EV Nickel Reports CarLang A PEA: Robust Economics for Large Scale Nickel Project

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- Pre-Tax NPV(8%) of $1.91 Billion
- Post-Tax NPV(8%) of $1.48 Billion
- Net C1 Cash Costs of US$4.36/lb Ni and Net AISC of US$4.87/lb Ni after by-product credits
- Producing 1.6B lbs of payable Ni over 20 year mine life
- Annual EBITDA of C$681 Million and Annual Free Cash of C$313 Million

(All amounts in Canadian Dollars unless otherwise indicated)

TORONTO, May 5, 2025 - EV Nickel Inc. (TSX-V:EVNI) ("EVNi" or the "Company is pleased to report the results of a Preliminary Economic Assessment ("PEA") on its 100% owned CarLang A Nickel Project (the "Project"), located approximately 30 kilometres southeast of Timmins, Ontario. The PEA was prepared by SRK Consulting (Canada) Inc. ("SRK") and Caracle Creek International Consulting Inc. ("CCIC"). The updated PEA used a pit constrained Measured resource of 1,007 million tonnes ("Mt") grading 0.24% Ni, consisting of Indicated resource of 510 Mt grading 0.25% Ni and an Inferred mineral resource of 497 Mt grading 0.23% Niand was initially modeled with a 20-year mine life and 120,000 tonnes mined per day.

"This PEA Study demonstrates the excellent potential of the large scale CarLang A Nickel Project as a near surface, moderate capex production asset," said John Paterson, Interim President and CEO of EV Nickel. "The shallow overburden cover and low strip ratio significantly reduces the overall Capex of the CarLang A project and allows for a rapid ramp-up of production to meet the 120,000 tonnes per day mill design. We are excited by these results and continue to move forward, advancing the permitting and optimizing the mine design and processing facilities. EV Nickel continues to execute our Strategic Plan, de-risking the large scale CarLang A Nickel Project while continuing to explore for additional high-quality, large-scale nickel deposits along the CarLang Trend and throughout the Shaw Dome Project area."

"The CarLang A Nickel Deposit demonstrates the potential of the CarLang Trend to host large-scale zones of mineralization suitable for advancement towards a production decision with significant expansion potential," said Paul Davis, Vice President Exploration of EV Nickel. "When combined with our successful, ongoing exploration program, including the Gemini North Sulphide Nickel Zone, the CarLang Trend has the potential to expand into a significant area of multiple large-scale zones of nickel mineralization with similar, or better, nickel grades and recovery characteristics as the CarLang A Deposit. If the Company continues to be successful in defining additional zones of nickel mineralization within the CarLang Trend, then work can begin to determine the best sequencing of the area and realize the benefits of multiple zones allowing for the optimization project development and the tailings storage schedules, to extract the best zones early on, to maximize the potential project economics in the area, while limiting the overall environmental impacts. The CarLang Trend potentially represents an area that could host large-scale nickel zones that would continue for multiple decades within a contiguous, well-defined area that could feed a single processing facility, just south of Timmins, Ontario."

A Technical Report in support of the PEA will be filed on SEDAR (www.sedar.com) within 45 days of the date of this news release. The PEA is effective as of March 24, 2025.

CarLang A 2025 PEA Summary

- Strong Economics (based on long term price and exchange rate assumptions)
  - $1.91 Billion Pre-Tax NPV(8%), 15% IRR
  - $1.48 Billion After-Tax NPV(8%), 14% IRR
- Large Scale, Low Cost Project
  - Average annual production of 83 million pounds of nickel, 615 million tonnes of iron and 36.7 million pounds of chrome and 31 thousand pounds of cobalt
  - By-product credits associated with iron, chrome and cobalt
  - Life of Mine C1 Cash Costs of US$4.36/lb Ni; Net AISC Costs of US$4.87/lb nickel net of by-product credits (based on long term price and exchange rate assumptions)
  - 20 year mine life totalling 753,000 tonnes of nickel
  - Low strip ratio of 0.38 reflective of thin overburden cover averaging 3 metres over the proposed open pit
- Robust Project Economics
  - $681 Million of annual EBITDA
  - $360 Million of annual Free Cash Flow over the 20 years of production

A PEA is preliminary in nature and includes inferred mineral resources that are considered too geologically speculative to have economic considerations applied that would allow them to be categorized as mineral reserves whereby there is no certainty that the results of the PEA will be realized.

