Premium Nickel Resources Ltd.

METALS & MINING

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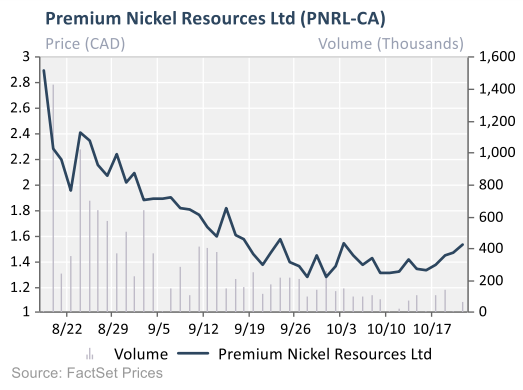
All figures in C$, unless otherwise noted.

Rating: Buy
Initiating Coverage
12-Month Target: $4.00

Price		**$1.45**
Ticker		**PNRL-T**
FYE		31-Dec
Potential ROR (incl. dividend)		176%
	Basic (M)	FD (M)
Shares O/S	115	128
Market Cap ($M)	$166.96	$185.52
Net Debt ($M)		-$8.75
Enterprise Value FD ($M)		$176.77
NAV/sh (FD)		**$5.10**

Historic Resource	Tonnes (MM)	NiEq (%)	NiEq (Blbs)
Selibi Mine			
M&I	17.8	1.45%	571
Inferred	15.3	1.08%	365
Total M&I&I	33.2	1.28%	936
Selkirk Mine			
M&I	124.0	0.52%	1,432
Inferred	11.3	0.58%	144
Total M&I&I	135.3	0.53%	1,576



Source: FactSet, Company filings, Paradigm Capital Inc.

Company description: Premium Nickel Resources Ltd. is the amalgamated company of North American Nickel (TSX-V:NAN) and Premium Nickel Resources (a private Canadian company). PNRL is a mineral exploration company focused on the discovery and advancement of high-quality nickel-copper-cobalt-platinum group metals. The flagship assets within the PNRL portfolio are the recently acquired Selebi Ni-Cu-Co mine and Selkirk Ni-Cu-PGM mine both located in Botswana. Selebi and Selkirk are high-quality assets previously owned by a parastatal corporation of Botswana (BCL). PNRL is evaluating redevelopment options to produce high-quality nickel and copper concentrates which are of strategic value and sought after by European battery and car manufacturers.

Botswana: Rejuvenating Its Nickel Industry

Investment Thesis

In January 2022, Premium Nickel Resources Ltd. (PNRL) executed a binding asset purchase for the former Selebi mining assets of BCL in Botswana which were liquidated after falling into receivership in 2016. Subsequently, the Selkirk mine, formerly owned by Tati Nickel Mining, was acquired in August. PNRL now owns a 100% interest in two past-producing nickel mines in Botswana free and clear of any legacy liabilities. Selebi is blessed with excellent infrastructure and a high-grade historic resource which could be rapidly advanced to development and see PNRL become a significant nickel producer by 2025.

Highlights

- **The Selebi Nickel-Copper Deposits |** The Selebi complex consists of three mineralized zones: Selebi, Selebi North and Selebi Central. The former two represent the higher-grade material in a historic, non-NI-43-101 resource of 15.9Mt grading on average 0.92% nickel and 1.37% copper. Past production from 1971 until closure due to a smelter failure in 2016 was initially from the Phikwe open pit (1971–1980) and subsequently from the Selebi underground mines where ~40Mt were extracted. Infrastructure is excellent with two functional shafts capable of hoisting 1.5Mt annually.
- **Great Starting Resource with Potential to Increase |** Despite the current resource being non-NI-43-101, mining at Selebi and Selebi North did not stop because of a lack of ore. Limited drilling will be required to increase the status to NI-43-101 and drilling extensions of both deposits are expected to add significant tonnage. PNRL is targeting an initial resource of 33Mt enabling a 20-year mine life. In addition, high-powered geophysics has outlined several high-quality greenfield targets to be tested.
- **Selkirk – A Perfect Second Act |** Selkirk is located 75 kilometres north of Selebi and could potentially be a standalone open-pit operation rivaling Selebi in metal output. Anglo American made the initial discovery and operated a high-grade underground operation mining 1Mt from 1989 to 2002. While a meaningful amount of high-grade ore still exists, PNRL is considering a lower-grade bulk tonnage open-pit operation. While several resource calculations have been completed by the various owners, the most relevant was one completed in 2011 by Norilsk which estimated a non-NI-43-101 open-pit resource of 135Mt grading 0.23% nickel and 0.27% copper.
- **Next Steps |** Priority is to complete enough drilling at Selebi to convert the current historic resource to a NI-43-101-compliant resource and to drill extensions of the existing ore bodies. This is expected to increase the resource to ~33Mt prior to completion of a Preliminary Economic Assessment (PEA) in 2023. High-priority geophysical targets are to be tested in areas outside the current known resources. As for Selkirk, adequate drilling has been conducted but additional effort will be required to verify the existing database to allow for an initial technical report restating historical resources prior to year-end 2022 and a subsequent PEA in 2023.

Valuation & Conclusion

PNRL's Botswana assets have long operating histories and substantial historic resources remaining. Redevelopment of the Selebi and Selkirk mines can provide strategic new sources of nickel-copper sought after by Western markets. We adopt a pounds-in-the-ground valuation metric to arrive at our $5.10/share NAV and apply a 0.75x multiple for development-stage assets to arrive at our $4.00 target. We are initiating coverage of PNRL with a Buy recommendation.

Table of Contents

Company Description

Premium Nickel Resources Limited (PNRL) is a unique and new name in the sulphide nickel mining space. PNRL owns the past-producing Selebi and Selkirk nickel-copper-cobalt mines in Botswana previously operated by BCL, a parastatal company of Botswana. With substantial historical resources remaining, and promising exploration results to date pointing to significant upside potential, PNRL is pursuing a modern redevelopment plan to produce separate high-quality copper and nickel-cobalt concentrates for sale to international smelters and/or direct sale to European battery manufacturers.

PNRL was formed via a reverse takeover transaction between North American Nickel (formerly listed on the TSX Venture Exchange under the ticker NAN) and Premium Nickel Resources Corp. (PNR), a private Canadian company. PNRL's flagship assets are the recently acquired and past-producing BCL-owned Selebi and Selkirk mines located in Botswana. In addition, PNRL maintains 100% ownership of the earlier-stage North American Nickel asset portfolio consisting of the Maniitsoq nickel-copper-cobalt project in Greenland, five prospective exploration permits in the Imilchil area of Morocco, and the Post Creek and Halcyon exploration properties in Ontario, Canada and adjacent to KGHM's past-producing Podolsky nickel-copper mine.

