 1.0, 5.0, 4.0, 2.0,
3.0.

[1] The Commercial Reset

- Under the status quo, AOS bitumen does not have the lowest In-Delivery Cost (IDC) base — its greater distance to tidewater leaves it behind in the global market.
- AOS ranks a distant third behind Venezuela and the Middle East, and only marginally ahead of Russia.
- Venezuela capacity is expanding and continues to grow, steadily displacing AOS's existing USGC customers.
- **The status quo is not sustainable, not an option. AOS must reset the economics.**

3rd

AOS's global rank on delivered cost today — behind Venezuela & the Middle East

[2] The Technology Reset

- The Initiative uses global patented RBITTT technology to transport heavy bitumen in its native solid state — eliminating diluent and heating, enabling 100% net payload and on-demand liquefaction at refineries.
- The transition eliminates the need for pipelines and reduces costs substantially.
- A wildfire-resilient Arterial Connector Grid (ACG) connects uninterrupted rail to all export terminals in the Atlantic and Pacific basins and to all continental customers.
- **The economics are compelling and sustainable — positioning AOS as the world's lowest-IDC provider (see table 5.0).**

100%

net payload — solid-state transport,
no diluent or heating

[3] The Critical Deliverable

1. Deliver a 'financeable solution' that assures Date Certain and assumes Completion Risk.
 2. Deliver a SEF Ø execution plan that confirms certainty of Date Certain.
- The entire journey is engineered zero-carbon (0 CO₂e), eliminating >1.77-ton CO₂e per barrel per year — far more than the 0.05-ton created by all AOS extraction activities (2024). At scale, that annual elimination exceeds the tailpipe emissions of every U.S. passenger vehicle (>286 MM) for more than 2 years.
 - Corridor, surface and marine operations rely on clean (hydrogen) energy, pump storage, renewable and passive energy.
 - AOS bitumen quality has the longest road service life globally (30+ yrs.).
 - Polymer-modified bitumen (PMB) is recyclable for life — no negative impact on the global environment, and it drives 'only clean' waste-plastic removal from the globe for life.

Date Certain

'that's for Certain' — enabled by
SEF Ø — only made possible by
RBITTT IP

[4] Transition Time Strategy

- The status quo costs are removed as a single causal chain: eliminating the diluent (5.1) and continuous heating (5.2) removes the very need for a pipeline (5.3); together they collapse the environmental footprint (5.4) and the carbon (5.5).
- **Each is a step that no longer occurs — eliminations, not reductions, and not negotiations.**
- The globally identical 16k BPD transition module (RTM) enables the most rapid ramp — earliest continental shipments commence <2 years of executed offtake (LoA), with global shipments a year later. Zero-cost inventory seamlessly absorbs receipt fluctuations.
- The ACG has redundant export terminals on both the Pacific and Atlantic basins, plus all existing continental, USGC, midwest and customer terminals — global capacity exceeds 12 MM BPD against current AOS demand of ~4 MM BPD.

>12 MM

BPD global grid capacity vs ~4 MM
BPD current AOS demand

[4.1] Commercial Linkage & Incentives

- Commercial linkage: customer (refiner), producer (E&P), EPC, exporter and distributor licenses are granted an ownership position in the RBITTT IP technology company.
- Customers receive a fixed Diluent Elimination Value (DEV) of \$28 per barrel for the life of existing offtake agreements.
- Plus an Early Adopter Value (EAV) of \$4 per barrel for the initial 2 MM BPD during a 180-day window.
- **The modular RTM infrastructure is scalable without disruption — with no completion risk passed to customers, producers, or governments.**

+\$28

per BBL — Pure Income
exclusive to Customer

[4.2] Infrastructure Ownership & Risk

- Export terminals are owned and operated by Arctic Gateway Group (AGG) and possible Indigenous partners — current operator of the strategic Atlantic port of Churchill, MB, the shortest distance from AOS to tidal waters. Custody runs producer gate (upstream) to refiner user gate (downstream).
- The delivery ISC is PAN·GLOBAL·LINK — a federal, self-funding, not-for-profit modelled on North American airport authorities, supported by usership (toll revenue bonds / project finance) with no ongoing subsidy.
- **RBITTT Midstream Inc. (RMI) assumes the completion risk; no risk falls on the producer, customer, or government (see table 4.0).**
- PGL maintains the ACG in continuous, **uninterrupted service and FireSafe Forest** the corridor systemwide.
- **The execution critical path is underway to earliest ISD.**