The key project metrics are summarized in Table 1 and Table 2.

Table 1: Life of Mine Physicals

Item	Units	Value
Physicals (Mill Feed)		
Mill Feed	Mt	840
Ni Feed Grade	%	0.23
Co Feed Grade	%	0.01
Cr Feed Grade	%	0.23
Fe Feed Grade	%	5.33
S Feed Grade	%	0.06
MgO Feed Grade	%	37.0
S/Ni Feed Ratio		0.25
Ni Concentrate		

Ni Recovery	%	14.6
Co Recovery	%	2.2
Ni Concentrate Grade	%	25.0
Co Concentrate Grade	%	0.17
Ni Concentrate	Mt	1,147
FeCr Concentrate		
Fe Recovery	%	55.0
Cr Recovery	%	26.3
Ni Recovery	%	26.2
Fe Concentrate Grade	%	48.0
Cr Concentrate Grade	%	1.0
Ni Concentrate Grade	%	1.0
FeCr Concentrate	Mt	51,287
Salable Metal Total Recovery		
Ni Recovery	%	40.8
Co Recovery	%	2.2
Cr Recovery	%	26.3
Fe Recovery	%	55.0

Source: SRK 2025

Table 2: Economic Analysis Summary

Item	Units	Value (C$)	Value (US$)
Payable Ni	Mlbs	1,603	1,603
Net Smelter Return	$/t-milled	27.93	19.55
Site Operating Costs	$/t-milled	11.69	8.19
Net C1 Costs	$/lb Ni-Eq	6.22	4.36
EBITDA	$/t-milled	16.24	11.37
Total Capital	$M	4,805	3,363
Initial Capital	$M	3,317	2,322
Sustaining Capital	$M	1,487	1,041

Net AISC	$/lb Ni-Eq	6.96	4.87
Pre-Tax $NPV_{0\%}$	$M	8,830	6,181
Pre-Tax $NPV_{8\%}$	$M	1,917	1,342
Post-Tax IRR	%	15	15
Post-Tax $NPV_{0\%}$	$M	7,201	5,041
Post-Tax $NPV_{8\%}$	$M	1,480	1,036
Post-Tax IRR	%	14	14
Payback (from Project Start)	Yrs	9	9
Payback (from Production)	Yrs	6	6

Source: SRK 2025

The key assumptions used in the economic analysis are shown in Error! Reference source not found. 3.

Table 3: Economic Analysis Assumptions

Assumption	Units	Value
Ni Price	US$/t	20,000
Co Price	US$/t	40,000
Fe Price	US$/dmt	162
Cr Price	US$/lb	1.75
Exchange Rate	US$:C$	0.70
Fuel Price	C$/L	1.20
Electricity Cost	C$/kWh	0.75
Royalty	%	-

Source: SRK 2025

Project Opportunities

Significant potential related to a number of opportunities associated with the CarLang A Project for additional value have been identified including:

- Additional near surface exploration potential along the 10 kilometres of strike length associated with the CarLang Trend.
- Potential for higher grade nickel and sulphur zones within the CarLang Trend that could represents areas with significantly improved recovery characteristics including the recently identified Gemini North Zone located approximately 2.5 kilometres to the north of the CarLang A Deposit along the CarLang Trend.

- Optimized processing of nickel concentrates to recover platinum group metals.
- Capital cost reductions associated with mine scheduling and Tailings storage options.
- Inclusion of Carbon Credits into the economic model related to the Carbon Capture Storage potential of the mine tailings and Carbon Footprint reductions with the incorporation of low-carbon, electric mining equipment.
- Application of the Company's bioleaching process to the nickel concentrates with the potential to reduce smelting and refining costs and produce products directly for the electric battery market producers.