Figure 1: Premium Nickel Resources – Company Assets

Source: Company filings

Investment Thesis

There are very few new sources of sulphide nickel in the global development pipeline that are ready to be exploited to meet the growing demand for class 1 metal desired by battery and automotive manufacturers. In our view, this makes Premium Nickel a rare and exceptional opportunity for investors. PNRL is a new public entity and has recently closed on the acquisition of two high-quality past-producing nickel-copper mines that have been out of the public eye for multiple years. Located in Botswana, not only are these assets in a stable and mining friendly jurisdiction, but they are also ideally positioned and possibly strategic resources sought after by European automotive and battery manufacturers in particular.

In the coming 12–18 months, we expect PNRL to progress rapidly in its evaluation efforts to ready the flagship Selebi mine and the highly prospective Selkirk mine for redevelopment and potential production as early as 2025. Combined, we estimate the Selebi and Selkirk mines are capable of producing 20–25Kt nickel and 35–45Kt copper, plus valuable cobalt and palladium by-products.

Botswana Assets: Background

The Selebi and Selkirk mines in Botswana are past-producing mines that were placed on care and maintenance in 2016 following the financial collapse of Bamangwato Concessions Ltd. (BCL), which was a parastatal corporation of Botswana originally formed in 1956 to explore and develop nickel and copper assets in-country. PNRL executed a binding asset purchase agreement for the Selebi mine and closed the acquisition on January 31, 2022. A binding asset purchase agreement for the Selkirk mine was subsequently executed in February and PNRL completed the acquisition in August.

PNRL now owns 100% of the Selebi and Selkirk mines free and clear of any legacy liabilities. Both mines remain fully permitted and have extensive existing infrastructure in place. The flagship Selebi mine is a high-grade underground mine with ~15Mt of historic resource in the highly prospective and open for expansion Selebi and Selebi North zones, and ~30Mt of historic resource in all deposit areas. The Selkirk mine, which was previously mined by underground methods as a high-grade direct-to-smelter ore source, has a previously unexploited ~125Mt historic resource of moderate-grade material which can be developed as a bulk tonnage open-pit operation.

Figure 2: Historic (Non-NI-43-101 Compliant) Remaining Resources and 2023 PEA Targets

Deposit	Tonnage MT	Ni %	Cu %	Pt g/t	Pd g/t	Au g/t	Reference	PNRL Target
Selebi	11.28 Mt	0.98	1.9	-	-	-	SAMREC compliant, NI 43-101 non-compliant	23 Mt
Selebi North	4.64 Mt	1.06	0.96				SAMREC compliant, NI 43-101 non-compliant	10 Mt
Selkirk	124.8 Mt	0.21	0.23	0.10	0.44	0.06	JORC compliant, NI 43-101 non-compliant	55 Mt

Source: Company filings

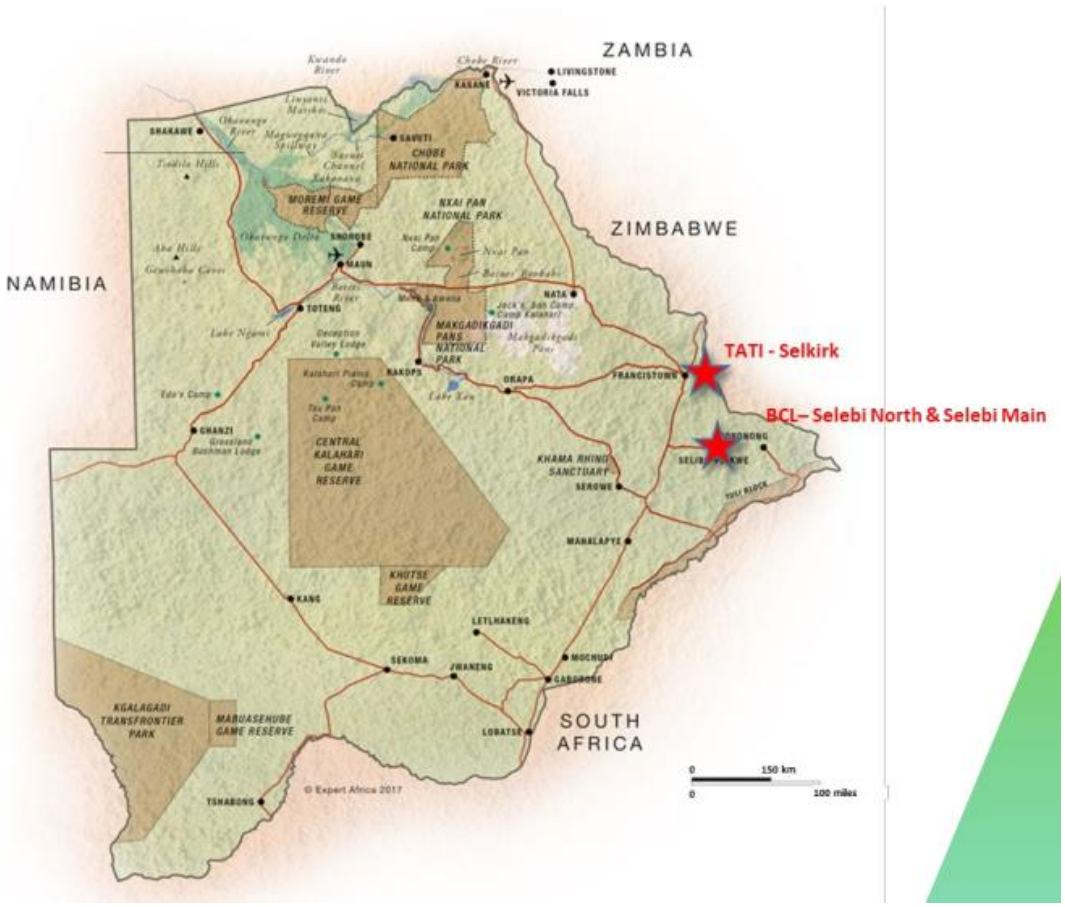
Selebi and Selkirk History

BCL discovered the Selebi deposit in 1963 and later the Phikwe deposit, ~14 kilometres to the northeast, in 1967. A mining lease was granted and BCL developed the combined Selebi-Phikwe land package as an integrated mining, concentrating and smelting complex which it operated for over 40 years. Mining initially commenced as an open-pit operation at Phikwe (1971–1980), and subsequently progressed to exploit the underground resources at four distinct production areas, namely Phikwe (1981–2016), Southeast Extension at Phikwe (1997–2016), Selebi (1980–2016) and Selebi North (1990–2016). Ore from all Phikwe and Selebi mines was processed at the BCL-constructed 10Ktpd concentrator located at the Phikwe deposit. The Phikwe concentrator produced a low-grade bulk nickel-copper concentrate as feed for the adjacent smelter.