\$70

per BBL — Time Value

1 day early **-\$420 MM**

1 day late **+\$420 MM**

± per day for life @ 6 MM BPD

[4.3] A Bottom Line for Every Stakeholder

REFERENCE	UoM	METRIC	MIN	MAX
4.3.1 UPSTREAM [E&P], Producer	\$/BBL	Invest [CAPEX] — RTM EX	\$0.86	<\$0.87
	\$/BBL	Invest [CAPEX] — AOS Rehab & Clean Waters	\$2	>\$2
	\$/BBL	BOTTOM LINE — Status-Quo Cost Eliminated	\$28	>\$35
4.3.2 MIDSTREAM [AGG], Exporter	\$/BBL	Invest [CAPEX] — ACG Infrastructure	\$3.00	<\$3.01
	\$/BBL	Invest [CAPEX] — EX Terminals	\$0.65	<\$0.66
	\$/BBL	BOTTOM LINE — Midstream Income	+\$2	<+\$3
4.3.3 DOWNSTREAM [REFINER], Customer	\$/BBL	Invest [CAPEX] — RTM IM	\$1.31	<\$1.32
	\$/BBL	Invest [CAPEX] — RTM EX	\$0.86	<\$0.87
	\$/BBL	BOTTOM LINE — DEV Income	+\$28	+\$28
4.3.4 AOS [ROYALTY], Owner	\$/BBL	Invest [CAPEX] — ACG Infrastructure	\$0.70	<\$0.71
	\$/BBL	Invest [CAPEX] — RTM EX Install & Commission	\$0.74	<\$0.75
	\$/BBL	BOTTOM LINE — Royalty Income	+\$10	>+\$30
4.3.5 OTHER [SPG], Stakeholders	\$/BBL	Invest [CAPEX] — Manufacturing & Fabrication	\$2.94	<\$2.95
	\$/BBL	Federal GDP	\$70	>\$70
	\$/BBL	BOTTOM LINE — FSF ACG Corridor Income	+\$3	>+\$3

[5] Frequently Asked Questions

“It’s never been done — where’s your proof?”

We don’t move a new material. We move bitumen in the solid state nature already made — **no samples, no experiments, no first-of-a-kind risk.**

Nature ran the pilot. We made it float — harmlessly.

Nothing sinks. Nothing spreads. The water stays clean, the land stays whole — for the generations to come.

Not Forecast, Not Hindcast, Numbers

The answers are in the numbers — five reference tables that quantify the transition net value, eliminations, risk removals, transition opportunity, and economics.

1.0 TRANSITION — NET VALUE 5.0 ELIMINATION — STATUS QUO 4.0 ELIMINATION — COST OF RISKS 2.0 TRANSITION OPPORTUNITY 3.0 ECONOMICS

1.0 • TRANSITION — NET VALUE

REFERENCE	UoM	METRIC	MIN	MAX
1.1 UPSTREAM [E&P], Producer	\$/BBL	Eliminate diluent & DRU technology (DRU value excluded from totals)	\$34	>\$34
	\$/BBL	Eliminate pipeline	\$8	>\$15
	\$/BBL	Pre-refinery — eliminate 0.15 ton CO ₂ e/BBL — ETS \$90/ton	\$14	>\$14
	\$/BBL	Subtotal (\$/BBL)	\$56	>\$63
1.2 MIDSTREAM [AGG], Exporter	\$/BBL	Subtotal (\$/BBL)	\$2	<\$3
1.3 DOWNSTREAM [REFINER], Customer	\$/BBL	Diluent Elimination Value [DEV]	+\$28	+\$28
	\$/BBL	Early Adopter Value [EAV]	+\$4	+\$4
	\$/BBL	Post-refinery — eliminate cost of heating	\$18	>\$18
	\$/BBL	Post-refinery — eliminate 1.62 ton CO ₂ e/BBL — ETS \$90/ton — 50:50 share	\$73	>\$73
	\$/BBL	Subtotal (\$/BBL)	tba	tba

1.0 • TRANSITION — NET VALUE (cont'd)

REFERENCE	UoM	METRIC	MIN	MAX
1.4 AOS [ROYALTY], Owner	\$/BBL	Royalties	\$10	>\$30
	\$/BBL	Economic Contribution	\$1.44	>\$1.44
	\$/BBL	Subtotal (\$/BBL)	\$10	>\$30
1.5 OTHER STAKEHOLDERS [SPG]	\$/BBL	FSF Corridors	\$3	>\$3
	\$/BBL	Economic Contribution	\$2.94	>\$2.94
	\$/BBL	GDP contribution	\$70	>\$70
	\$/BBL	Subtotal (\$/BBL)	tba	tba

Note — Economic Contribution / GDP contribution = the total value of exported barrels (benchmarked at ~\$70/BBL by 2030). It is a convenient, common measuring tool for benchmarking such countrywide and global infrastructure projects, in place of counting employment or man-years.

