

First Phosphate Corp.
CSE: PHOS
OTC: FRSPF

EMERGING *Growth* Research

December 4, 2025

Price (close on Dec. 3, 2025)

C\$0.87

Rating
BUY

12-Month Target Price
C\$4.93

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52-Week Range	C\$0.17 – C\$1.08
Shares Outstanding	151.21 mil
Insider/Institutional	25%/40%
Public Float	\$86.2 mil
Market Capitalization	C\$114.9 mil
Total Debt	Nil
Debt / Equity	NA
ROE (LTM)	NA
Book Value / Share	C\$0.10
Daily Volume (90-day)	513,245
Fwd. Div. & Yield	--

About the Company

First Phosphate is a mineral development and cleantech company dedicated to building and onshoring a vertically integrated mine-to-market LFP battery supply chain for North America. Target markets include energy storage, data centers, robotics, mobility and national security. First Phosphate's flagship Bégin-Lamarche Property in Saguenay-Lac-Saint-Jean, Quebec is one of North America's rare igneous phosphate resources, yielding high-purity phosphate with minimal impurities.

Building a Western phosphate platform for the LFP decade. Initiate with a Buy Rating. We

initiate coverage on First Phosphate (FP) with a Buy rating and a 12-month target price of C\$4.93. FP is building a Québec-based platform that upgrades rare igneous phosphate ore into 40%-41% P₂O₅ apatite concentrate and converts over 90% of this into battery-grade purified phosphoric acid (PPA) for LFP cathodes. We believe the market is underpricing the combination of ore quality, deep-water logistics at the Port of Saguenay, and a staged integration plan that generates cash from concentrate sales while the acid plant advances toward feasibility and FID. If management meets permitting, financing, and offtake milestones on the timetable discussed, we see scope for a re-rating toward a de-risked sum-of-the-parts outcome over the next 12 to 36 months.

Why now?

LFP's share of global batteries continues to rise while Western PPA remains scarce. FP stands out as one of the few projects with high-purity igneous feed, deep-water port access, and early proof-of-concept validation through fully North American LFP cells. The staged model (sell concentrate first, then internalize to PPA) provides transparent pricing anchors and lender-friendly offtake structures. We believe this situation is exactly the profile that capital is seeking for Western phosphate-to-LFP exposure.

What we model:

We model first production in 2029 from the Bégin-Lamarche mine and concentrator, ramping to approximately 900ktpa of apatite concentrate at steady state. We allocate up to 400ktpa to a binding European offtake agreement and transfer the balance to the Port Saguenay acid complex, which we model at roughly 190ktpa on a P₂O₅ basis with a three-year ramp to 90-95% utilization.

Our model currently points to undiscounted free cash flow (FCF) of about C\$3.5bn from the mine and about C\$2.5bn from the PPA plant over a 23-year operating profile, before corporate items and funding effects.

Valuation:

We use a sum-of-the-parts DCF that values the mine and PPA as separate legs with market-based transfer pricing on internal volumes and pre-FID risk adjustments. We apply discount rates of 12% for the mine and 14% for the PPA plant and arrive at a preliminary NAV of C\$4.93 per share. At a current share price of around C\$0.76, this valuation implies an upside of approximately 548%. We expect to revisit discount rates and risk premiums as feasibility, permits, offtakes and financing harden.

Investment Thesis

- **LFP demand growth meets PPA scarcity.** Rising LFP penetration and scarce Western PPA supply create a constructive backdrop. FP's staged production model supports earlier cash generation from concentrates while PPA qualifies and ramps.

- **Transparent indexation reduces pricing risk:** FP intends to index prices to well-known benchmarks. These anchors are familiar to lenders and support bankable offtakes and project finance
- **Unit costs look competitive:** Management has guided mine net cash cost to the mid-US\$90 per tonne range after magnetite credits, consistent with the PEA life-of-mine opex framework. Port logistics shorten the mine-to-ship chain and should support a tighter working-capital profile compared with inland peers.
- **Two earning legs at scale:** At steady state, 400ktpa of external concentrate sales plus internal transfer of the remaining volumes to PPA create two earnings legs. Management has indicated post-tax FCF from the mine alone averages about US\$239mn per year, peaking near US\$290mn, before layering in incremental PPA cash flows.
- **Ore quality and rarity are real advantages:** Only about 5% of global phosphate deposits are igneous, and FP's ore upgrades to above 40% P₂O₅ concentrate with low impurities. Higher-purity feedstock should translate to better PPA yields, and a more recyclable gypsum stream.
- **De-risking milestones are visible:** Feasibility work, permits, additional multi-year offtakes and/or volume expansions building on existing agreements, ECA and grant packages, and conversion of the Port Saguenay land option are all catalysts over the next 12 to 24 months.
- **Early downstream proof points:** FP has already helped produce LFP cells using fully North American critical minerals, with results presented. This supports the fit of FP's products for battery-grade applications and strengthens the narrative around a regionalized LFP supply chain.
- **Valuation has room to re-rate:** The Bégin-Lamarche PEA framed a pre-tax NPV of approximately C\$2.1bn and an after-tax NPV around C\$1.6bn, with a pre-tax IRR of about 37%, and payback under three years. FP's current equity value implies a steep discount to a de-risked mine-plus-PPA platform in Québec.

What we are watching as risks

- Two-asset capex and funding mix, including potential dilution
- Construction and qualification risk for battery-grade PPA
- Volatility in benchmark pricing and input costs (India acid contract, phosphate rock, sulfur, power)
- Permitting timelines and environmental approvals
- Final sulfur integration strategy, turnaround cadence, and PPA opex stack

What would make us more positive

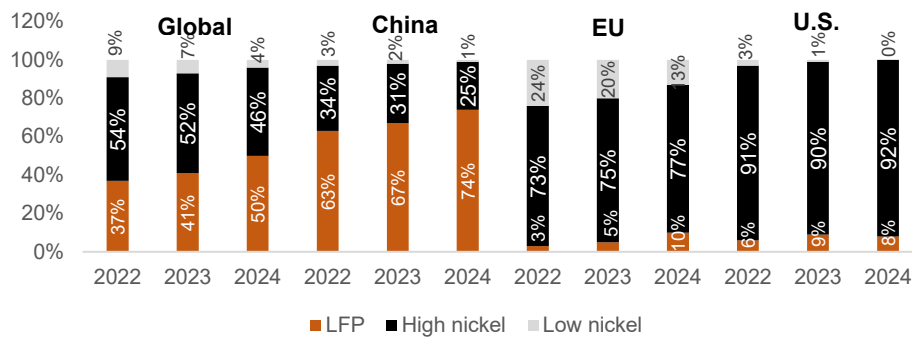
- Feasibility-level updates for the mine and PPA, with tighter capex and opex bands
- Major permits in hand for both the mine and the port facility
- Confirmed export-credit and grant packages
- Conversion of the Port Saguenay industrial land option into a lease on milestone achievement.
- Continued visible support from Québec and federal stakeholders around FP's role as a strategic igneous-phosphate supplier.
- Additional multi-year offtakes and/or volume expansions building on the existing binding European concentrate agreement, especially for PPA.

Industry insight – PPA as the bottleneck in the LFP build-out

LFP becoming the workhorse for storage, data, and automation

LFP (Lithium Iron Phosphate) is now the leading chemistry for battery energy storage systems (BESS), data-centre backup, and industrial automation, where safety, cycle life, and cost per kWh matter more than energy density. Grid-scale storage is one of the fastest-growing battery markets globally, and most new BESS installations are shifting to LFP because it handles frequent cycling and offers stable thermal performance. **Data centres and AI infrastructure are also adopting LFP for on-site peak-shaving and resilience as electricity demand is set to double by 2030.** Warehouses, factories, ports, and logistics hubs are accelerating the switch to LFP packs for robotics, AGVs, forklifts, and automation equipment. LFP continues to grow in EVs, but we see the strongest incremental demand for Western PPA (Purified Phosphoric Acid) coming from storage, data, and automation buyers seeking long-term, non-Chinese supply.