By 2016, BCL was encumbered by serious operational and administrative deficiencies which saddled the company with high operating costs and unsustainable debt obligations. The final straw for BCL came in 2016 when a costly refurbishment of the Phikwe smelter failed to see it restart and forced BCL to place all mining operations immediately under care and maintenance. The Botswana government subsequently put BCL into provisional liquidation.

The Phikwe smelter closure also resulted in the liquidation of the Tati Nickel Mining Company. Tati Nickel operated the Phoenix and Selkirk mines located ~75 kilometres to the north of Selebi-Phikwe. Direct shipping ore as well as a bulk nickel-copper concentrate produced by the Tati operations had been toll-treated under contract by BCL at the Phikwe smelter.

Figure 3: Selebi Main, Selebi North and Selkirk Project Location



Source: Company filings, Paradigm Capital Inc.

Premium Nickel Involvement

In 2019, Premium Nickel began initial due diligence on the former BCL and Tati Nickel Mining assets and determined BCL's Phikwe concentrator and smelter to be outdated, in poor condition and to have substantial legacy environmental liabilities. However, the historical resources, in-place infrastructure and exploration potential at BCL's Selebi mine and Tati's Selkirk mine were identified as attractive opportunities for redevelopment through modernization.

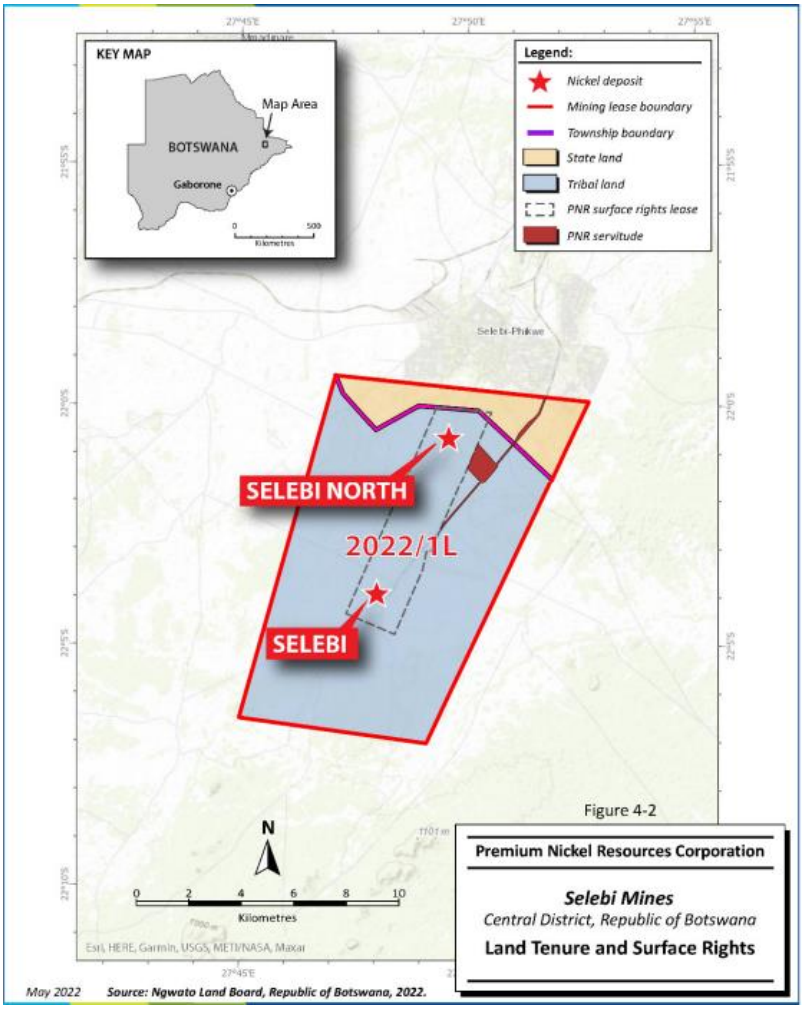
In 2021, PNRL was selected as the preferred bidder by the BCL liquidator and awarded an exclusivity period to conduct further due diligence, which ultimately resulted in PNRL's purchase of the Selebi and Selkirk mines in 2022 for ~$60 million in upfront and contingent payments.

As part of due diligence on the Selebi and Selkirk assets, PNRL undertook preliminary metallurgical test work at both mines and identified the potential to redevelop the assets using a modernized processing flowsheet to produce separate high-grade nickel-cobalt and copper-platinum group metal (PGM) concentrates. High-grade nickel and copper concentrates are sought after by international smelters and increasingly by strategic end-user markets such as battery and automotive manufacturers.

Flagship Selebi & Selebi North Mines

The Selebi property consists of two mines (Selebi and Selebi North) and extensive infrastructure within a single mining license covering an area of 11,504 hectares. The project is accessible via paved and gravel roads and the town of Selebi-Phikwe, a fully integrated township (pop. 52,000) built for the mining community, is located just north of the mining license. Selebi-Phikwe is serviced by a railway connecting to the main line between Gaborone and Francistown. Additionally, a government-operated runway is located south of the town but services no commercial flights and provides no refueling facilities. Power is supplied to site by the Botswana Power Corporation via a 220kV line connected to the national grid.

Figure 4: Selebi Mineral Tenements



Source: Company filings, Paradigm Capital Inc.

The Selebi mine project includes two shafts (Selebi and Selebi North) with a combined 1.5Mtpa hoist capacity, and related underground and surface infrastructure. The Selebi mine was the first to enter production in 1980 and was operated until 2016 when it was placed on care and maintenance due to the failure of the Phikwe smelter. Selebi is accessed by the #2 Shaft, a 6.1-metre diameter concrete lined shaft extending 375 metres deep with an estimated hoist capacity of 900Ktpa. The Selebi mine has been further developed down to a depth of 1,140 metres. The Selebi North mine is located ~6 kilometres to the north of the Selebi mine and commenced operations in 1990 (also operating through to 2016). Selebi North is accessed by the #4 Shaft, a 3.5-metre diameter shaft that extends down to the 745-metre level and has an estimated hoist capacity of 600Ktpa. Selebi North has been further developed down to the 970-metre level.