5.0 • ELIMINATION — STATUS QUO

REFERENCE	UoM	METRIC	MIN	MAX
5.1 DILUENT	\$/BBL	Eliminate diluent & DRU technology (DRU value excluded from totals)	\$34	>\$34
5.2 HEATING	\$/BBL	Eliminate need for heating systemwide (post refinery) PMB	\$18	>\$18
5.3 PIPELINE	\$/BBL	Eliminate need for Pipeline [5.1 & 5.2 above] (heavy bitumen)	\$8	>\$15
	\$/BBL	Eliminate need for Pipeline govt. subsidy @ ~\$37B	\$15	>\$15
5.4 CARBON (CO ₂ e)	\$/BBL	Eliminate 0.15-ton CO ₂ e/BBL — ETS (EUA) carbon ~\$90/ton	\$14	>\$14
	\$/BBL	Eliminate 1.62-ton CO ₂ e/BBL — ETS (EUA) carbon ~\$90/ton — 50:50 share	\$73	>\$73
	\$/BBL	Eliminate CAPEX & OPEX	tba	tba
5.5 ENVIRONMENT IMPACT	SEF	Smallest Environment Footprint (SEF)	SEF Ø	SEF Ø
	ton/BBL	Eliminate global plastic waste pile	0.054	>0.054
	\$/BBL	Eliminate Environmental Impact	tba	tba

4.0 • ELIMINATION — COST OF RISKS

REFERENCE	UoM	METRIC	MIN	MAX
4.1 COMPLETION	\$/BBL	100% modular & repetitive design	incl.	incl.
		>80% offsite assembly (exist. plant)	incl.	incl.
		<20% onsite & commissioning	incl.	incl.
4.2 MARKET RISK	\$/BBL	AOS bitumen (PMB) recyclable for life, longest life, global travel surface (CAGR 3%+)	incl.	incl.
		No obsolescence risk	incl.	incl.
		IP is protected globally & by contract	incl.	incl.
4.3 NATURAL EVENT	\$/BBL	FSF ACG corridors [current crisis]	\$3	>\$3
		Earthquakes	incl.	incl.
		Tsunamis	incl.	incl.
		Sea level rise	incl.	incl.
		Temperature	incl.	incl.
4.4 CONSULTATION	\$/BBL	Full consultation & full agreement	incl.	incl.
		No permit relief (fast-track) required or desired	incl.	incl.
4.5 INCIDENT IMPACTS	\$/BBL	Non-hazardous, non-flammable & fully buoyant	incl.	incl.
		No-harm spills only	incl.	incl.

2.0 • TRANSITION OPPORTUNITY

REFERENCE	UoM	METRIC	MIN	MAX
2.1 UPSTREAM [E&P], Producer	\$/BBL	Eliminate diluent & DRU technology (DRU value excluded from totals)	\$34	>\$34
	\$/BBL	Eliminate pipelines cost base	\$8	>\$15
	\$/BBL	Eliminate pipeline govt. subsidy @~\$37B	\$15	>\$15
	ton CO ₂ e	carbon offsets +	0.15	>0.15
2.2 MIDSTREAM [AGG], Exporter	\$/BBL	OPEX EX-Terminals	\$2	<\$3
2.3 DOWNSTREAM [REFINER], Customer	\$/BBL	Diluent Elimination Value [DEV] +	+\$28	+\$28
	\$/BBL	Early Adopter Value [EAV] +	+\$4	+\$4
	\$/BBL	Zero-cost inventory (no heat fuel) +	\$18	>\$18
	ton CO ₂ e	carbon offsets +	1.62	>1.62
2.4 AOS [ROYALTY], Owner	\$/BBL	royalty & frequency	10	>\$30
	\$/BBL	transition infrastructure (jobs)	1.44	<\$1.45
2.5 OTHER STAKEHOLDERS [SPG]	\$/BBL	FSF corridors and towns	\$3	>\$3
	\$/BBL	economic regional benefits	2.94	<\$2.95
	\$/BBL	transition infrastructure (jobs)	1.44	<\$1.45
	\$/BBL	GDP	\$70	>\$70