Exhibit 1: Share of LFP against other batteries by region

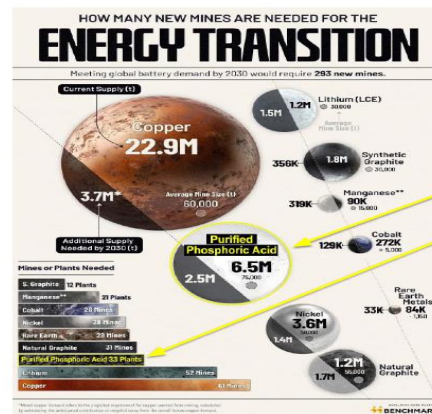
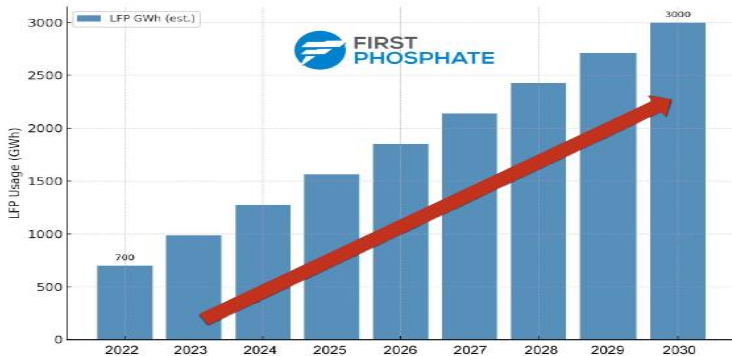


Source: IEA

LFP’s addressable market is expected to grow at about 17% per year from US\$19bn in 2024 to roughly US\$90bn by 2034, as automakers and grid-scale storage developers lean into LFP for cost, safety, and longevity. That growth collides with a structural bottleneck in Western PPA and high-purity rock supply. **Automotive accounted for about 5% of purified PPA demand in 2023 and is expected to rise toward 24% by 2030.** Without significant Western build-outs, the PPA market could face a 1Mt/yr deficit by 2030. We therefore believe the investable takeaway is straightforward: purified phosphates are tight, and new Western capacity should command healthy premiums to fertilizer-grade acid.

Exhibit 2: Battery demand

Projected Global LFP Battery Usage, 2022–2030 (GWh)



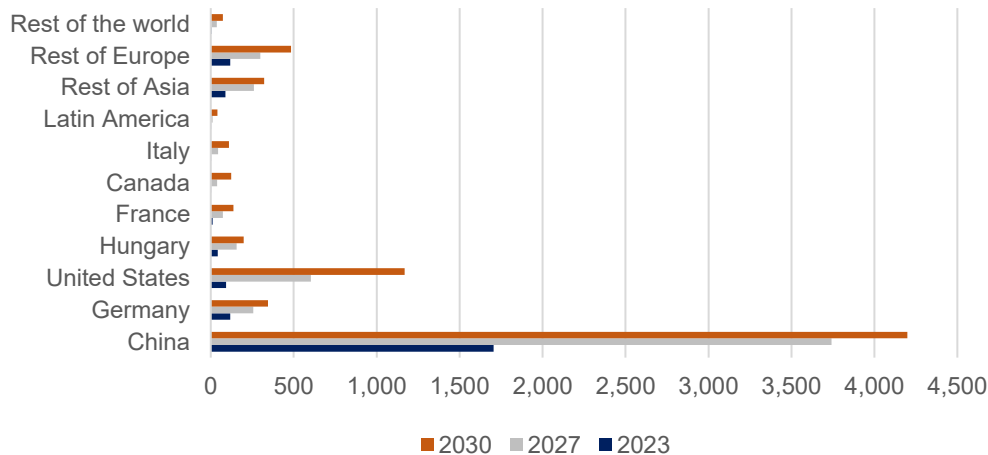
33 new purified phosphoric acid plants required by 2030 to meet demands from the energy transition for LFP Battery. Today there are only 5 in the Western World

Source: Company presentation

Scarcity of qualified PPA unlikely to fade quickly

The tightness in battery-grade PPA is not just an EV story. The same purified phosphates are needed for LFP cells that sit inside grid-scale battery-energy-storage systems (BESS), data centre backup and peak-shaving units, and automation and robotics platforms. Global cell manufacturing capacity is ramping sharply, led by China, which accounts for roughly two thirds of installed capacity today and is still expected to hold more than 50% of projected 2030 capacity, with the United States and Europe playing catch-up. As utilities add renewables and storage, and as hyperscale data centres, factories, and logistics hubs electrify, demand for reliable, non-Chinese PPA rises alongside EV demand.

Exhibit 3: Battery manufacturing capacity worldwide – 2023 vs projections, gigawatt hours



Source: S&P Global

Western PPA capacity, however, remains thin and is mostly configured for fertilizer or captive industrial use. Converting these plants to high-purity battery supply is non-trivial: operators must secure sulfuric-acid supply, meet tight impurity specs, handle and monetise gypsum, and pass multi-year customer qualification. Greenfield battery-grade PPA projects face the same hurdles plus permitting and capital constraints. The result is a limited pipeline of fully qualified, export-oriented Western PPA projects. We see three implications for FP:

- **Pricing power for qualified PPA:** Benchmarks exist, but the pool of suppliers able to turn igneous feed into consistent battery-grade PPA is small, which supports premiums over fertilizer-grade acid.
- **Strategic relevance to storage and data-centric infrastructure:** BESS and data-centre operators increasingly want long-term, traceable, non-Chinese PPA supply from stable jurisdictions such as Québec.
- **Favourable financing optics:** Bankable offtakes indexed to transparent benchmarks, framed around energy security and digital-infrastructure resilience, fit well with export-credit and government-support programmes.

Igneous rock – quality and scarcity as a strategic asset

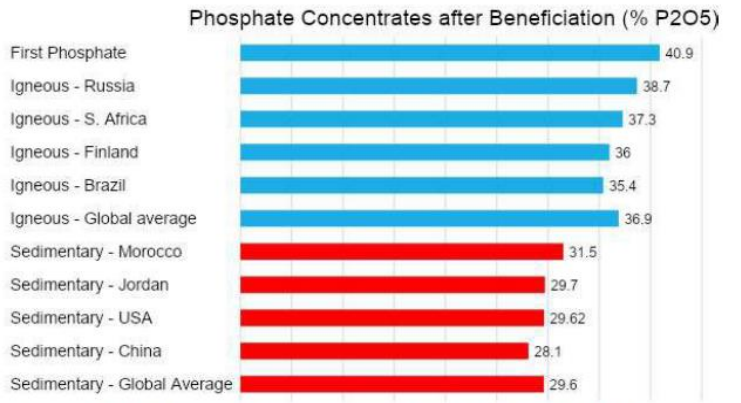
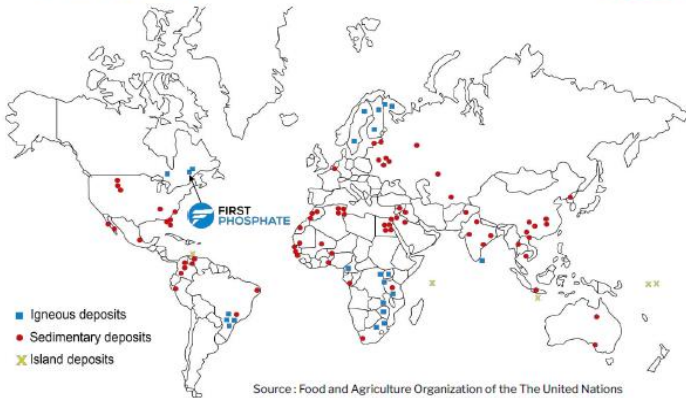
Only about 5% of global phosphate deposits are igneous. The vast majority are sedimentary and tied to traditional fertilizer chains. Igneous deposits, such as those of FP in Saguenay-Lac-Saint-Jean, typically upgrade cleanly to 39-41% P₂O₅ concentrate with lower deleterious elements. This geological advantage translates into:

- Higher acid yields and better PPA recovery
- Simpler purification and impurity control
- Cleaner, more recyclable gypsum by-product streams

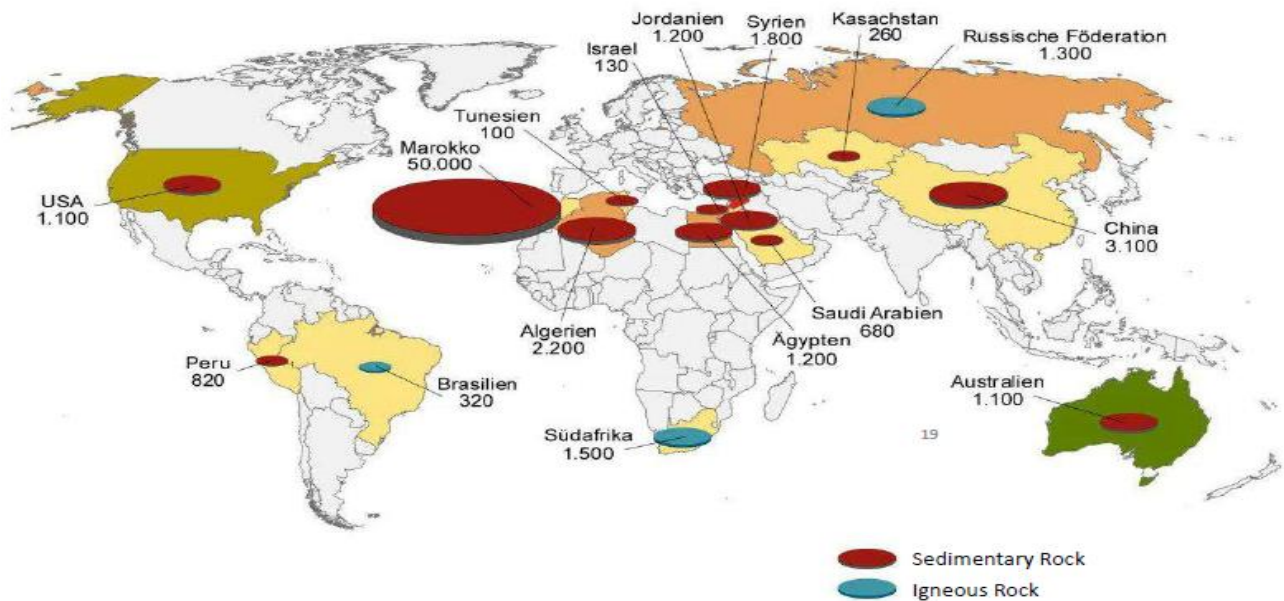
Exhibit 4: World igneous phosphate deposits

IGNEOUS PHOSPHATE ROCK IS RARE

First Phosphate Achieves Leading Igneous Phosphate Concentrate



Phosphate Reserves in Mt



Source: Company presentation

The scarcity of igneous rock in North America, coupled with declining sedimentary output and higher ESG scrutiny, supports pricing power and lender confidence for projects like Bégin-Lamarque. Few listed names tick all three boxes of being North American, igneous-based and explicitly LFP-oriented, which should widen the valuation range once financing milestones become visible.

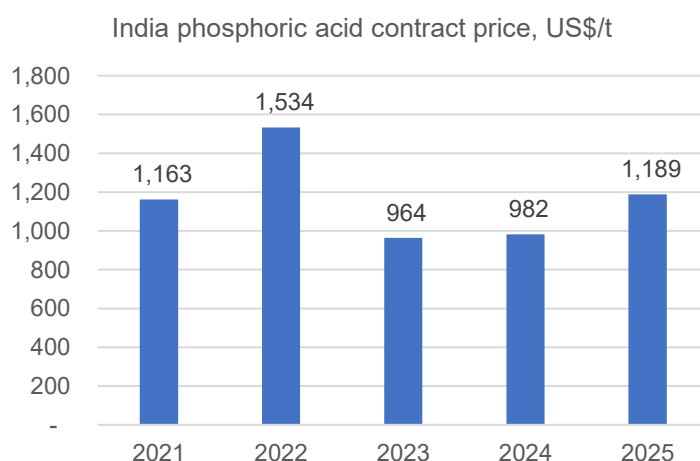
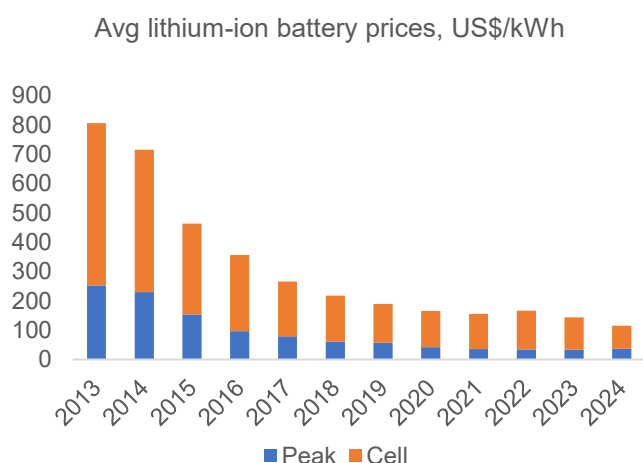
Exhibit 5: Listed phosphate miners

Symbol	Exchange	Name	Phosphate Deposit Location	High Purity Igneous	LFP Battery Focused	North American Source
PHOS	CSE	First Phosphate Corp.	Saguenay (Quebec)	Yes	Yes	Yes
AEV	ASX	Avenira Ltd.	Wonarah (Australia)	No	Partially	No
DAN	TSXV	Arianne Phosphate Inc.	Lac-a-Paul (Quebec)	Yes	Partially	Yes
FOX	CSE	Fox River Resources Corp	Martison (Ontario)	Yes	No	Yes
ICL	NYSE	ICL Group Ltd	Israel	No	Partially	No
IFOS	TSXV	Itafos	Farim (Guinea), Santana (Brazil), Conda (Idaho)	No	No	Yes
KRPZ	AIM	Kropz PLC	Elandsfontein (S. Africa), Hinda (R.Congo)	No	No	No
LRA	TSXV	Lara Exploration Ltd.	Bhaia Inglesa (Chile)	No	No	No
MNB	ASX	Minbos Resources Ltd.	Cabinda (Congo)	No	No	No
MOS	NYSE	Mosaic	USA ²³	No	No	Yes
NTR	TSX	Nutrien Ltd.	USA	No	No	Yes
YAR	OL	Yara International ASA	Siilinjärvi (Finland)	Yes	No	No
NZP	TSXV	Chatham Rock Phosphate	Chatham Rise (New Zealand), Korella (Australia)	Partially	No	No
RVG	TSXV	Revival Gold Inc.	Diamond Mountain (Utah)	No	No	Yes
FTZ	ASX	Fertoz	Fernie (Alberta), Wapiti (British Columbia)	No	No	Yes
CSM	ASX	Centrex Ltd.	Ardmore (Australia)	No	No	No

Source: Company presentation

LFP’s growing share has helped stabilize battery prices in recent years even as ternary chemistries saw sharper declines. We reflect this outcome in our base case by keeping LFP pack pricing broadly flat in 2025-2026 and easing thereafter as scale and localization improve.

