



**FPX Nickel**

TSX-V:FPX | OTCQB:FPOCF

---

# **Baptiste Nickel Project Preliminary Feasibility Study Summary of Results**

September 2023

---

[fpxnickel.com](https://fpxnickel.com)

## CAUTIONARY NOTE

# Forward Looking Statements

This presentation contains certain “forward looking statements” within the meaning of “forward looking information” under applicable Canadian securities laws, concerning the business, operations and financial performance and condition of FPX Nickel Corp. (“FPX Nickel” or “the Company”) Forward looking statements include, but are not limited to, statements with respect to the future price of nickel and certain other commodities, the estimation of mineral reserves and resources, the realization of mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, success of exploration activities, permitting time lines, requirements for additional capital, government regulation of mining operations, and environmental risks Forward looking statements are statements that are not historical fact Forward looking statements can be identified by the use of forward looking terminology such as “plans”, “expects”, “is expected”, “expected”, “budget”, “target”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, “or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “or “will be taken”, “or “be achieved” Forward looking statements are based on the beliefs, estimates and opinions of the Company’s management that, while considered reasonable, are inherently subject to significant business, economic and competitive uncertainties and contingencies Readers are cautioned that such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of FPX Nickel to be materially different from the Company’s estimated future results, performance or achievements expressed or implied by those forward looking statements, and the forward looking statements are not guarantees of future performance These risks, uncertainties and other factors include, but are not limited to significant depreciation of metals prices changes in equity ownership accidents and other risks associated with mining, exploration, development and production operations unanticipated geological factors possible variations in mineral resources and reserves, grade or recovery rates delays in obtaining governmental approvals or financing on acceptable terms, or in the completion of development activities and other risks of the mining industry Although FPX Nickel has attempted to identify important factors that could cause actual results to differ materially from those contained in forward looking statements, there may be other factors that cause actual results not to be as anticipated, estimated or intended There can be no assurances that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements FPX Nickel does not undertake to update or revise any forward looking statements that are included in this document, except as required by applicable securities laws

---

## TECHNICAL INFORMATION


All technical information in this presentation was prepared under the supervision of FPX Nickel’s SVP, Projects & Operations, Andrew Osterloh, P.Eng., a qualified person consistent with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43 101”)

# Baptiste Nickel Project

- Municipality
- Mine/Project
- - - Rail
- ⚓ Deep Water Port



PACIFIC  
OCEAN

**Baptiste Nickel Project**

Road Accessible	Access to BC Hydro Grid	Recent Permit Precedence
-----------------	-------------------------	--------------------------

● Kemess

● Stardust

● Kwanika

**Mt. Milligan Mine:**  
60,000 tpd open pit  
Commissioned in 2013

● Mt. Milligan

● Fort St. James

● Burns Lake

● Endako

● Vanderhoof

● Prince George

**Blackwater Project:**  
Receipt of full suite of permits in 2023

● Blackwater

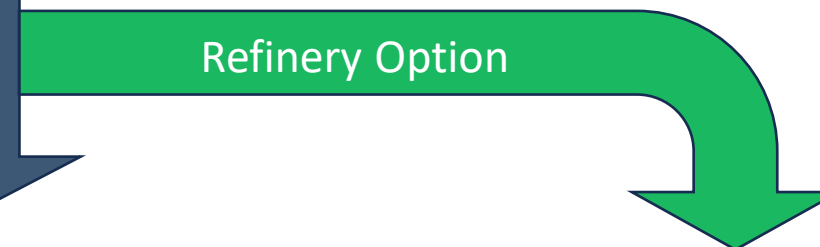
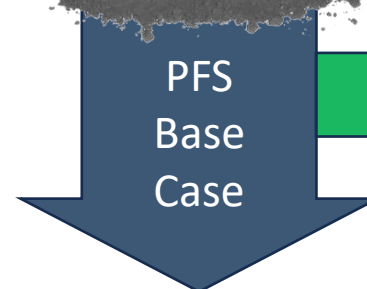
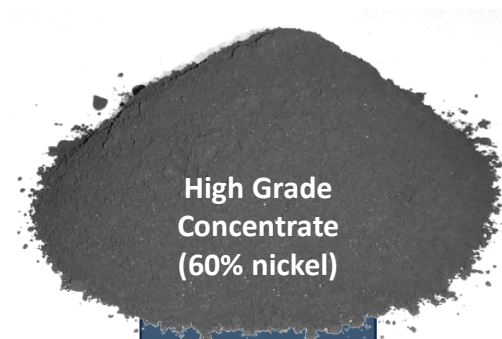
to Vancouver  
530km



Baptiste Nickel Project

# Strategic Flexibility

Premium Nickel Product Suitable for Stainless Steel and EV Battery Material Supply Chains



## PFS Base Case

100% to Stainless Steel Market

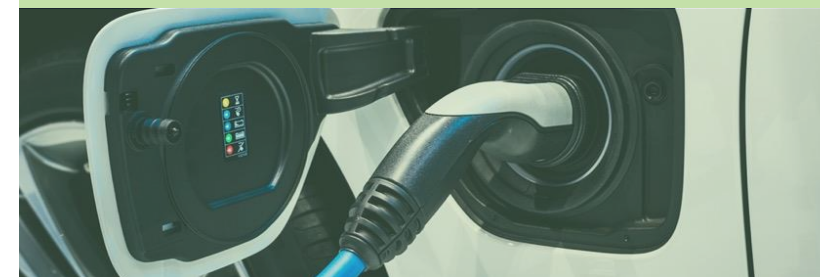
- Direct sale to stainless steel producers
- Comparable to FeNi products sold by Anglo, etc.
- Bypass Ni smelters → premium pricing



## Refinery Option

40,000 tpy to EV Supply Chain

- Optimized flowsheet based on testwork
- Demonstrated route to battery-grade  $\text{NiSO}_4$
- Balance of nickel to stainless steel producers