3.0 • ECONOMICS

REFERENCE	UoM	METRIC	MIN	MAX
3.1 TIME VALUE	\$/BBL	Early/Late ISD @ 6MM BPD	-\$420MM	+\$420MM
3.2 EFFICIENCY	%	Payload	100	100
	Year	Code Design Life, Structures	100	>100
	\$/BBL	1.77-ton CO ₂ e/BBL/year — ETS (EUA) carbon ~\$90/ton — 50:50 share	\$79	>\$79
	ton/BBL	Eliminate Global plastic waste pile	0.054	>0.054
3.3 CAPEX – TRANSITION	\$/BBL	Global Infrastructure — custody gate to custody gate	\$3.68	<\$3.69
3.4 CAPEX – ACG CORRIDOR	\$/BBL	Surface Infrastructure — custody gate to custody gate	\$3.70	<\$3.71
3.5 OPEX – TRANSFER	\$/tKM	Surface: Unit Train – 105k BBL	n/a	<\$0.0171
	\$/tKM	Marine: VLBC – 1.2 MM BBL	n/a	<\$0.0009

The Initiative satisfies “all Stakeholders ... all the Time”

\$70

Project Time Value
\$/Barrel/Day

>12 MM

ACG Capacity
Barrel/Day

+\$28

DEV
\$/Barrel

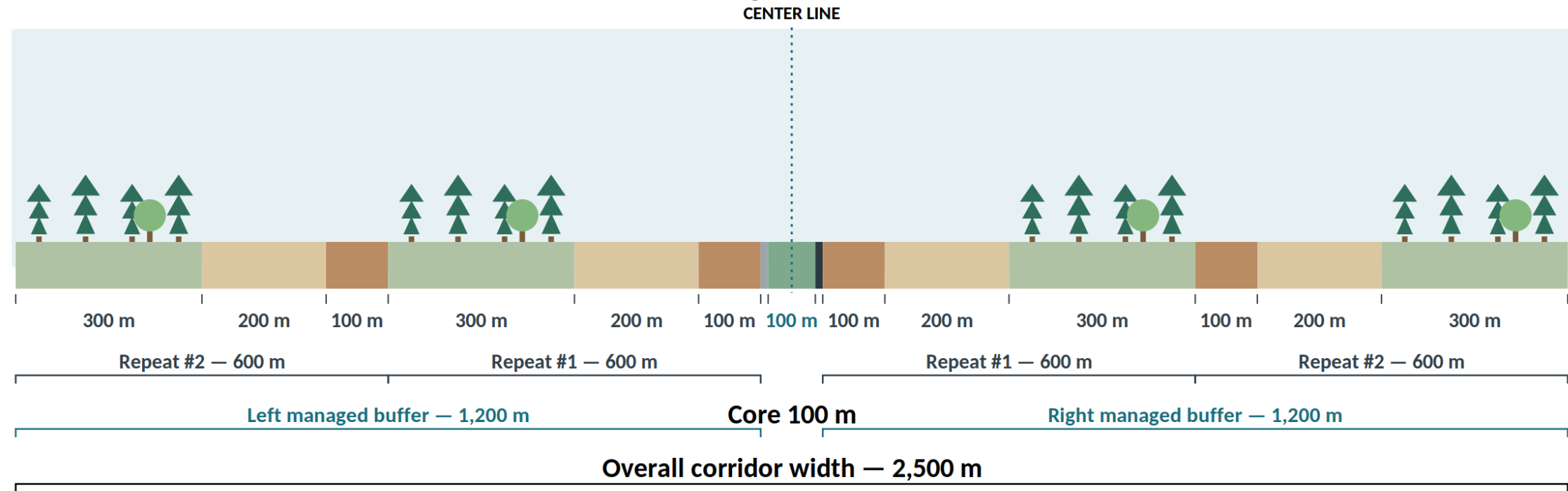
-1.77

CO₂e Elimination
ton/Barrel/year

Solid-state transport • 0 CO₂e journey • Financeable, Date Certain execution • Lowest In-Delivery Cost • Earliest In-Service Date.