Exhibit 6: Battery and phosphoric acid prices



Source: BloombergNEF, Fertiliser Association of India, Argus Media, P205.com

Business insights – from igneous rock to battery acid

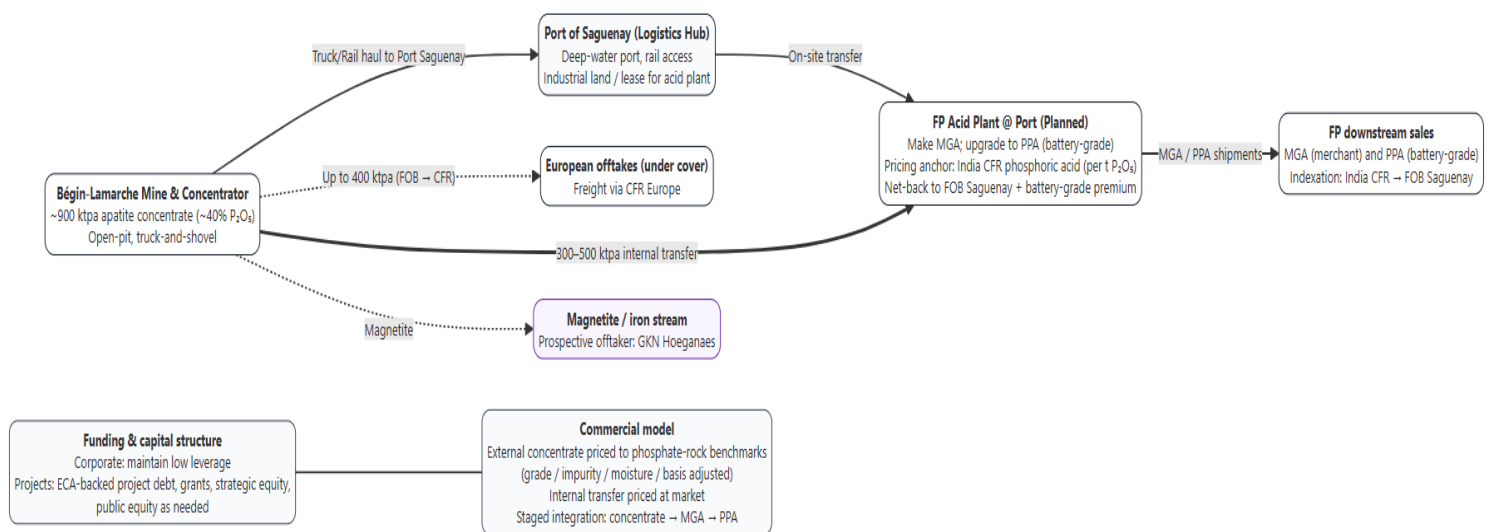
Platform design – mine, port & PPA spine

FP is developing a Québec-based, port-enabled supply chain that upgrades rare igneous ore into 40% P₂O₅ apatite concentrate and, at Port Saguenay, converts a material share of that concentrate into purified PPA for the LFP ecosystem. The core operating hub is Bégin-Lamarche in Saguenay-Lac-Saint-Jean. The PEA outlines an open-pit, truck-and-shovel mine feeding a conventional crush-SAG/ball-flotation concentrator. The processing life of the mine and plant is about 23 years, with a life-of-mine strip ratio of around 1.5:1 and a ramp to 900ktpa of 40% P₂O₅ apatite concentrate at steady state. Magnetite is recovered as a by-product, and gypsum generated downstream is recyclable given the low-impurity igneous feed.

Commercially, FP intends to sell up to 400ktpa of concentrate into Europe under a binding long-term offtake agreement with a major phosphate processor, and to transfer the remaining ~300-500ktpa to its own acid facility at Port Saguenay. The port site sits on an industrial land option that runs through December 2027, with construction anticipated from 2028, subject to permitting, feasibility, and funding milestones.

The port plant is designed to produce merchant-grade phosphoric acid (MGA) and, depending on partner configuration and margin conditions, upgrade part of that MGA into battery-grade PPA. FP can flex between selling MGA and converting to PPA as market premiums shift. The Company currently has a definitive agreement for up to 60,000t of MGA with a European buyer. Logistics from mine to port are handled by road, after which deep-water access shortens delivery lanes to Europe and supports lean working capital. Portfolio optionality comes from the Lac à l’Original property and from downstream by-products and precursors. Management has advanced an iron-phosphate precursor concept, now paused pending tariff and trade clarity, while industrial interest in the magnetite stream (including from GKN Hoeganaes) provides additional diversification.

Exhibit 7: Operating footprint: Saguenay-Lac-Saint-Jean, Quebec. Volumes, pricing anchors, and funding philosophy



Source: Company presentation, Emerging Growth Research. *ktpa = thousand tonnes per annum; MGA = merchant-grade phosphoric acid; PPA = purified phosphoric acid; CFR/FOB as per trade basis. Volumes reflect current planning anchors from management discussions.

Strategically, FP plans to keep the corporate balance sheet unlevered for as long as practical and to fund large assets with export-credit-agency backed project debt, government grants, and strategic equity. The staged model, with external concentration sales first and captive phosphoric acid capacity second, supports earlier cash generation, aligns with lender expectations, and concentrates equity upside in the de-risking milestones of permitting, financing, and offtake conversion.

Essentially, we expect FP’s edge could come from:

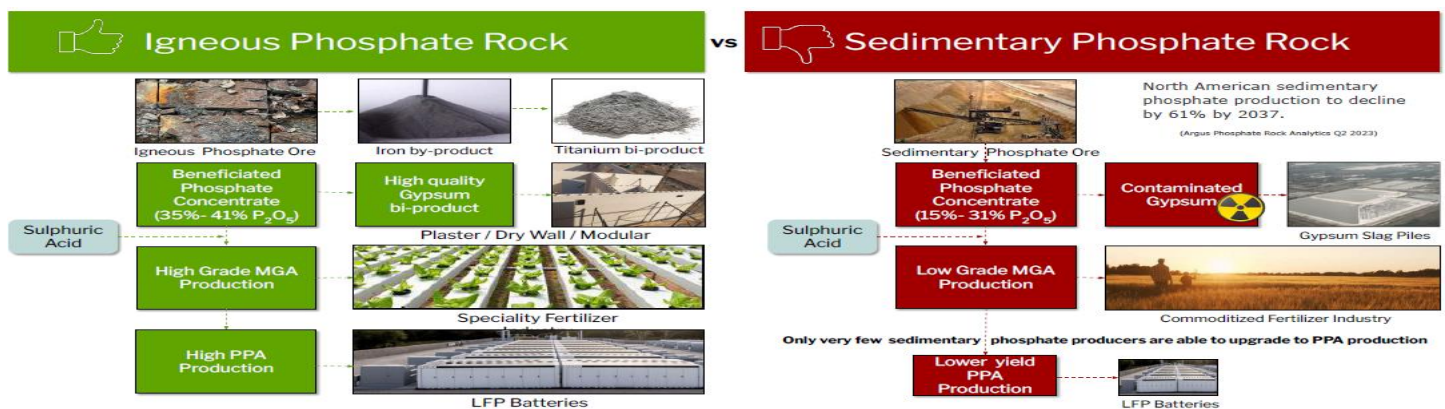
- Igneous phosphate ore quality and high-purity flowsheet
- Port adjacency and efficient Atlantic logistics
- Transparent pricing tied to recognized benchmarks.