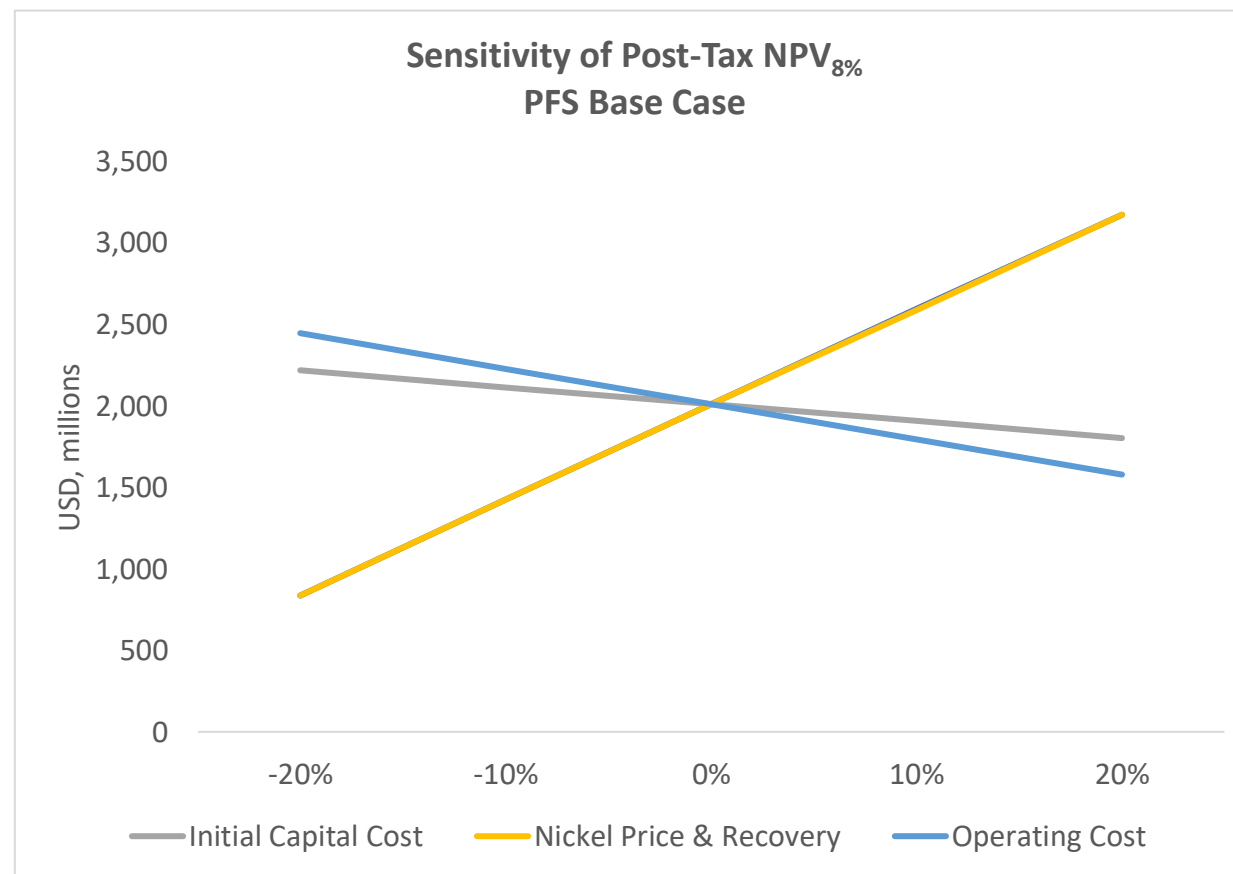
# PFS Base Case Economics

## Key Assumptions

▪ Nickel Price	8.75 US\$/lb
▪ FeNi Payability	95%
▪ MHP Payability	87%
▪ Discount Rate	8%
▪ CAD to USD rate	0.76

Opex & Post-Tax Metrics	Value
C1 Operating Cost (US\$ /lb Ni)	3.70
NPV <sub>8%</sub> (US\$, millions)	2,010
IRR	18.6%
Payback (years)	3.7
Mine Life to Payback (ratio)	7.8
NPV <sub>8%</sub> to Initial Capex (ratio)	0.92