Project Overview

The CarLang A Project is designed as a conventional open pit mine/mill operation utilizing traditional mining and milling equipment. The project will develop two products including a high-grade nickel concentrate estimated at 25% nickel and a magnetite concentrate estimated at 48% iron and 1% chromium. Both of the products are assumed to be sold based on the nickel, iron, chromite and cobalt content of the concentrates.

The process plant will utilize a conventional milling operation consisting of crushing, grinding, desliming and flotation operations similar to other ultramafic hosted nickel operations. The processing plant will be constructed at a full capacity of 120,000 tonnes per day from the initiation of production.

Location and Infrastructure

The CarLang Nickel Property, within National Topographic System ("NTS") 1:50 000 map sheets 042A/06 (Timmins) and 042A/07 (Watabeag River), is situated in portions of Carman, Langmuir, and Shaw townships, Porcupine Mining Division, northeastern Ontario, Canada. The centre of the Property is approximately 30 km southeast of the City of Timmins.

The Property is accessed by motor vehicle via Tisdale Street (Forks River Road), which originates in South Porcupine (Timmins), travelling for about 15 km southward, after 15 km taking the left logging road diversion (Langmuir Road). Rail access is located nearby.

Regional 3-phase power lines extend south of Timmins following Forks River Road and supplying power to the Redstone Mill Facility and previously to the Carshaw Mill Site, 5 km west and 4 km northwest of the CarLang A Zone, respectively. A 500 kV transmission line runs along the western boundary of the Property to Timmins, about 18 km west of the CarLang A Zone Deposit. The project envisions that a 230 kV powerline will be constructed from Hydro One Porcupine Substation to the site, then step down the voltage as required to feed the various electricity consumers.

The other infrastructure to be developed for the project includes on site haul and service roads, water and power supply, mine waste rock and tailings storage facilities (TSF), processing facilities and site buildings.

Mining Method

The CarLang A deposit is expected to be mined using conventional open pit mining methods using trucks and shovels. The life of mine (LOM) is 20 years at a mill feed rate of 43.3 million tonnes per annum (Mtpa) and a maximum total material movement of 72 Mtpa. The mine schedule includes one year of pre-production to generate waste fill for the tailings management facility. The primary equipment will be 34 m^3 shovels and 229 t haul trucks.

The resource model was regularized to 20x20x15 m, which resulted in 1.7% dilution and 0.1% loss. No additional factors were applied to the tonnes and grades. A revenue factor of 67% was selected from the pit optimization results as the basis of the pit design, which resulted in 840 Mt of plant feed at an average grade of 0.23% Ni with a strip ratio of 0.38.

Mineral Processing and Metallurgical Testing

Corem metallurgical laboratory was contracted to perform sample characterization and bench-scale laboratory testwork on A zone material, with the objective of producing saleable nickel sulphide and magnetite (or ferrochrome) concentrates. The lab flowsheet and conditions closely followed the results reported in the Canada Nickel Company Crawford technical reports.

A total of 20 intervals were selected for metallurgical testing from 2022 drilling performed by EVNi. Of the 20 samples, 11 were included in the 2024 testwork program and four were sent for quantitative mineralogical analysis. From the analysis of these samples, CarLang A zone mineralogy is highly variable in both nickel deportment as well as non-sulphide gangue that is independent of the consistent assays shown for Ni, Fe, S and MgO. While this also reported for the Crawford project, the quality of both nickel sulphide and magnetite concentrates may be at the lower end of the range expected from the Crawford process flowsheet. Continued metallurgical testing on A zone samples will better quantify this.