As early proof of concept, FP recently announced the production of LFP battery cells manufactured using fully North American critical minerals, including FP-sourced phosphate, with cells presented at a conference themed “OREBA3” in Montréal. While still early-stage, this demonstration helps validate the technical suitability of FP’s concentrate and planned PPA for downstream battery customers and supports the strategic case for a localized LFP supply chain

Igneous vs sedimentary: the process advantage

Igneous ore, like FP’s, typically upgrades to 35-41% P₂O₅ concentrate and yields high-grade MGA that can be purified into battery-grade PPA with cleaner gypsum by-product. Sedimentary chains are generally longer and more fertilizer-centric, with lower PPA yields and more complex waste and impurity management. For battery customers and lenders, this result matters. A cleaner flowsheet supports more robust ESG narratives, lower technical risk and potentially lower sustaining and remediation costs over time. FP’s ore quality is therefore not just a geology point but a commercial and financing advantage.

Exhibit 8: Igneous phosphate vs sedimentary



Source: Company presentation

Location & logistics – Port Saguenay as a force multiplier

Saguenay-Lac-Saint-Jean gives FP a compact mine footprint connected by road to a deep-sea port with an industrial land option for the phosphoric acid plant. The option grants FP an exclusive right through December 2027, with construction targeted from 2028, subject to milestones. In July 2025, FP signed an industrial-land agreement with the Port of Saguenay for its phosphoric-acid facility, converting its option into a more concrete site framework subject to standard development milestones. The signing event included representatives of the Port, local mayors, federal and provincial officials and European trade representatives, underlining the political and commercial interest in a Québec-based, igneous-phosphate hub for European supply.

Shipping lanes from Port Saguenay to Europe and eastern North America compress freight times and reduce the need for large stockpiles. This configuration is a tangible moat against inland peers that depend on long rail hauls and third-party port access. It should also support tighter working-capital cycles once operations are stable.

Exhibit 9: Proximity to shipping route poses a key advantage

Source: Company presentation

Commercial model – how FP gets paid

We base concentrate realizations on phosphate-rock benchmarks and then apply adjustments for P_2O_5 grade, impurity index, moisture and trade basis (FOB or CFR). For PPA, we base realizations on the India quarterly contract for phosphoric acid per tonne of P_2O_5 , converted from CFR India to FOB Saguenay, and uplifted by a battery-grade purity premium.

At steady state, we assume a mine net cash cost in the mid-US\$90 per tonne range after by-product credits. This result is consistent with management's guidance (US\$80-100/t) and the PEA, which indicates life-of-mine opex of about US\$218/t of concentrate before credits and roughly US\$121/t after magnetite credits.

FP's external concentrate sales are priced to phosphate-rock indices, then adjusted for P_2O_5 grade, impurities, moisture, and basis. PPA sales are priced to the India quarterly phosphoric-acid contract, quoted per tonne of P_2O_5 on a CFR India basis, net-backed to FOB Saguenay and uplifted by a battery-grade purity premium. These anchors simplify offtake drafting and are familiar to lenders, which matters for export-credit and project-finance package. FP is targeting European and North American buyers that want non-Chinese PPA and rock supply. In our view, igneous ore quality, port access, and European partnerships provide tangible differentiation versus peers.

Project snapshot – 23-year mine plan and port build

The Bégin-Lamarche PEA frames a 23-year processing life with life-of-mine economics that are attractive at scoping level. The study indicates: i) Pre-tax NPV of about C\$2.1bn (8% discount rate), ii) After-tax NPV of roughly C\$1.6bn, iii) Pre-tax IRR of about 37%, and iv) Payback period just under three years. These figures underline the margin headroom implied by ore quality, scale and by-products. Management's internal schedule assumes construction after permits and feasibility, with first production targeted for 2029 and an operating ramp that reaches about 70% utilization in year one and full utilization in year two.

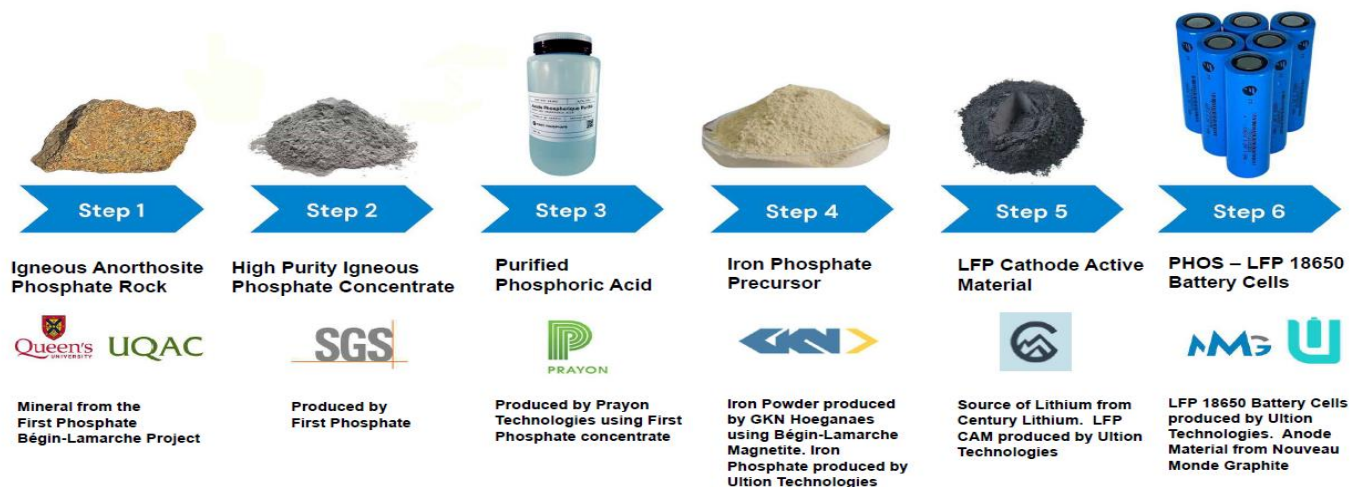
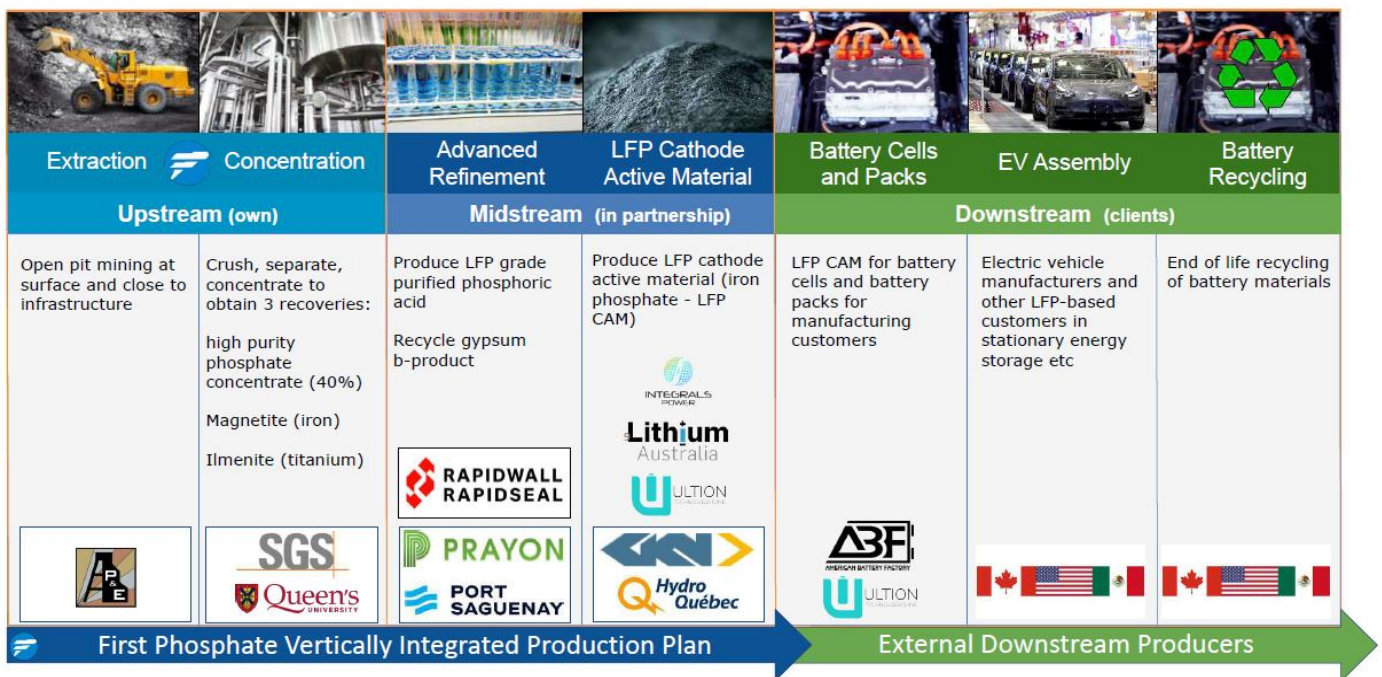
The Bégin-Lamarche PEA frames a 23-year processing life with life-of-mine economics that are compelling at scoping level: an after-tax NPV (8%) of roughly C\$2.1bn, an IRR of 37%, and a payback period just under three years. These figures are preliminary and will be revisited at feasibility, but they underline the margin headroom implied by ore quality and scale.