Note: Above C1 Operating Costs exclusive of any byproduct credits



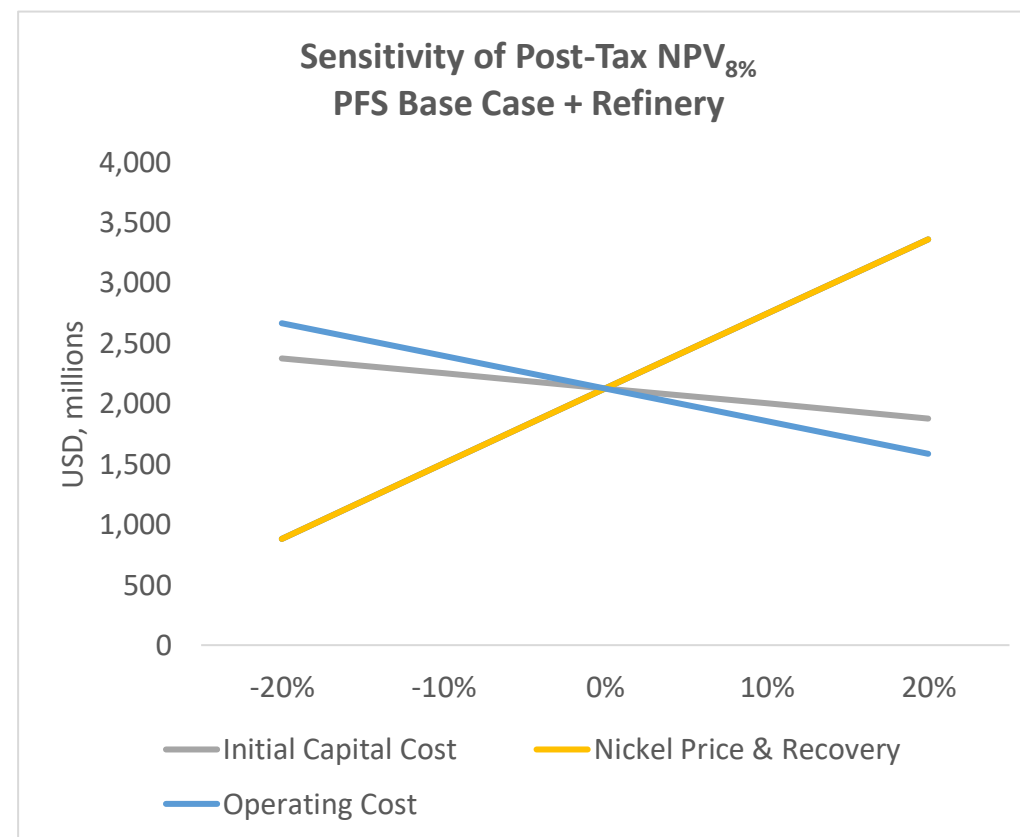
# Refinery Option Economics

## Key Assumptions

▪ Nickel Price	8.75 US\$/lb
▪ Cobalt Price	15.00 US\$/lb
▪ Copper Price	3.50 US\$/lb
▪ NiSO <sub>4</sub> Premium	1.00 US\$/lb
▪ Discount Rate	8%
▪ CAD to USD rate	0.76

Opex & Post-Tax Metrics	Base Case + Refinery	Refinery Only
C1 Operating Cost (US\$ /lb Ni)	3.89	0.79
NPV <sub>8%</sub> (US\$, millions)	2,127	63
IRR	17.7%	9.9%
Payback (years)	3.9	7.5

Note: Above C1 Operating Costs inclusive of Co & Cu byproducts from refinery





## Baptiste Nickel Project

# PFS Fundamentals

- 29-year mine life incorporating a phased development approach:
  - Phase 1 Y1-9 108,000 tpd
  - Phase 2 Y10-29 162,000 tpd
- The PFS incorporates results of FPX's extensive de-risking process, including:
  - In-fill drilling & more representative modelling approach yielded a 7% increase in mill feed grade
  - Extensive metallurgical program which yielded a 4% increase in recovery
  - Engineering trade-off studies to define best value configurations
  - 2 seasons of geotechnical drilling
  - 18 months of environmental & cultural baseline studies
  - Initial community engagement workshops

## Baptiste Nickel Project – Reserves

Category	Tonnes (Mt)	DTR Ni (%)	Total Ni (%)	Contained Metal (kt DTR Ni)	Contained Metal (kt Total Ni)
Proven	-	-	-	-	-
Probable	1,488	0.13	0.21	1,933	3,125
<b>Proven + Probable</b>	<b>1,488</b>	<b>0.13</b>	<b>0.21</b>	<b>1,933</b>	<b>3,125</b>

### Notes:

1. Mineral Reserves are reported effective September 6, 2023.
2. The Qualified Person for the estimate is Mr. Cristian Hernan Garcia Jimenez, P.Eng, an independent consultant.
3. Mineral Reserves were developed in accordance with CIM Definition Standards (2014).
4. Mineral Reserves are reported using a fixed 0.06% DTR Ni cut-off grade, which represent approximately US\$9/t NSR value, which is above the economic cut-off grade of US\$5.5/t.
5. The Mineral Reserves are supported by a mine plan, based on a pit design, guided by a Lerchs Grossmann (LG) pit shell. Inputs include \$8.75/lb Ni, \$1.98/t mining opex, \$3.72/t process opex, \$1.10 /t G&A opex, pit slopes varying from 42-44 degrees, and 85% process recovery
6. Life-of-mine strip ratio is 0.56 (W:O), excluding capitalized pre-stripping.
7. Ore and contained nickel tonnes are reported in metric units and grades are reported as percentages.
8. All figures are rounded to reflect the relative accuracy of the estimate. Totals may not sum due to rounding as required by reporting guidelines.

# Baptiste Nickel Project

## Mining

### Conventional Open Pit

- Mining commences in SE of deposit:
  - Targets Phase 1 head grade
  - Defers stripping to Phase 2
- Strip Ratio, excluding capitalized pre-stripping:
  - LOM 0.56
  - Phase 1 0.41

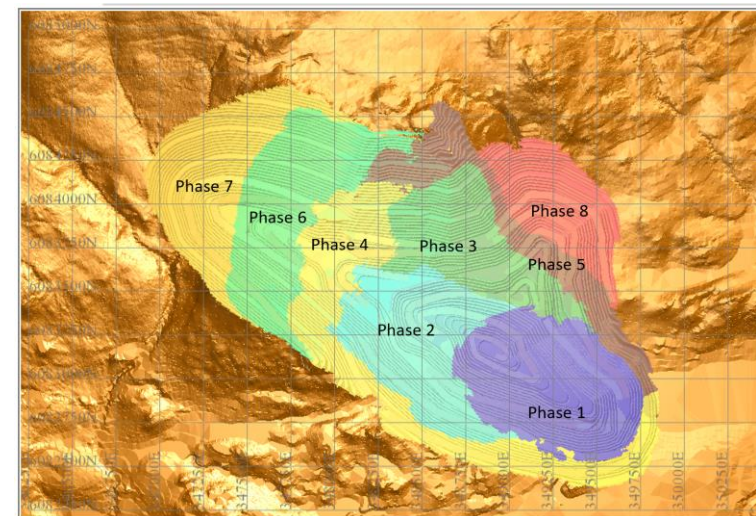
### Equipment Selection

- Loading & Drilling: now electric equipment
- Haulage: 300 Ton class trucks
- Decarbonization study planned for 4Q23