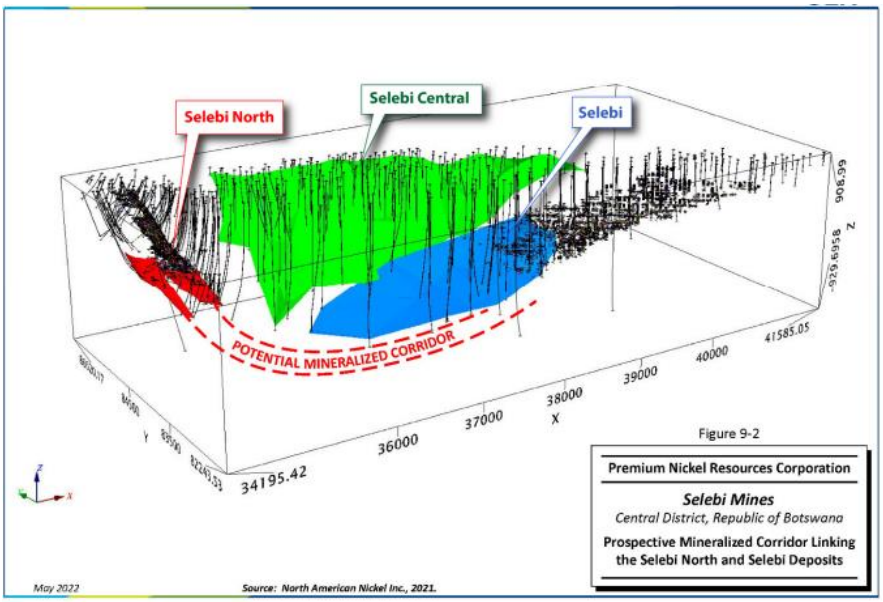
Figure 5: Selebi Infrastructure – Shaft #2, Shaft #4 and Underground Workings

Source: Company filings

Resources

Between 1980 and 2016 when the mines closed, 40.5Mt of ore with an average grade of 0.64% nickel and 0.90% copper was extracted from the Selebi and Selebi North deposits. And in 2016 when the mines were placed on care and maintenance, a SAMREC-compliant resource estimate was completed which estimated a combined remaining resource of 15.9Mt grading 1.00% nickel and 1.62% copper and containing 160Kt nickel and 260Kt copper. An additional 17.3Mt of lower-grade 0.61% nickel and 0.76% copper is estimated to reside in the Central deposit and represents future opportunity for exploitation but is not a current focus for PNRL.

Figure 6: Selebi Mines – Historic Resources



Class/Deposit	Tonnes (Mt)	Grade		Contained Metal	
		% Ni	% Cu	(000 t Ni)	(000 t Cu)
		Measured and Indicated			
Selebi	7.19	1.05	2.28	75.35	164.28
Selebi Central	8.79	0.64	0.78	56.28	68.59
Selebi North	1.85	1.26	1.09	23.29	20.20
Total M&I	17.83	0.87	1.42	154.92	253.07
		Inferred			
Selebi	4.09	0.86	1.21	35.18	49.49
Selebi Central	8.46	0.57	0.74	48.21	62.59
Selebi North	2.79	0.93	0.87	25.97	24.30
Total Inferred	15.34	0.71	0.89	109.36	136.38

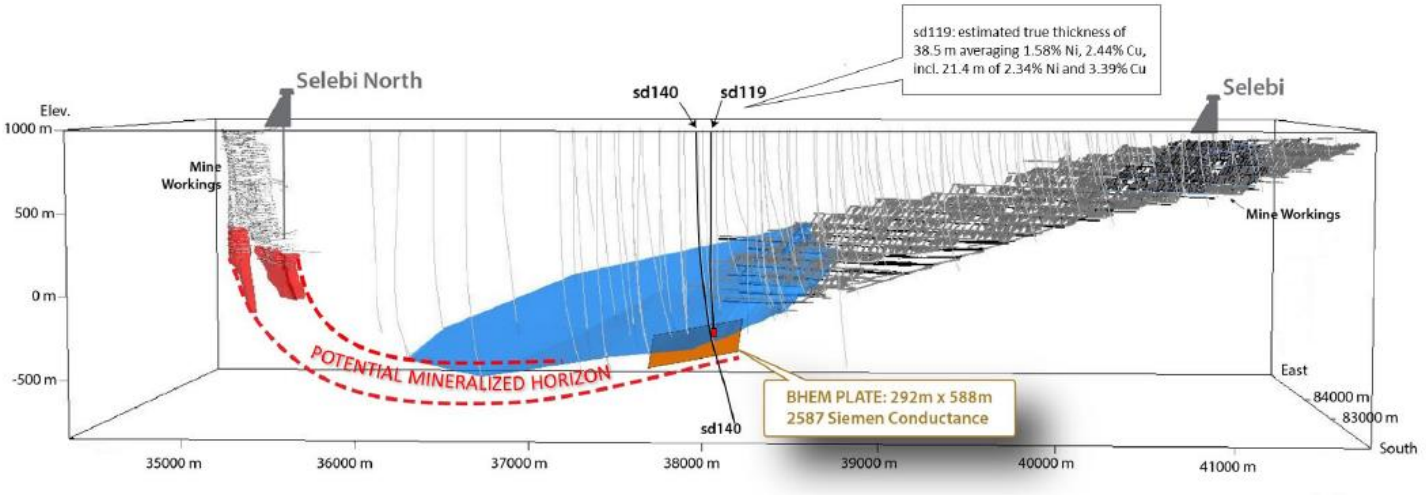
Source: Company filings

Selebi and Selebi North Targets: Looking to Increase Resources to 33Mt

As part of its due diligence, PNRL reviewed the historical exploration database and identified a priority target at Selebi Main. Specifically, computer modelling of a high-conductance BHEM off-hole anomaly in historic drill-hole sd140 outlined a previously untested large plate with dimensions of 588 metres x 293 metres. And new gyro data acquired by PNRL has more accurately repositioned this plate versus BCL's interpretation. The new position data shows the southern end of the plate to be located within 110 metres of the existing mine workings, and that the plate had been intersected by historic drill-hole sd119 which had returned an exceptional intercept of 38.5 metres true width grading 1.58% nickel and 2.44% copper, including an even higher-grade 21.4-metre section of 2.34% nickel and 3.39% copper — approximately double the grade of the shallower Selebi historic resource.

This conductor plate is interpreted to represent the down-plunge extension of the Selebi Main mine and potentially represents a significant increase in tonnage. While the thickness and grade of the entire plate remains to be drill-tested, this single ~600-metre strike length target could be host to as much as 15–20Mt of substantially higher-grade mineralization at Selebi Main. Also of importance is that the data suggests the down-dip extension of Selebi Main is controlled by a hinge fold (the same structure being mined at Selebi North) and potentially indicates that mineralization at Selebi and Selebi North are connected at depth along the entire ~3,000-metre strike between the deposits.

Figure 7: Position of Hole sd140 Identified Conductor Plate in Relation to Historic Drilling and SAMREC Resources



Source: Company filings

At Selebi Main, 20,000 metres of wide-spaced surface drilling is planned. This shallower drilling is anticipated to convert ~5Mt of ~11Mt SAMREC historic resource in the Main deposit into a NI-43-101-compliant resource. More importantly, the surface drilling is designed to provide data to plan an underground exploration drift which will be used to drill and define a portion of the lower mineralized horizon identified by the EM conductor plates. Planned is 27,000 metres of underground drilling which will be constrained to just an initial ~1,200 metres out of the total ~3,000-metre strike length of the interpreted lower mineralized horizon and targets, adding 18Mt to the Selebi Main resource.