Management’s schedule assumes construction after permits and feasibility, with first production targeted for 2029 and an operating ramp that reaches about 70% utilization in year one and full utilization in year two.

At Port Saguenay, FP holds an exclusive industrial-land option through December 2027 and currently guides to starting construction in 2028, subject to milestones. Initial capital for the acid facility is framed at just under US\$200mn. FEED will define final scope, including whether to integrate sulfuric-acid capacity on site (a key opex lever and capex swing factor) and the turnaround cadence for the PPA flowsheet.

FP has executed licensing and engineering agreements for a PPA facility sized at approximately 190 ktpa on a P₂O₅ basis. The steady-state intent is to convert roughly 500ktpa of mine concentrate into battery-grade PPA priced off the India quarterly phosphoric-acid contract and net-backed to FOB Saguenay with a quality premium. A separate 10 ktpa iron-phosphate (FePO₄) precursor line remains on hold. It offers future optionality and proof-of-capability for cathode precursors but is not on the near-term critical path while the mine-to-PPA spine is advanced.

Exhibit 10: Value chain



Source: Company presentation

Political and stakeholder tailwinds

Québec and federal stakeholders have increasingly highlighted FP as a strategic critical-minerals project. The Québec Minister of Natural Resources recently visited the future processing site at Port Saguenay, and the Port Saguenay agreement signing brought together local, provincial, federal and European representatives. The Belgian embassy in Canada has pointed to FP as a potential igneous-phosphate supply option for Europe, while the leader of the Bloc Québécois has cited Lac-Saint-Jean phosphate as central to the party’s economic positioning for Québec in the context of trade and climate tensions. We view these actions as supportive of permitting and funding applications.

Governance and alignment – skin in the game at the top

FP’s board is majority-independent and structured around standard Audit and Compensation committees chaired by Laurence W. Zeifman. CEO John Passalacqua owns more than 10% of the Company, and management and directors are largely compensated in equity, which helps preserve cash and tightly aligns leadership with shareholders. The board regularly buys stock in the market, and Passalacqua personally purchased about \$650,000 of FP shares between January and May 2025 during heightened trade-war volatility, signaling conviction in the asset base and support for existing shareholders.

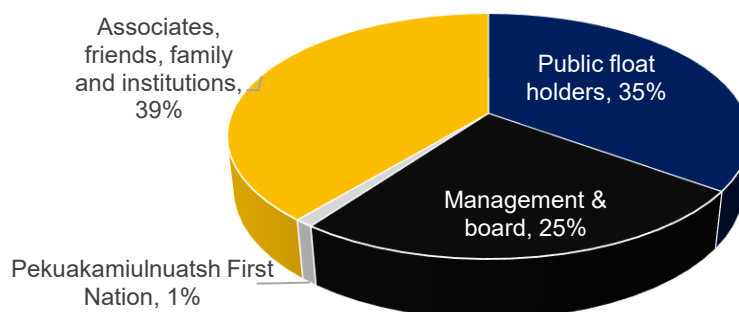
Other key insiders, including the CFO, President, and Chief Geologist, also hold measurable stakes. In our view, this ownership structure, combined with an independent board, supports a governance profile where oversight and execution incentives are reasonably balanced.

Exhibit 11: Executive team and shareholdings

Executive / Director	Role	Since	Stake in FP Shares held, 000s	
Laurence W. Zeifman	Chair of the Board	Jun-22	3.64%	5,459
John Passalacqua	CEO & Director	Jun-22	10.17%	15,245
Bennett Kurtz	CFO & Director	Jun-22	3.01%	4,515
Peter Nicholson	Director	Aug-24	2.18%	3,261
Armand MacKenzie	President	Feb-25	0.49%	730
Gilles Laverdière	Chief Geologist	May-22	0.34%	508
David Dufour	Executive VP	May-23	0.35%	528

*Source: Company filings. *Board and management compensation is predominantly equity-based. Executives and directors continue to buy in the market, including approximately \$0.65mn of open-market purchases by the CEO in 2025.*

Exhibit 12: Ownership by shareholders



Source: Company presentation

Financial analysis – two-leg cash flow model

We model FP as two economic legs that roll up into a consolidated FCF:

- i) the Bégin-Lamarche mine and concentrator, and
- ii) the Port Saguenay PPA plant.

Each leg has its own revenue, opex, sustaining capex and working-capital profile. For internal transfers of concentrate to the PPA plant, we apply a market-based transfer price pegged to the grade-adjusted phosphate-rock benchmark, so that both the mine and the acid plant stand on their own economics.

Volumes, ramp & pricing

We assume first production from Bégin-Lamarche in 2029, with utilization ramping to about 85% in 2030 and trending toward 95% from 2037 onward. At steady state, we model approximately 900ktpa of 40% P₂O₅ apatite concentrate. We allocate up to 400ktpa to the binding European offtake agreement and transfer the balance to the Port Saguenay acid complex. For the PPA plant, we assume a nameplate capacity of about 190ktpa on a P₂O₅ basis and a three-year ramp to 90-95% utilization.

For concentrate sold externally, we model realizations of roughly US\$940/t FOB on a 40% P₂O₅ basis, adjusted for grade and impurity penalties. For PPA, we anchor pricing to the India quarterly phosphoric-acid contract, quoted per tonne of P₂O₅ on a CFR India basis. We use a reference level of around US\$1,300/t P₂O₅ CFR India, consistent with recent settlements tracked by P₂O₅.com. and apply adjustments to arrive at a price estimate. This framework produces a modeled realized PPA price in the low-US\$900s per tonne FOB Saguenay.

Exhibit 13: PPA price realization

Line item	Value (US\$/t)
India quarterly phosphoric-acid contract price (per tonne of P ₂ O ₅ , CFR India)	1,300
<i>Stoic factor used for conversion</i>	<i>0.725</i>
P ₂ O ₅ conversion to 100% using stoic factor	943
Freight	(70)
Battery-grade purity premium, US\$/tonne	40
Final realized PPA price (FOB Saguenay)	913

Source: Company presentation

Operating costs

At steady state, we carry mine net cash cost at about US\$95/t of apatite concentrate after magnetite credits. This amount sits at the midpoint of management's US\$80-100/t guide and is consistent with the PEA life-of-mine framing once by-product credits are applied. For the PPA unit, we carry a placeholder opex of about US\$250/t on a 100% H₃PO₄ basis. Sulfur pricing, power and steam integration, purification-loop efficiency, and gypsum handling are the main drivers of the acid-plant cost stack. These will be refined at FEED.