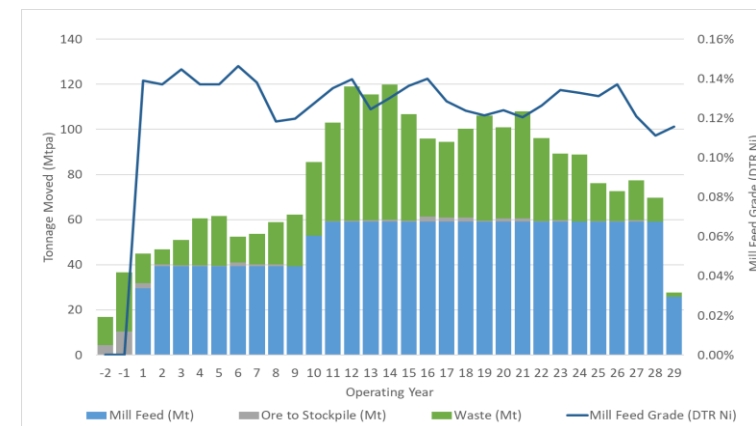
### Mine Design Basis

- Pit slopes flattened from PEA
  - From 45 to 42-44 degrees
- Owner-purchased fleet

### PFS Mining Sequence



### Material Moved by Year





# Baptiste Nickel Project

## Processing

### Robust Metallurgical Program

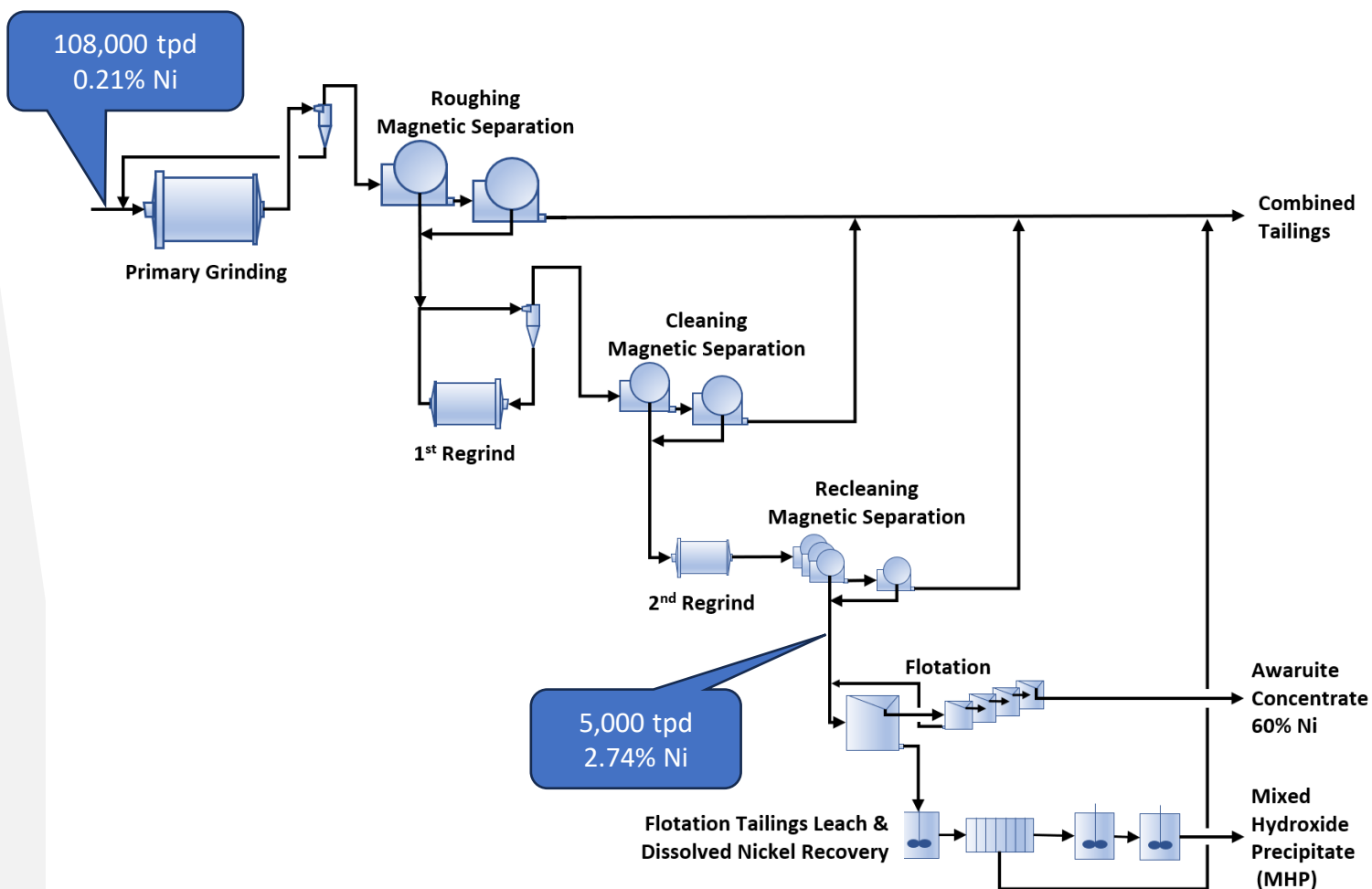
- Multiple bench-and pilot-scale programs with leading labs & met team
- Demonstrated 4% increase in DTR Ni recovery
  - 88.7% for PFS (vs. 84.7% from PEA)