At Selebi North, three underground drill platforms are already in place and a further five underground platforms are planned to drill the down-dip extension. Drilling is targeting to convert the entire existing ~4.6Mt SAMREC resource at the North deposit to be NI-43-101-compliant, and to increase resources at depth by an additional 5Mt.

If successful, the planned drilling would see Selebi host to a 33Mt (NI-43-101 compliant) resource sufficient to support a 20-year mine life based on existing hoist capacity. In addition, a further ~20Mt of historic (SAMREC) resource would remain for future study. And an almost 2-kilometre strike distance of the lower mineralized horizon (potentially connecting the Main and North deposits) would remain open for drill testing.

Selebi and Selebi North PEA

Central to PNRL's restart plans at Selebi is the ability to produce separate high-grade nickel and copper concentrates which are saleable to international smelters rather than to replicate the low-grade bulk concentrate, as was the focus under BCL's operatorship. PNRL has worked with SGS Lakefield, Canada, to conduct preliminary metallurgical testing of Selebi ore to confirm an alternative but modernized beneficiation process using a conventional flowsheet (widely employed in Canadian nickel operations) can be adopted at Selebi. The preliminary results of the metallurgical testing have been very positive.

Fresh metallurgical ore samples collected within the mine were provided to SGS and it was able to produce a high-grade 10% nickel concentrate and a high-grade 31% copper concentrate with no deleterious elements. Optimization work will need to continue, but initial recovery of 62% nickel to the nickel concentrate (64% overall recovery) and recovery of 79% copper to the copper concentrate (95% overall recovery), plus 70% cobalt recovery (a metal previously not recovered by the BCL smelter) confirm high metallurgical recoveries and improved metal payabilities can be achieved.

With 1.5Mt of in-place hoisting capacity and assuming a conservative base case of no improvement to the resource grade and no additional optimization from the SGS metallurgical work, we can see Selebi producing 10Kt of payable nickel plus substantial copper and cobalt. And potentially +15Kt payable nickel should the resource grade improve at depth. PNRL is targeting to have an updated mineral reserve estimate and potentially a PEA evaluating the restart of the Selebi mine by late 2023.

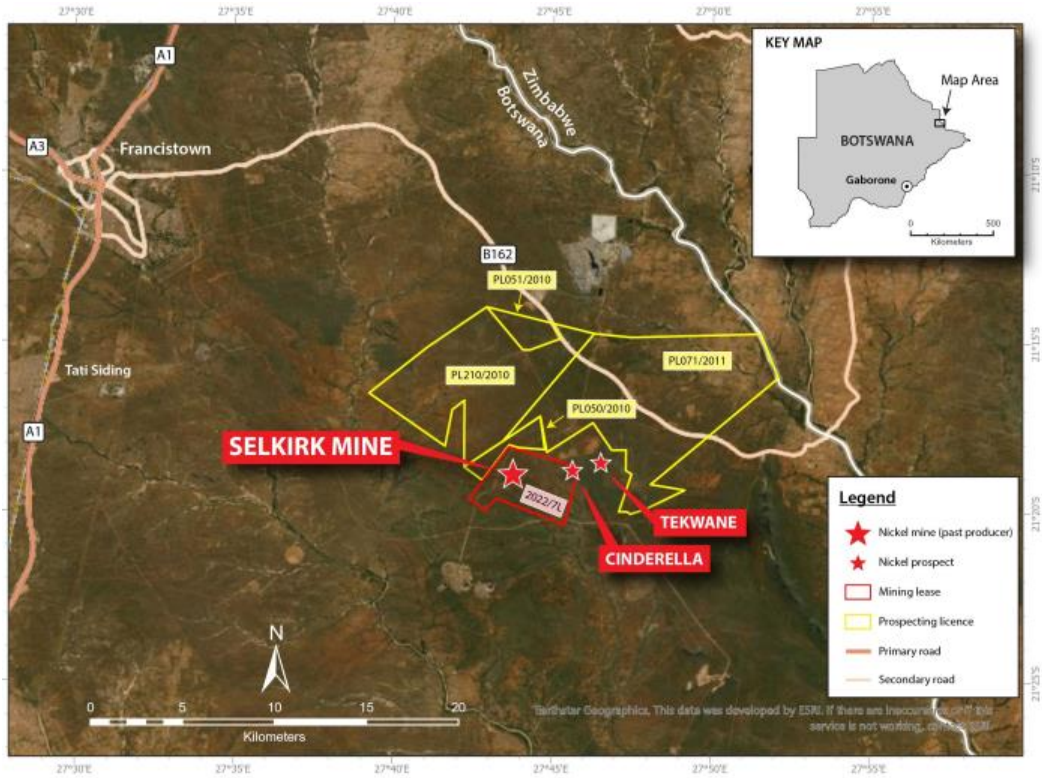
Selkirk Mine Provides Substantial Optionality

The Selkirk mine is located 75 kilometres north of Selebi and 60 kilometres east of Francistown (pop. 90,000). The project is accessible via an all-weather road as well as a railway that crosses the western end of the property. Francistown is serviced by a tarred airstrip and international airport.

Tati Nickel Mining Company (85% Anglo American, 15% Botswana Government) operated the Selkirk underground mine from 1989 to 2002 and the nearby Phoenix open-pit mine from 1995 until the BCL smelter closed in 2016. At Selkirk, initial production by Anglo American targeted mining of high-grade nickel-copper veins for direct shipping to the BCL smelter at Phikwe. Anglo mined ~1Mt of ore with an average grade of 2.6% nickel and 1.5% copper over 13 years, after which the high grade was deemed to be depleted.

Ownership of Selkirk changed hands in 2002 with LionOre acquiring the mine. LionOre initiated a pre-feasibility study evaluating Selkirk as a lower-grade bulk tonnage open-pit operation. LionOre was subsequently acquired by Norilsk Nickel who continued evaluation of the Selkirk and advanced studies of an open-pit mining operation to a bankable feasibility level in 2016 (just prior to shutdown of the Phikwe smelter).

Figure 8: Selkirk Mineral Tenements



Source: Company filings

Resources

The most recent resource estimate for Selkirk was completed by Norilsk Nickel in 2008. Norilsk was evaluating Selkirk as an open-pit development project and calculated a measured and indicated resource of 124Mt grading 0.23% nickel, 0.27% copper, and containing 0.10 g/t platinum, 0.47 g/t palladium and 0.06 g/t gold. Additional inferred resources were 11.3Mt grading 0.27% nickel and 0.30% copper (plus PGMs). The global resource totaled 310Kt nickel, 368Kt copper and 2.1Moz palladium. The Norilsk resource estimate is deemed historic in nature and not NI-43-101 compliant.