Capex, sustaining, and working capital

For the mine and concentrator, we reflect initial capex of roughly C\$650-675mn, broadly consistent with the C\$675mn pre-production figure in the PEA. For the PPA plant, we frame initial capex just under C\$340mn, split over 2027-2028. We spread C\$317mn of mine sustaining capex over the 23 production years on a tapered schedule that starts light, peaks around mid-life, and eases in the final years. For the PPA facility, we carry sustaining capex at 2-4% of replacement cost per year, with heavier turnarounds every four to five years. We treat working capital conservatively in the first two operating years for each asset, then normalize thereafter. For the mine, we assume net working capital of 3-5% of concentrate

revenue, reflecting modest stockpiles and FOB terms. For the PPA plant, we assume 8-10% of the change in PPA revenue, reflecting higher inventories, receivables, and reagent cycles.

Free cash flow anchors

Management has indicated that post-tax FCF from the mine alone averages about US\$239mn per year across the core run and peaks near US\$290mn in the best year. Excluding tax lifts the average above US\$310mn. We use those anchors for the mine leg and then layer incremental PPA cash flow on top as the Port Saguenay plant ramps to steady-state margins.

Balance sheet and funding

We assume two final investment decisions, one for the mine and one for the PPA plant. The funding stack prioritizes export-credit and project debt, government programs, and strategic or partner equity, with modest corporate-level equity where needed. We model a minimal-inventory posture given mine-to-port proximity and continuous operations, and we do not assume dividends or buybacks before both assets are at a stable run-rate.

Exhibit 14: Project overview

Item	Mine & Concentrator	PPA Plant (Port Saguenay)
Asset role	Produce 40% P ₂ O ₅ apatite concentrate	Convert FP concentrate to MGA, then upgrade selected volumes to battery-grade PPA
Start, ramp	First ore 2029, 80% in 2030, ~95% from 2037 onward	Nameplate 190 ktpa (P ₂ O ₅ basis), 3-year ramp to 90-95% utilization
Steady-state volume	900ktpa concentrate	190ktpa P ₂ O ₅ equivalent output
Pricing anchor	Grade-adjusted rock benchmarks, FOB, with quality and impurity adjustments	India quarterly phosphoric-acid contract (CFR India, per mt of P ₂ O ₅), net-back to FOB Saguenay, plus battery-grade premium
Transfer price	Market-based, pegged to the rock benchmark on a 40% P ₂ O ₅ basis	n/a
Unit opex (steady state)	US\$95 per tonne of concentrate after by-product credits	US\$250 per tonne; sensitivity to sulfur, power/steam, purification loop efficiency
By-products	Magnetite credit embedded in mine net cash cost	Gypsum credit modeled as 6-8% of PPA revenue once stable
Initial capex	C\$675mn, pre-production build	C\$242mn in 2027-2028
Sustaining capex	C\$317mn over 23 operating years, tapered (light early, heavier mid-life, light late)	2-4% of replacement cost per year, heavier turnarounds every 4-5 years
Working capital policy	3-5% of concentrate revenue, modest stockpiles, FOB terms	8-10% of change in PPA revenue, to reflect inventory, receivables, reagents
Free cash flow anchors	Mgmt guide: post-tax FCF ~US\$239mn per year average for mine only, peak ~US\$290mn; pre-tax average above ~US\$310mn	Layer PPA FCF as ramp and margins stabilize
Funding stack	ECA and project debt, government programs, strategic equity, modest corporate equity if needed	Same approach, asset-level where practical

Source: Company filings

Valuation

We value FP using a sum-of-the-parts approach. We discount the mine free cash flow at 10% and acid-plant free cash flow at 12% to reflect process and market risks prior to qualification, apply project-stage risking prior to FID, and consolidate corporate items to equity value. We arrive at a per-share target price of C\$4.93 once FEED clarifies exact scope, capex by package, and the acid-plant operating stack. We recognize sensitivities to the India P₂O₅ contract, phosphate-rock benchmarks, capex, start dates, and utilization.

Exhibit 15: NAV

Mine NAV, C\$mn	417
PPA plant NAV, C\$mn	328
Cash, C\$mn	8
Total NAV	745
Shares outstanding, mn	151
NAV/share, C\$	4.93
Share price, C\$	0.76
<i>Upside</i>	548%
<i>Price/NAV</i>	0.15x
Key assumptions	
Discount rate – mine	12%
Discount rate – plant	14%
Mine cash opex/ton (adj for credits), US\$	95
PPA cash opex/ton, US\$	250
US\$/CAD	1.38
P ₂ O ₅ conversion factor	0.73
Battery grade purity premium, US\$/tonne	45
Reserves	
Total mine resources, million tonnes (Mt)	150.55
Grade estimate	5.76% P ₂ O ₅
Mine life	~24 years
Strip ratio	1.5:1 (waste:ore)
Implied mass yield to concentrate	13.7% (20.7 Mt conc./150.55 Mt feed)
Implied P ₂ O ₅ recovery:	90-95% (40% P ₂ O ₅ concentrate)

Source: Fertiliser Association of India, Argus Media, P205.com

FP is building exactly the type of Western PPA-linked platform the LFP cycle needs. The processing life of the mine and plant is twenty-three years under the current plan, the ramp reaches approximately 900ktpa of concentrate by steady state, and the logistics footprint at Port Saguenay converts geology into commercial advantage. As milestones accrue, we expect the market to migrate from “optionality” pricing toward a de-risked sum-of-the-parts view.

We are therefore initiating on FP with a Buy rating and a target price of C\$4.93, subject to FEED-level confirmation of capex scope and acid-plant operating economics.

Risks and catalysts

The principal risks are two-asset funding and potential dilution, construction and qualification risk at the acid plant, volatility in benchmark pricing and input costs, and permitting timelines. **The near-to-medium term catalysts** are feasibility updates at the mine and at the port facility, the assembly of export-credit and government support, the conver), and the port land

option into a lease, additional multi-year offtakes and/or volume expansions building on the existing binding European concentrate agreement (especially for PPA), and the progression of permits toward a notice to proceed.

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Buy, 30% or greater price appreciation in the next 12 months.

Buy-Extended, near-term EPS and/or revenue horizon is challenging with strong long-term appreciation possibility.

Buy-Emerging, initial stages with low revenue and the potential for large returns with higher risk and volatility.