### Conventional Process

- SAG-mill grinding
- Magnetic separation sequentially rejects a total of 95% of fresh plant feed
- Flotation then separates magnetite and awaruite to produce a 60% Ni concentrate

### New Flotation Tails Leach Circuit

- Mild, atmospheric leach
- Simple purification to a high-Ni MHP product
- Accounts for 7% of total Ni production



# Baptiste Nickel Project

## Project Facilities

### Compact Footprint

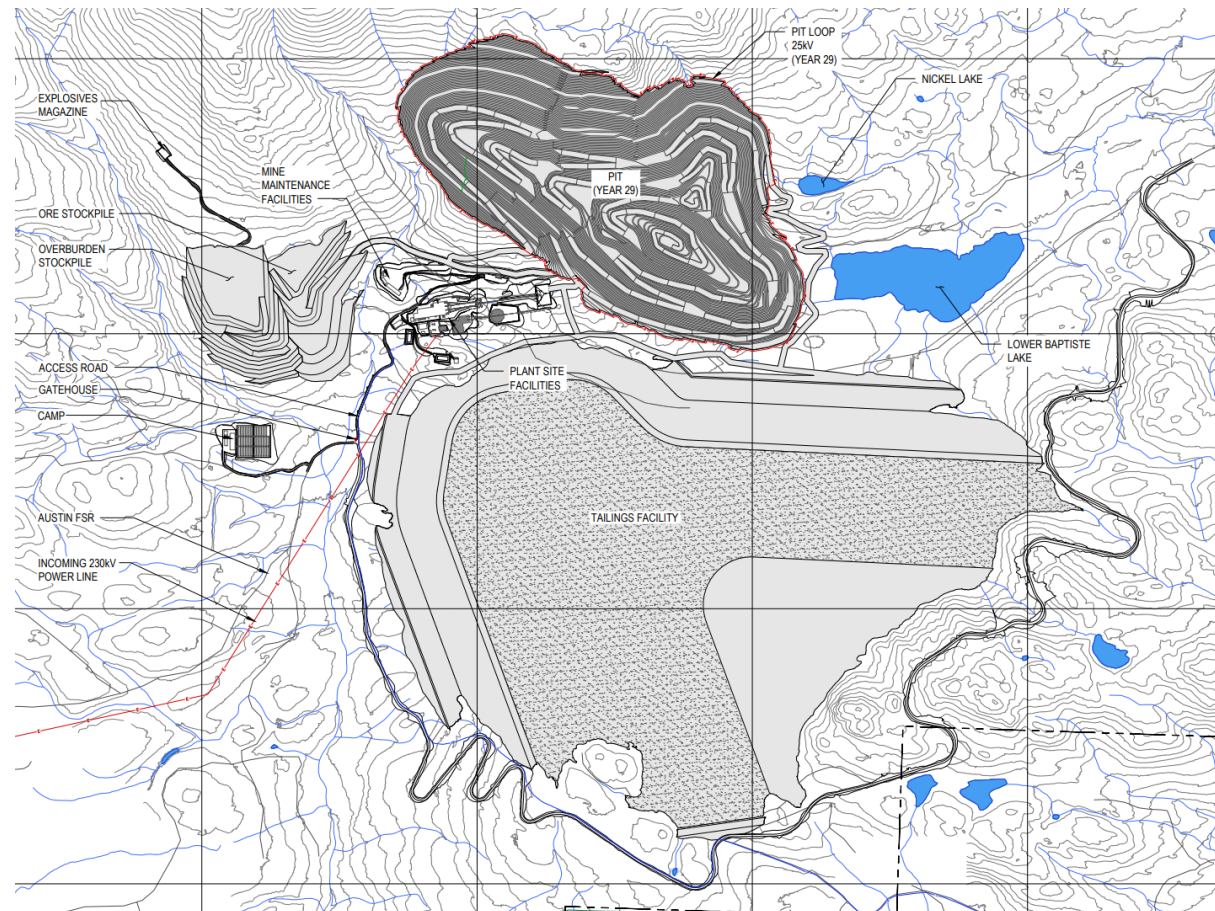
- Reduced by 33% from PEA

### Integrated Waste Facilities

- Pre-stripping material and mine waste integrated into tailings facility
  - No permanent external waste dumps
  - Elimination of PEA's sand dam concept

### Infrastructure & Logistics

- Camp for construction & operations
- Upgrades & expansion to existing FSR network
- Connection to BC Hydro grid
- High-value product; Opex considers bagging, containerizing, and shipment to Asia