Figure 9: Selkirk Mine – Historic Resources

Date	Reference	Tonnage Mt	Ni %	Cu %	Pt g/t	Pd g/t	Au g/t	Category	Comments
As at Sept 26, 2006	Dexter Ferreira, Lower Quartile Solutions, reported in Independent Technical Report (ITR) for LionOre Mining International Ltd ("LionOre") [2]	165.3	0.284	0.243	-	-	-	Indicated	Prepared in accordance with NI 43-101 (cut off 0.15% Ni)
As at May 6 2008	Anton Geldenhuys, MinRED, a member of the Anglo American plc group, 2008 Mineral Resource Update for Selkirk Nickel Project, Botswana for Norilsk Nickel Africa [3]	74.7	0.23	0.27	0.11	0.48	0.06	Measured	Block model selmod08 (cut-off grade 0.15% Ni based on a check on calculations commissioned for BFS)
		49.3	0.22	0.27	0.09	0.46	0.06	Indicated	
		11.3	0.27	0.3	0.09	0.47	0.06	Inferred	
As at January 1, 2011	GiproNickel Institute, 2013 Adjustment of the Geological Model of Selkirk Deposit Mining for Norilsk Nickel Africa [4]	124.8	0.21	0.23	0.1	0.44	0.06	Measured	Prepared in accordance with JORC Code (2012)
		3.55	0.15	0.16	0.07	0.28	0.06	Indicated	Block model m-SEL-13G-NEW Model non-oxidized (cut-off grade of 0.10% Ni)
		123.8	0.17	0.19	0.08	0.34	0.03	Inferred	Ordinary Kriging method, based on newly-constructed 3D variograms (0.10% Ni cut-off).

Source: Company filings

Of note, PNRL's review of the exploration database identified high-grade intercepts within the footwall indicating exploration potential at depth. Footwall intercepts have graded as high as 7.22 metres @ 2.81% nickel, 3.12% copper, 0.10 g/t platinum and 0.36 g/t palladium at a vertical depth of 91 metres.

Selkirk to Be Evaluated for Redevelopment as an Open-Pit Mine

PNRL is evaluating Selkirk as an open-pit mine using state-of-the-art processing and tailings management facilities to prioritize minimizing environmental impacts, including using less water and power, and sourcing alternative energy to lower the carbon footprint. Key to a redevelopment plan (as with Selebi) is the ability to produce separate marketable grade copper and nickel concentrates. Preliminary metallurgical testing conducted by SGS Canada has confirmed this is possible, although optimization of the process flowsheet is required to maximize metal recoveries. Importantly, the preliminary metallurgical testing demonstrated substantial recovery of PGMs (particularly palladium) to the copper concentrate. PGMs had not previously been recovered by the BCL smelter but could represent as much as 25% of the payable metal value at Selkirk.

Preliminary metallurgical testing by SGS was able to produce separate high-grade nickel and copper concentrates from Selkirk ore samples. A 10% nickel concentrate was produced with a 63% recovery rate and included potentially payable amounts of palladium/platinum/gold. And a 32% copper concentrate was produced with a 55% copper recovery to the copper concentrate and 86% copper recovery overall, plus a very high PGM content including 36 g/t palladium.

As a moderate grade open-pit resource, costing assumptions can play an outsized role in determining the economic scale of the Selkirk deposit with highly conservative assumptions possibly restricting the resource to as low as 35Mt, and less restrictive parameters resulting in as much as 250Mt potentially mineable (as estimated by Norilsk in 2011).

PNRL is currently undertaking a review of the Selkirk drill-hole data to verify the information used in the Norilsk resource calculation, including inspection of mineralized core, verification of collar co-ordinates, downhole surveys and sampling protocols in order to prepare a resource estimate in accordance with NI-43-101 standards. Management is targeting an initial resource of ~55Mt which we estimate could support an ~7Ktpa payable nickel production profile. Subsequent verification plans include filling in gaps in the drill database with an additional 11,400 metres of drilling in 34 holes, plus drilling for metallurgical samples, geotechnical holes for pit wall stability and sterilization holes for infrastructure placement, which will provide the necessary data for a PEA in late 2023.

Valuation & Recommendation

Both the flagship Selebi mine and the secondary Selkirk mine are brownfield projects which have been mined successfully previously. Both assets remain permitted, have large historic resources and substantial infrastructure in place. These advantages set these assets apart from the majority of planned new nickel projects in the global pipeline and substantially reduce the risk profile as PNRL advances studies for redevelopment of both assets using a modern processing flowsheet.

With historic resource verification work and updated metallurgical testing ongoing, we adopt a pounds-in-the-ground basis to derive our asset valuation. A pounds-in-the-ground valuation is typically a more conservative valuation metric versus discounted cash flow analysis but often also a more effective metric for assets prior to release of a PEA. We track a cross-section of nickel and copper development projects as well M&A transactions and highlight the average trading value pounds-in-the-ground basis of low-grade nickel projects is on average US$0.02/lb nickel, mid-grade projects US$0.10/lb nickel and high-grade projects (few and far between) range from US$0.10/lb to US$0.90/lb nickel. Perhaps just as informative for benchmarking are several recent nickel M&A transactions, including BHP's implied investment price into Kabanga valued at US$0.15/lb nickel (pounds-in-the-ground), Wyloo Metals acquisition of Noront valued at US$0.31/lb nickel equivalent (NiEq) and IGO's acquisition of Western Areas (a nickel producer) valued at ~US$0.41/lb NiEq.

Figure 10 provides a summary of the historic resources at the Selebi and Selkirk mines. For the high-grade Selebi mine, we apply a US$0.30/lb NiEq valuation to the historic Selebi and Selebi North deposits (the focus of the redevelopment plan by PNRL) and apply a US$0.20/lb NiEq valuation to the ~23Mt of targeted resource additions that PNRL has identified in BHEM plates and is in the process of drill testing. Note we make no adjustment to the grade of the target resource additions (limited historic drilling suggests grades may increase at the hinge fold targeted by the PNRL drilling). The Selebi Central deposit is not currently an area of focus for PNRL but is host to a substantial resource available for future study. Accordingly, we apply a US$0.10/lb NiEq valuation to this lower-grade historic resource. At Selkirk, we view Norilsk's 2008 resource estimate of 135Mt (at a 0.15% nickel cut-off), which was the basis for its open-pit Bankable Feasibility Study (BFS), as most relevant and apply a US$0.10/lb NiEq valuation to this asset.