Add.#3.0 • FireSafe Forest (FSF) Corridor — Cross-Section

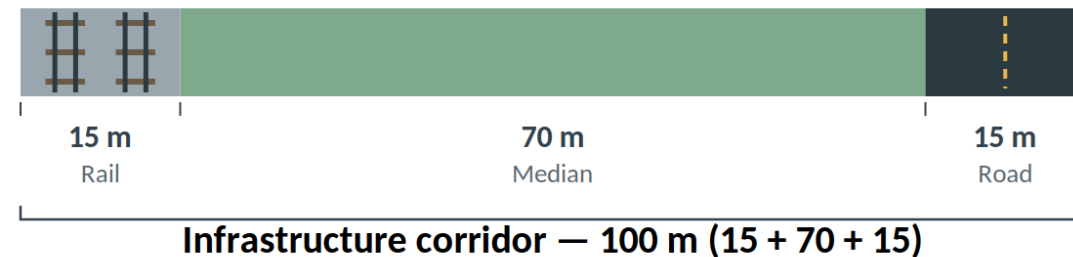
2,500 m corridor • 100 m infrastructure core (15 Rail + 70 Median + 15 Road) + 1,200 m managed buffer each side



Legend

- Clear Cut (100 m)** — bare ground, stumps
- Fire Break (200 m)** — mineral soil / low cover
- Thinning (300 m)** — spaced mature trees
- Mature coniferous** — spruce / pine / fir
- Minor deciduous** — aspen / birch / poplar
- Rail** — ballast + ties + 2 tracks, 15 m
- Median** — vegetated firebreak, 70 m
- Road** — asphalt, 15 m

Core Infrastructure Detail — 100 m total (15 + 70 + 15)



Add.#1.0 • Stakeholder Participation Group (SPG) — by Definition (1 of 3)

#	Stakeholder	Office	Mailing Address	Contact Information
1	Assembly of First Nations AFN	Office of the National Chief	50 O'Connor Street, Suite 200 Ottawa, ON K1P 6L2	Tel: 613-241-6789 Email (media): media@afn.ca Web: afn.ca
2	Alberta	Office of the Premier	307 Legislature Building 10800 – 97 Avenue Edmonton, AB T5K 2B6	Tel: 780-427-2251 Fax: 780-427-1349 Email: premier@gov.ab.ca Web: alberta.ca/premier-contact
3	British Columbia	Office of the Premier	PO Box 9041, Stn Prov Govt Victoria, BC V8W 9E1	Tel: 250-387-1715 Fax: 250-387-0087 Email: premier@gov.bc.ca Web: news.gov.bc.ca/office-of-the-premier
4	Canada Energy & Natural Resources Canada	Office of the Minister of Energy and Natural Resources	580 Booth Street Ottawa, ON K1A 0E4	Tel: 343-292-6837 Email: minister.ministre@nrcan-rncan.gc.ca Web: natural-resources.canada.ca
5	Inuit Inuit Tapiriit Kanatami (ITK)	Office of the President	75 Albert Street, Suite 1101 Ottawa, ON K1P 5E7	Tel: 613-238-8181 Toll-Free: 1-866-262-8181 Email: president@itk.ca / info@itk.ca Web: itk.ca
6	Manitoba	Office of the Premier	204 Legislative Building 450 Broadway Winnipeg, MB R3C 0V8	Tel: 204-945-3714 Fax: 204-949-1484 Email: premier@leg.gov.mb.ca Web: gov.mb.ca/premier

Add.#1.0 • Stakeholder Participation Group (SPG) — by Definition (2 of 3)

#	Stakeholder	Office	Mailing Address	Contact Information
7	Métis Métis National Council (MNC)	Office of the President	Suite 600, 180 Elgin Street Ottawa, ON K2P 2K3	Web: metisnation.ca Contact via metisnation.ca/contact
8	New Brunswick	Office of the Premier	Chancery Place PO Box 6000 Fredericton, NB E3B 5H1	Tel: 506-453-2144 Fax: 506-453-7407 Email: premier@gnb.ca Web: www2.gnb.ca
9	Newfoundland and Labrador	Office of the Premier	Confederation Building, East Block PO Box 8700 St. John's, NL A1B 4J6	Tel: 709-729-3570 Fax: 709-729-5875 Email: premier@gov.nl.ca Web: gov.nl.ca/premier
10	Northwest Territories	Office of the Premier	Government of the NWT PO Box 1320 Yellowknife, NT X1A 2L9	Tel: 867-767-9000 Email: premier@gov.nt.ca Web: gov.nt.ca/en/departement/premier
11	Nova Scotia	Office of the Premier	PO Box 726 Halifax, NS B3J 2T3	Tel: 902-424-6600 Fax: 902-424-7648 Email: premier@gov.ns.ca Web: premier.novascotia.ca
12	Nunavut	Office of the Premier	Government of Nunavut 926 Sivumugiaq, 2nd Floor PO Box 2410 Iqaluit, NU X0A 0H0	Tel: 867-975-5050 Fax: 867-975-5051 Web: premier.gov.nu.ca