# Baptiste Nickel Project

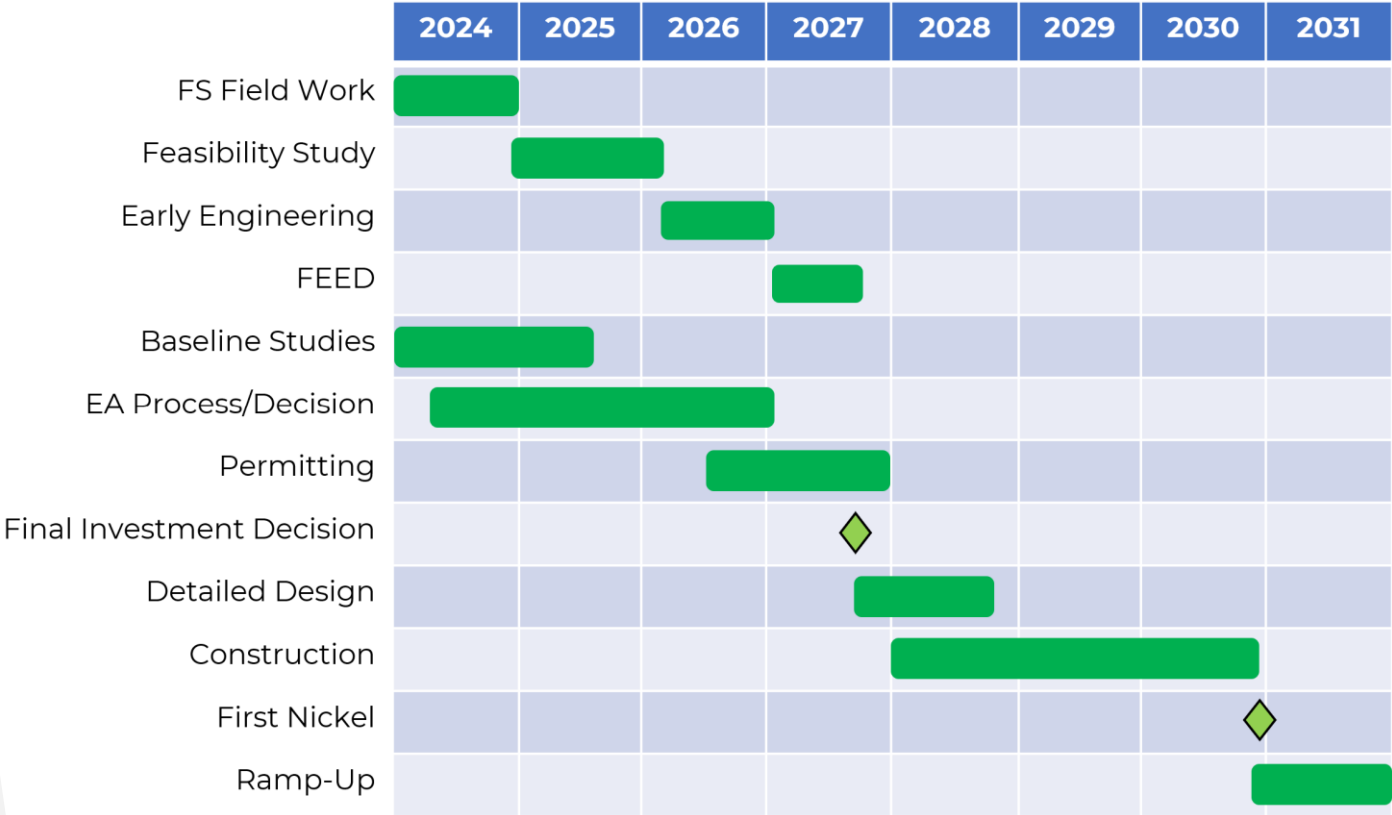
## Project Execution

### Critical Path

- Firmly runs through environmental assessment (EA) and permitting process
- Engineering studies approximately 9-12 months off critical path
- FPX targeting submission of Initial Project Description in mid-2024, to initiate the EA process

### Key Next Steps

- Continued early engagement with local communities
- Continued cultural and environmental baseline data collection
- Initiate key environmental and engineering studies to support greater project definition in advance of entering EA process



# Cost Estimates

## Estimate Basis:

- Initial: AACE Class 4
- Expansion & Sust.: AACE Class 5
- Closure: order of magnitude
- CAD:USD Exchange = 0.76
- Initial capital intensity managed through:
  - Deferred mining approach
  - Progressive concentration
  - Efficient footprint
  - Fit-for-purpose approach
- Opex developed bottoms-up, but benchmarked against comparable regional operations
- Additionally, closure capital costs of \$284M are included in the financial model

## Capital Costs (US\$, millions)

Category	Initial	Expansion	Sustaining
Mining	325	68	643
Processing	845	409	421
Infrastructure	233	34	-
Total Direct Costs	1,403	511	1,064
Indirect & Owner's Costs	507	149	20
Contingency	272	103	97
<b>Total Capital Costs</b>	<b>\$2,182</b>	<b>\$763</b>	<b>\$1,181</b>

## Operating Costs (US\$/t milled)

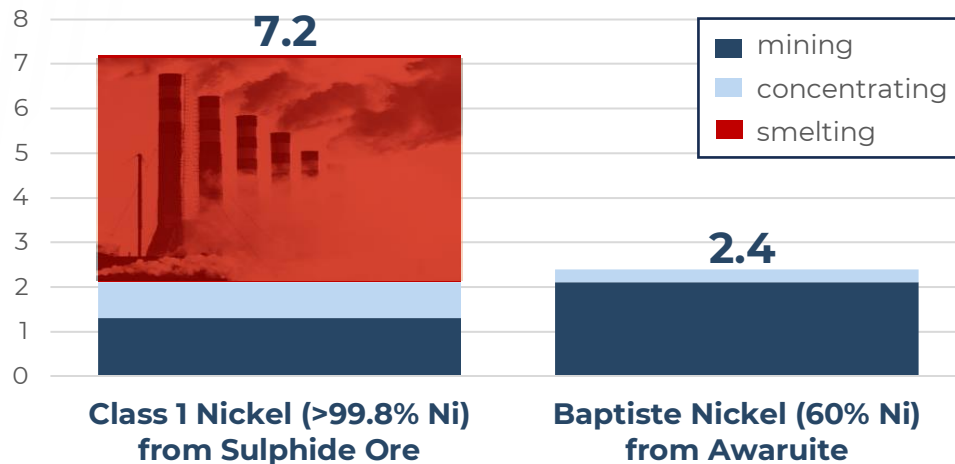
	Phase 1	Phase 2	Total
	Years 1-9	Years 10-29	LOM
Mining	2.59	3.31	3.14
Processing	3.75	3.59	3.63
G&A	1.23	1.05	1.09
Concentrate Transport	0.31	0.29	0.29
<b>Total</b>	<b>\$7.88</b>	<b>\$8.24</b>	<b>\$8.15</b>
C1 Operating Cost (US\$ /lb Ni)	\$3.48	\$3.76	\$3.70

1. C1 operating costs are the costs of mining, milling and concentrating, on-site administration and general expenses, metal product treatment charges, and freight and marketing costs. No byproduct credits are included in the above figures. These are expressed on the basis of per unit nickel content of the sold product.