Figure 10: Selebi and Selkirk Mines – Historic Resources

Deposit	Category	Tonnes	Grade						Contained Metal						Valuation	Value
			NiEq %	Ni %	Cu %	Pt g/t	Pd g/t	Au g/t	NiEq mlbs	Ni mlbs	Cu mlbs	Pt kozs	Pd kozs	Au kozs	(US$/lb NiEq)	(US$M)
Selebi	M&I	7.19	1.99	1.05	2.28				315	166	361					
Selebi North	M&I	1.85	1.71	1.26	1.09				70	51	44					
Selebi	Inf	4.09	1.36	0.86	1.21				122	78	109					
Selebi North	Inf	2.79	1.29	0.93	0.87				79	57	54					
Total		**15.92**	**1.67**						**587**						**$0.30**	**$176**
Selebi Central	M&I	8.79	0.96	0.64	0.78				186	124	151					
Selebi Central	Inf	8.46	0.87	0.57	0.74				163	106	138					
Total		**17.25**	**0.92**						**349**						**$0.10**	**$35**
Selebi	Target Addition	5.00	1.99	1.05	2.28				219	116	251					
Selebi North	Target Addition	18.00	1.71	1.26	1.09				678	500	433					
Total		**23.00**	**1.77**						**897**						**$0.20**	**$179**
Selkirk	M&I	124.00	0.52	0.23	0.27	0.10	0.47	0.06	1432	618	738	407	1882	239		
Selkirk	Inf	11.30	0.58	0.27	0.30	0.09	0.47	0.06	144	67	75	33	171	22		
Total		**135.30**	**0.53**						**1576**						**$0.10**	**$158**

[1] Selebi historic resource estimate prepared in accordance with SAMREC as at Sept.30/2016
[2] Selkirk historic resource estimate reported by Norilsk Nickel, 2013 Annual Report

Source: Company filings

Figure 11 summarizes our corporate NAV estimate of $5.10 per fully diluted share (based on a pounds-in-the-ground valuation metric). Additionally, we use a 0.75x NAV multiple, applicable to all our development-stage companies. We are initiating coverage of Premium Nickel Resources with a Buy recommendation and $4.00 target.

Figure 11: Premium Nickel Resources — Summary NAV

	US$ Millions	C$ Millions	C$ Per FD Share
Projects			
Selebi	$390	$488	$3.81
Selkirk	$158	$197	$1.54
	$548	$685	$5.35
Other Assets			
Est. Net Working Capital	$7	$9	$0.07
Total Assets	**$555**	**$694**	**$5.42**
Liabilities			
PV Future Asset Investment Commitments (US$55M @ 10% DCF)	-$33	-$41	-$0.32
Total Liabilities	**-$33**	**-$41**	**-$0.32**
Net Asset Value	**$522**	**$653**	**$5.10**

Exchange Rate		Shares Outstanding	
US$1.00 = C$	1.25	Basic	115.1
		Options	11.8
		Warrants	1.0
		Fully Diluted	**127.9**

Source: Company filings, Paradigm Capital Inc.

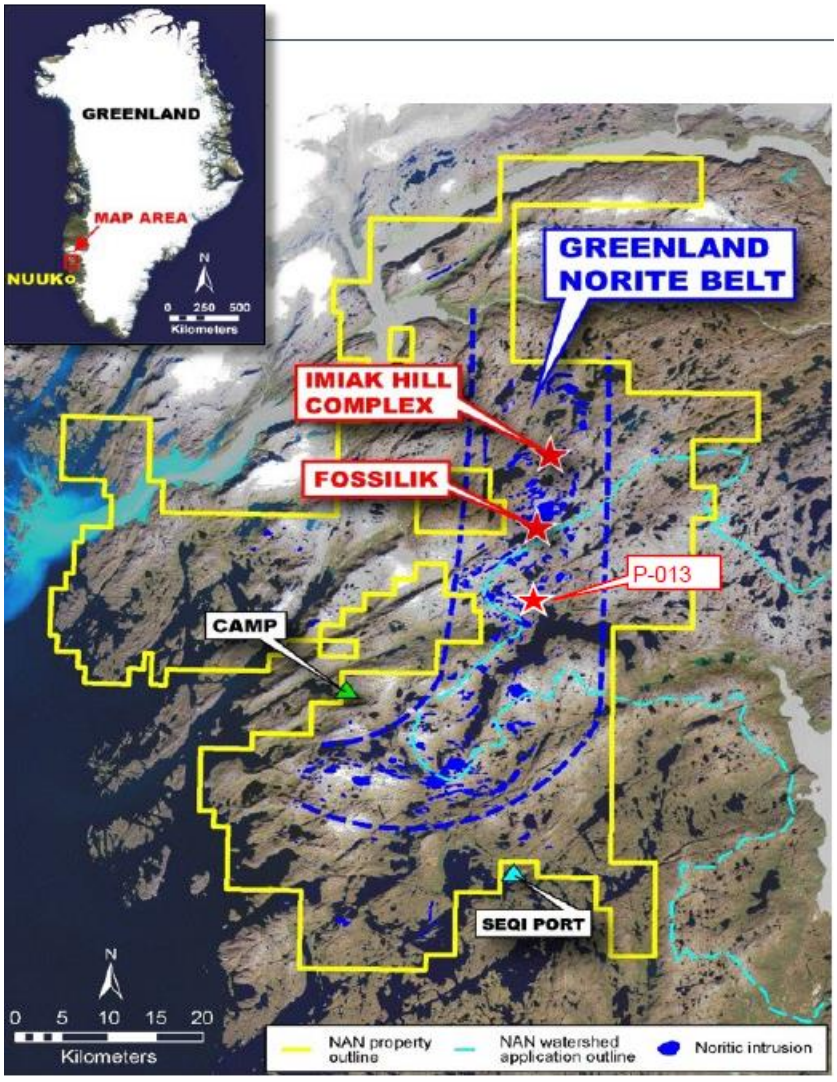
APPENDIX I: Other Premium Nickel Resources Properties

Greenland: Maniitsoq

PNRL owns 100% of the Maniitsoq project, a district scale land package centred on numerous high-grade nickel sulphide occurrences associated with the Greenland Norite Belt. The 3,408-square-kilometre project area is accessible from the Seqi deepwater water port, allowing for year-round access.

The land package is characterized by widespread historic and new high-grade nickel-copper-cobalt-PGM occurrences with a high percentage of outcroppings. Most exploration to date has been focused on the Imiak Hill Complex, Fosilik and at P-103. Drilling programs completed between 2012 and 2016 for 29,841 metres over 133 core boreholes followed up on known occurrences of nickel-copper-cobalt-PGM sulphide mineralization hosted intrusions of the Greenland Norite Belt. Multiple semi-massive to massive sulphide and breccia veins have been intercepted collectively ranging from 0.3 metres to 13.6 metres and with nickel grades as high as 3–7%. PNRL expects to implement a three-year exploration plan with intent to execute a major drill campaign on priority targets in 2024.