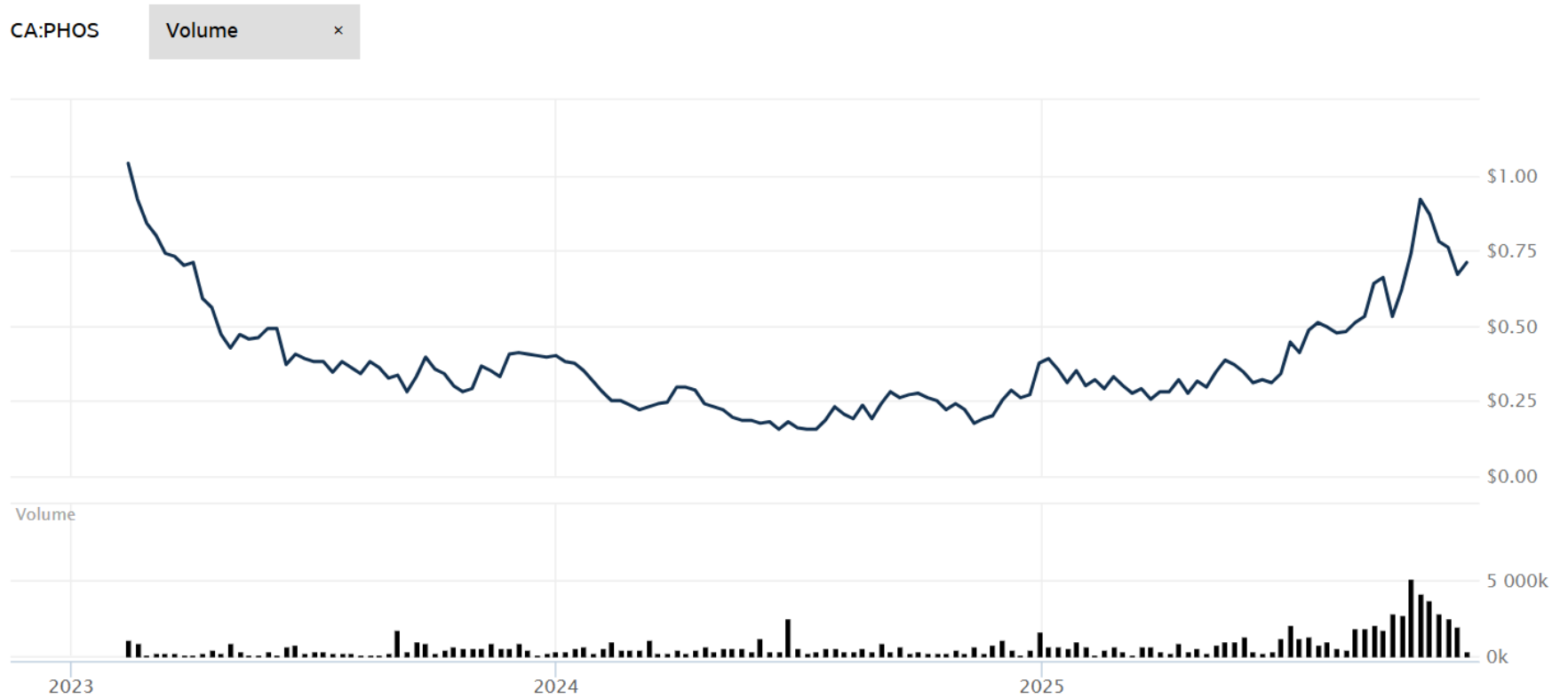
Hold, perform similar to market.

Sell, 30% or more decline in the next 12 months.

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5-Year Chart



Appendix: valuation model

First Phosphate Corp CSE: PHOS; OTC: FRSPF Sum-of-the-parts / NAV model C\$'m unless otherwise stated	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Mining																											
ROI mined, ktpa	3,460	5,309	5,309	5,309	6,989	6,989	6,989	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
Nameplate concentrate capacity (ktpa)	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Recovery to concentrate	10%	80%	85%	88%	89%	90%	92%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
Apatite concentrate (kt, ~40% P ₂ O ₅)	90	720	765	792	801	810	810	810	828	855	855	855	855	855	855	855	855	855	855	855	855	855	837	828	828	810	810
Realized apatite price, US\$/t, adj for freight	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325	325
Apatite revenue, US\$'m	29	234	249	257	260	263	263	263	269	278	278	278	278	278	278	278	278	278	278	278	278	278	272	269	269	263	263
opex (adj for magnetite credit)	(9)	(9)	(9)	(9)	(12)	(94)	(100)	(104)	(105)	(106)	(106)	(109)	(112)	(112)	(112)	(112)	(112)	(112)	(112)	(112)	(112)	(110)	(109)	(109)	(109)	(106)	(106)
Change in net working capital	-	-	-	-	2	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0)	-	-	(0)	-
Capex	(6)	(6)	(338)	(338)	(6)	(8)	(9)	(10)	(11)	(13)	(15)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(15)	(15)	(14)	(13)	(13)
FCF (pre-tax)	(15)	(15)	(347)	(347)	25	232	235	242	243	244	243	247	256	255	255	255	255	255	255	255	255	249	248	248	249	244	244
Effective tax rate	10%	12%	15%	15%	15%	15%	15%	15%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Income tax	(2)	(28)	(35)	(36)	(2)	(28)	(35)	(36)	(37)	(37)	(61)	(62)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(62)	(62)	(62)	(62)	(61)	(61)
FCF (post-tax)	(15)	(15)	(347)	(347)	22	204	199	206	207	208	182	185	192	192	192	192	192	192	192	192	192	187	186	186	187	183	183
Discount factor (12% WACC)	1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36	0.32	0.29	0.26	0.23	0.20	0.18	0.16	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.07	0.06	0.05
Mine NAV (PV of FCF)	(15)	(13)	(276)	(247)	14	116	101	93	84	75	59	53	49	44	39	35	31	28	25	22	20	17	15	14	12	11	10
Mine NAV, C\$'m																											
	417																										
PPA plant																											
Nameplate capacity (ktpa, P ₂ O ₅ basis)	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190
Utilization	10%	70%	75%	80%	80%	85%	85%	85%	90%	90%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	90%	90%	88%	88%
PPA sales volume (kt, P ₂ O ₅ basis)	10	133	143	152	152	162	162	162	171	171	175	175	175	175	175	175	175	175	175	175	175	175	171	171	167	167	
Realized PPA price, US\$/t P ₂ O ₅ , FOB Saguenay	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918
PPA revenue, US\$ m	9	122	131	139	139	148	148	157	157	160	160	160	160	160	160	160	160	160	160	160	160	160	157	157	153	153	
By-product credits - gypsum/others US\$'m	0	7	10	11	11	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	
By-product credit as % of PPA revenue	3%	6%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Total PPA plant revenue, US\$'m	9	129	141	151	151	160	160	169	169	173	173	173	173	173	173	173	173	173	173	173	173	173	169	169	166	166	
Total PPA plant revenue, C\$'m	12	179	195	208	208	221	221	234	234	239	239	239	239	239	239	239	239	239	239	239	239	239	239	234	234	229	229
Feedstock cost - apatite transfer	139	(144)	(164)	(176)	(180)	(184)	(184)	(192)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(204)	(196)	(192)	(192)	(184)	(184)	
Cash opex, C\$'m	(3)	(46)	(49)	(52)	(52)	(56)	(56)	(59)	(59)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(59)	(59)	(58)	(58)	
Change in net working capital	-	-	-	-	1	13	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	(0)	-	-	(0)	-
Capex	(121)	(121)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
FCF (post-tax)	(121)	(121)	3	139	140	149	148	159	158	169	168	172	171	171	171	171	171	171	171	171	171	171	171	167	168	163	164
Effective tax rate	10%	12%	15%	15%	15%	15%	15%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Tax charge	(0)	(17)	(21)	(22)	(22)	(24)	(39)	(42)	(42)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(43)	(42)	(42)	(41)	(41)
FCF (post-tax)	(121)	(121)	3	122	119	127	126	135	118	126	126	129	129	129	129	129	129	129	129	129	129	129	129	125	125	122	123
Discount factor (14% WACC)	0.77	0.67	0.59	0.52	0.46	0.40	0.35	0.31	0.27	0.24	0.21	0.18	0.16	0.14	0.12	0.11	0.09	0.08	0.07	0.06	0.06	0.06	0.05	0.04	0.04	0.03	0.03
PV of FCF	(93)	(82)	2	63	54	51	44	42	32	30	26	23	21	18	16	14	12	11	9	8	7	6	5	5	4	4	
PPA NAV																											
	328																										
SoTP Valuation																											
Mine NAV, C\$'m	417																										
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Total mine resources, million tonnes (Mt)	150.55																										
Grade estimate	5.76% P ₂ O ₅																										
Mine life	~24 years																										
Strip ratio	~1.5:1 (waste:ore)																										
Implied mass yield to concentrate	13.7% (20.7 Mt conc./150.55 Mt feed)																										
Implied P ₂ O ₅ recovery:	90-95% (40% P ₂ O ₅ concentrate)																										

Price Target Sensitivity Analysis:

Mine discount rate	Apatite price (adjusted), US\$/t				
	225	275	325	375	