# The Green Choice For Nickel

## Lowest Decile Carbon Intensity

- FPX calculations indicated a 2.4 tCO<sub>2</sub>/t Ni carbon intensity on a Scope 1 & 2 basis
- BC's hydro-powered grid carries very low carbon intensity
- PFS includes electrified pit
- Post-PFS trade-off study will evaluate haulage decarbonization



Source:

- Class 1 Nickel figures from Mistry et al, 2016
- Baptiste Nickel figures based on FPX internal calculation considering PFS configuration

## Other Environmental Strengths

- Product quality suitable for direct feed to stainless steel
  - Totally eliminates any need for intermediate smelting
- Low mine strip ratio
- Mine waste integrated into tailings facility
- Geochemistry of waste rock and tailings materials (very low potential for acid rock drainage)
- PFS footprint reduced by 33% (vs. PEA)
- Utilize existing FSR network as foundation for an all-season access road
- PFS water modelling indicates a zero-discharge basis (only modest quantity of fresh water required for potable and make-up purposes)
- PEA's impact to Lower Baptiste and Nickel Lakes minimized through inclusion of buffer zones



# Baptiste Nickel Project

## Refinery Option

### Location

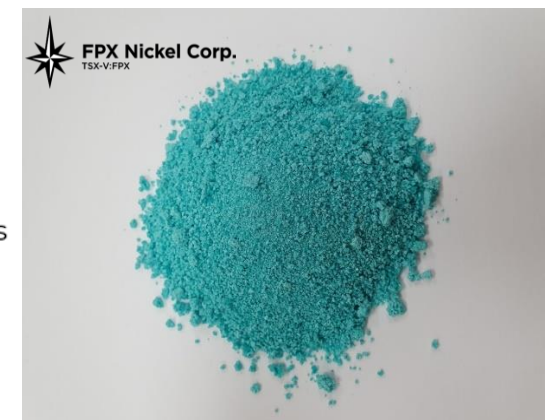
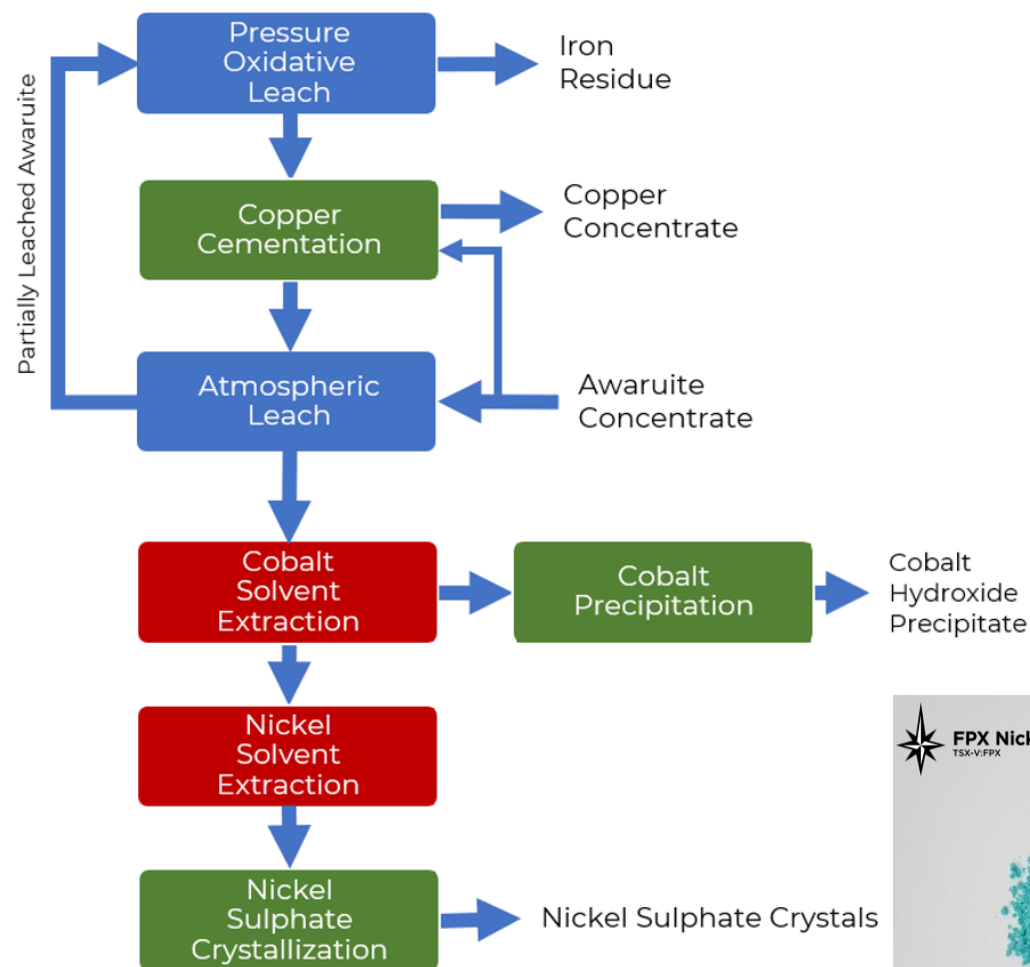
- Assumed semi-urban setting in Central BC
- Ideally co-located in integrated battery hub

### Process

- Sized for 40,000 tpa of Ni in nickel sulphate
- Simple flowsheet & conventional unit operations
- Optimized leaching circuit which reduces downstream purification requirements
- Production of  $\text{NiSO}_4$  crystals included
- Valorization of secondary metals:
  - Co MHP      700 tpy Co
  - Cu Conc.      300 tpy Cu