Figure 12: Maniitsoq Project – Location



Source: Company filings

Morocco: Imilchil Area (High Atlas Mountains)

PNR signed a memorandum of understanding (MoU) with the ONHYM (Office National des Hydrocarbons et des Mines), a government entity and the single-largest current permit holder in Morocco, in 2019 after identifying the potential for a camp-scale project in the High Atlas Mountains. The agreement gives PNRL first-mover status in an emerging and mining friendly jurisdiction.

Under the MoU agreement, PNRL is granted access to confidential data to further study Jurassic-aged troctolitic and gabboric intrusions at the margin of a significant trans-lithospheric structure. Three major nickel-copper outcrops and several minor outcrops lie on the land package that has no modern geophysics or drilling completed.

Plans to fulfill $65,000 in work obligations over a three-year period were submitted in May. PNRL intends to acquire additional permits and to execute the initial work plans, including prospecting and EM surveys to define potential drill targets.

Project Description — Canada: Post Creek & Halcyon

PNRL holds grounds in some of Canada's most prolific regions including the Sudbury Basin and Thunder Bay Mining District. The most advanced properties are Post Creek and Halcyon located 35 kilometres east of Sudbury and ~2 kilometres northeast of the past-producing Podolsky copper-nickel-PGM mine (KGHM).

Exploration of the properties began in 2010 and work has primarily focused on finding an extension of the Whistle Offset. Offset and footwall deposits account for a significant portion of all ore mined in the Sudbury Camp. The Whistle Offset Dyke begins at the Sudbury Igneous Complex (and the past-producing Whistle open-pit mine) and trends to the northeast. It has been traced to the northern extent of the Podolsky mine and is contiguous with PNRL's Post Creek property.

APPENDIX II: Management

Charles Riopel, Chairman, Premium Nickel Resources Canada:

- 25+ years domestic/international investment experience in mining
- Founder and managing partner at Latitude 45, a private equity fund specialized in mining
- Prior thereto, he was Senior Investment Director at The Sentient Group, one of the largest private equity funds in mining with over US$2.7 billion under management

Keith Morrison, CEO & Director, Premium Nickel Resources Canada:

- Over 40 years of global experience in the resources sector with an accomplished background in strategy, finance, exploration, technology, operations, capital markets and corporate development
- Co-founded two significant Canadian-based success stories — Quantec and QGX

Montwedi Mphati, CEO, Premium Nickel Resources Botswana:

- Over 35 years in operations management including leadership roles at BCL Mining and Smelting and Botswana Ash
- Currently the President of the Botswana Chamber of Mines
- Extensive experience developing and sustaining productive working relationships with stakeholders from employees, labour unions, suppliers, customers, regulators, lenders to communities

Boris Kamstra, COO, Premium Nickel Resources Botswana:

- Over 31 years' experience as a civil engineer focused primarily on mining and infrastructural projects
- Previously CEO for Alphamin Resources Bisie tin mine in the Democratic Republic of the Congo (DRC) where he took Alphamin from exploration, to a commissioned mine now valued ~US$1 billion
- Boris graduated as a civil engineer in 1989 from the University of Cape Town. Subsequently he obtained an MBA from Wits Business School

Kneipe Setlhare, Country Manager, Premium Nickel Resources Botswana:

- Mining engineer with over 14 years of experience in mining operations management, including roles with BCL Mines and Discovery Metals Limited
- Currently the Executive Country Manager at Giyani Metals Corp.
- Experience managing both private and public companies involved in early-stage exploration, preliminary economic assessment, feasibility study, mine development and commissioning, mine asset acquisitions

Sarah-Wenjia Zhu, CFO:

- Over 15 years of financing and accounting experience in the public and private equity market with a focus on the Natural Resources sector
- Formerly held the position of Investment Manager with The Sentient Group

APPENDIX III: Investment Risks

Development Risk: The Selebi and Selkirk projects are at the development stage, which carries some inherent risk. Looking ahead to the progression of the project, significant capital expenditure will be required to complete construction and bring the project to commercial production. Although the company has financial options, including strategic partnerships, there is no guarantee that it will be able to fund the project through additional financings.

Commodity Price Risk: Premium Nickel is exposed to nickel price fluctuations, and ultimate value creation for shareholders can be influenced by the amount and timing of these fluctuations.

Country Risk: The Selebi and Selkirk projects are in the Republic of Botswana, which is considered an emerging market. Emerging markets generally pose a greater degree of risk than more mature economies which could impact negatively on the company. Emerging economies are more susceptible to destabilization resulting from domestic and international developments, currency fluctuations and exchange controls and/or limitations on repatriation of earnings, and to changes in import/export matters as well as taxation policies.

Permitting Risk: Premium Nickel is operating in a relatively friendly jurisdiction in the Republic of Botswana which has several active mining operations. The Final Environmental permit is yet to be obtained, which is dependent on the Definitive Feasibility Study. There is always a risk that complications will arise in the permitting process that could impact the ability to advance the project or delay the timeline of development.

Financing & Credit Risk: Though the company has several financing options for the project, developing it will require a capital investment. There is a risk that the project will not be able to raise the financing necessary or, in the event of a financing, expose itself to a large amount of credit risk should it secures large debt obligations to advance the project.

Liquidity Risk: As with any non-operational company, there is a risk that Premium Nickel will not be able to meet its financial obligations as it is not currently operational or generating revenue.

DISCLAIMER SECTION

Company	Ticker	Disclosures
Premium Nickel Resources Ltd.	**PNRL-CA**	**2,3**

Note: Please refer to above table for applicable disclosure numbers.

1. The analyst has an ownership position in the subject company.
2. Paradigm Capital Inc. has assumed an underwriting liability for, and/or provided financial advice for consideration to the subject companies during the past 12 months.
3. Paradigm Capital Inc. expects to receive or intends to seek compensation for investment banking services from the subject companies in the next 3 months.
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5. The analyst has a family relationship with an Officer/Director of subject company.
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Buy	97	62%	**Buy** – Expected returns of 20% or more over 12 months.
Spec. Buy	49	31%	**Speculative Buy** - Expected returns of 20% or more over the next 12 months on high-risk development or pre-revenue companies, such as junior mining and other early stage companies.
Hold	10	3%	**Hold** - Expected returns of less than +/- 20% over the next 12 months. Includes companies Under Review.
Sell*	0	0%	**Sell** - Expected returns of -20% or more over the next 12 months.
Total	156		

**Includes companies with a "Tender" recommendation*

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Hold: Expected returns of less than 20% over the next 12 months.

Sell: Expected returns of -20% or more over the next 12 months. .