Add.#1.0 • Stakeholder Participation Group (SPG) — by Definition (3 of 3)

#	Stakeholder	Office	Mailing Address	Contact Information
13	Ontario	Office of the Premier	Legislative Building, Queen's Park Toronto, ON M7A 1A1	Tel: 416-325-1941 TTY: 1-800-387-5559 Email: premier@ontario.ca Web: ontario.ca/page/premier
14	Prince Edward Island	Office of the Premier	Shaw Building, 5th Floor 95–105 Rochford Street, PO Box 2000 Charlottetown, PE C1A 7N8	Tel: 902-368-4400 Fax: 902-368-4416 Email: premier@gov.pe.ca Web: princeedwardisland.ca/en/premier
15	Québec	Cabinet du premier ministre	Édifice Honoré-Mercier, 3e étage 835, boul. René-Lévesque Est Québec, QC G1A 1B4	Tel: 418-643-5321 Fax: 418-643-3924 Email: cpm@mce.gouv.qc.ca Web: quebec.ca/en/premier
16	Saskatchewan	Office of the Premier	Room 226, Legislative Building 2405 Legislative Drive Regina, SK S4S 0B3	Tel: 306-787-9433 Fax: 306-787-0885 Email: premier@gov.sk.ca Web: saskatchewan.ca
17	Yukon	Office of the Premier	PO Box 2703 Whitehorse, YT Y1A 2C6	Tel: 867-393-7007 Fax: 867-393-7135 Email: premier@yukon.ca Web: yukon.ca/en/your-government/office-premier

Call to Action

The Critical Path Forward • Immediate Next Steps

1 Project Objective — Earliest ISD

Critical Deliverable, 'Date Certain' is fixed at May 4, 2030.
The financeable execution plan is solely accountable to deliver 'Date Certain'

2 Transition Offtake Agreement

Transition Existing Customer Offtake Agreements
Earliest transition generates earliest DEV value.

3 Project Initiative Introduction & Consultation

Introduce the project Initiative to each SPG stakeholder, answer and align positively all questions.

4 Critical Engineering, Scope Definition & Contract Documentation

Initiate critical FireSafe Forest (FSF) execution strategy scoping, start with critical ACG corridors.

5 Critical Path Procurements

Abbreviations (1 of 2)

AGG	Arctic Gateway Group	FSF	FireSafe Forest
ACG	Arterial Connector Grid	GDP	Gross Domestic Product
AOS	Athabasca Oil Sands	IDC	In-Delivery Cost
BBL	Barrel	IP	Intellectual Property
BPD	Barrels Per Day	ISC	Industry Service Corporation
CO₂e	Carbon Dioxide Equivalent	ISD	In-Service Date
CTOR	Commercial Terms of Reference	IPL#1	IP License#1 [RTM-EX]
DEV	Diluent Elimination Value	IPL#2	IP License#2 [RTM-IM]
DRU	Diluent Recovery Unit technology	IPL#3	IP License#3 [AOS-TERM]
EAV	Early Adopter Value	IPL#4	IP License#4 [AOS-EXPORT]
ETS	Emissions Trading System	IPL#5	IP License#5 [AOS-DISTR]
EUA	European Union Allowance	LoA	License Offtake Agreement
EX-IM	Export-Import		

Abbreviations (2 of 2)

MM	Million	RTM-EX	RTM Export
N\$IA	No \$ Impact Acceleration	RTM-IM	RTM Import
NO	No is No Answer	SEF	Smallest Environmental Footprint
PGL	PAN·GLOBAL·LINK	SPG	Stakeholder Participation Group
PMA	Polymer Modified Asphalt	IPL	IP License (see IPL#1–#5)
PMB	Polymer Modified Bitumen	TCF	The Commercial Framework
RBITTT	Refinery BITumen Transition Transfer	USGC	U.S. Gulf Coast
RMI	RBITTT Midstream Inc.	VLBC	Very Large Bulk Carrier
RTM	Refinery Transition Module		

A 21st-Century Solution to an Obsolete 20th-Century Problem

We've come a long way in solving one of heavy oil's oldest problems — the need for diluent to move bitumen — and, with it, eliminated a significant part of a cost base that has burdened this industry for decades.

Our intent is straightforward: to **share that gain with our customers** — existing and future, now and for the life of their agreements.

The diluent problem belongs to the last century. **The solution is here** — and we invite forward-looking partners to build on it with us.