### Infrastructure

- Minimal infrastructure requirements
- Primary waste is hematite and sodium sulphate (no economic benefit considered in study)



# Refinery Option

## Basis of Estimate

- AACE Class 5
- CAD/USD 0.76

## Economic Criteria

- Ni Price 8.75 US\$/lb
- Co Price 15.00 US\$/lb
- Cu Price 3.50 US\$/lb
- NiSO<sub>4</sub> Premium 1.00 US\$/lb

## Capital Costs (US\$, millions)

Category	Base Case + Refinery	Refinery Only
Direct Costs	1,665	261
Indirect & Owner's Costs	593	86
Contingency	372	100
<b>Total</b>	<b>\$2,629</b>	<b>\$448</b>

## Refinery Economics (US\$, post tax)

	Base Case + Refinery	Refinery Only
C1 Operating Cost (US\$ /lb Ni)	3.89	0.79
NPV <sub>8%</sub> (US\$, millions)	2,127	63
IRR	17.7%	9.9%
Payback (years)	3.9	7.5

*Note: Above C1 Operating Costs inclusive of Co & Cu byproducts from refinery*

# Share Structure & Financial Position

## Capital Structure

TSX-V: FPX | OTCQB: FPOCF

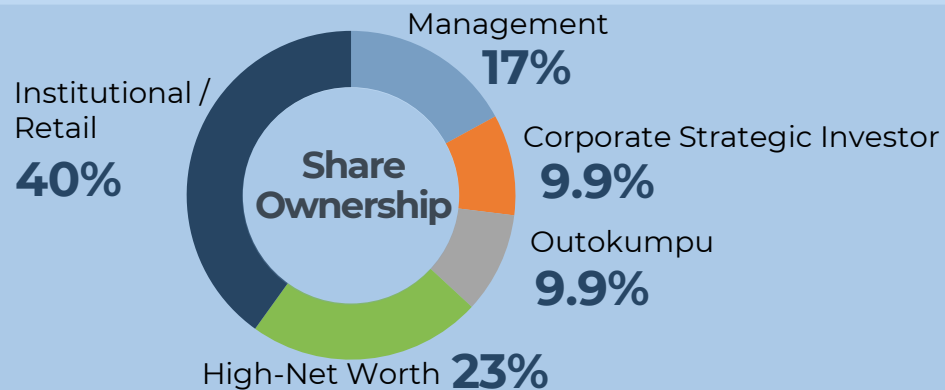
52-week Range: C\$ 0.31 –C\$ 0.64

Shares Outstanding: 273.9 M (basic) ; 287.7 M (diluted)

Market Capitalization (basic): C\$110 million

Cash and working capital: ~C\$31 million

No debt, No warrants | Fully Funded for 2023 & 2024



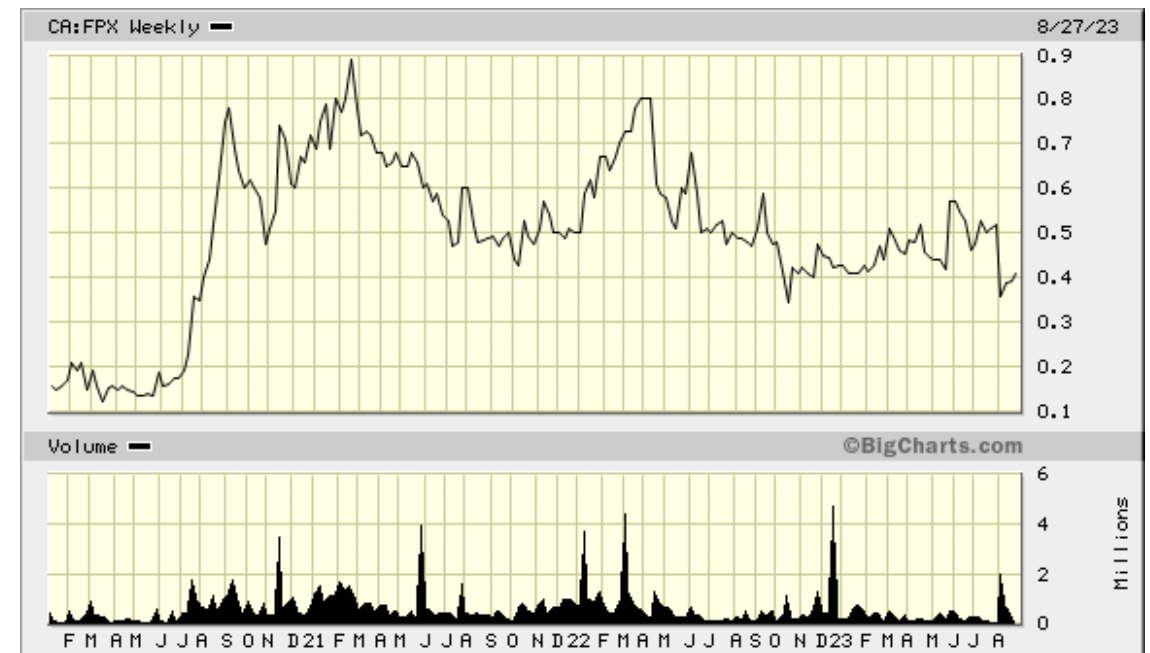
## Analyst Coverage



## ETF Inclusion



## FPX (TSX-V): 2020-2023 Price Chart (C\$/share)







# FPX Nickel

TSX-V:FPX | OTCQB:FPOCF

---

Phone: +1 604-681-8600  
[ceo@fpxnickel.com](mailto:ceo@fpxnickel.com)

---

Suite 320 – 1155 West Pender Street  
Vancouver, BC Canada  
V6E 2P4

---

Twitter: @FPX\_Nickel  
[fpxnickel.com](http://fpxnickel.com)