Limited optimization work was done but based on the testwork completed by Corem on 11 samples from the CarLang A zone, recoveries to a nickel sulphide concentrate and magnetite concentrate were estimated. These estimates are preliminary but are suitable for the mine plan completed by SRK. Considering the highly variable nature of the A zone test samples, further metallurgical testwork is recommended.

Recovery Methods

The CarLang A mineralization will be processed through a single, on-site plant with a design capacity of 120,000 tonnes per day, producing saleable nickel sulphide and magnetite concentrates.

The plant flowsheet includes crushing, grinding, sulphide flotation and magnetic separation to generate the two concentrates. Nickel sulphide recovery is done in stages with both coarse and fine flotation following grinding and deslime removal. Both concentrates are thickened and filtered prior to storage before transport off-site. The plant is based on average head grades of 0.23% Ni and 5.3% Fe.

Preliminary recoveries have been estimated at 5% to 20% Ni to the sulphide concentrate and 55% Fe and 20% Ni to the magnetite concentrate. The sulphide concentrate is assumed to be 25% Ni and 0.17% Co as payables with 25% MgO and 27% SiO2 as potential penalty elements. The magnetite concentrate is assumed to be 48% Fe and 1% Cr as payables with 15% MgO, 12% SiO2 and 0.04% S as potential penalty elements.

Capital and Operating Cost Estimate

The capital and operating costs have been estimated based on benchmarks of similar projects and on first principles where possible. Costs have been estimated to a scoping level of accuracy with capital costs summarized in Table 4 and operating costs in Table 5.

Table 4: Capital Cost Estimate Summary

Item	Unit	Initial Capital	Sustaining Capital	Total Capital
Mining[1]	M$	56	207	263
Mill[2]	M$	2,263	-	2,263
On-Site Infrastructure	M$	166	16	182
Tailings & Water Management	M$	228	1,100	1,329
Closure Costs	M$	11	164	175

Construction Indirects & Owner Costs	M$	425	-	425
Total Project Capital	M$	3,150	1,487	4,637

1 Mine initial capital costs include capitalized pre-production operating costs.

2 Mill sustaining costs are included in the processing operating costs.

Source: SRK 2025

Table 5: Operating Cost Estimate Summary

Item	LOM Total (M$)	Unit Cost ($/t-milled)	Unit Cost ($/t-mined)
Mining[1]	3,231	3.85	2.85
Processing[2]	5,726	6.82	6.82
General & Administrative	671	0.80	0.80
Tailings Management	208	0.23	0.23
Total Site Operating Cost	9,818	11.69	10.69

1 Mine operating costs exclude capitalized pre-production operating costs.

2 Processing operating costs include mill sustaining costs.

Sensitivities

The key project economic indicators (NPV and IRR) are the most sensitive to exchange rate and metal prices, then capital expenditure, and the least sensitive to operating expenditure, see Figure 1 and Figure 2. The trends of the project sensitivity are generally in line with a typical greenfield mining project.

Figure 1: CarLang A Project $NPV_{8\%}$ Sensitivity

Figure 2: CarLang A Project IRR Sensitivity

Next Steps

The Company has initiated baseline environmental studies on the CarLang A project and is reviewing the additional study requirements to advance the project along the permitting process. Ongoing exploration drilling associated with the Gemini North Zone and other high priority CarLang Trend targets to identify the potential of the CarLang area.

The Technical Report in support of the PEA will be filed under EV Nickel's profile on SEDAR at www.sedar.com within 45 days of the date of this press release.

Mineral Resource Estimate

1. The independent Qualified Person for the Mineral Resource Estimate, as defined by NI 43-101, is Mr. Simon Mortimer, (FAIG #4083) of Atticus Geoscience Consulting S.A.C., working with Caracle Creek International Consulting Inc. The effective date of the Mineral Resource Estimate is February 28, 2023.

2. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this Mineral Resource Estimate are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
3. The Mineral Resource Estimate was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).
4. Mineralized domains were based on lithological contacts. A cut-off grade of 0.25% Ni was used for defining the high grade domain, which was determined on the basis of core assay geostatistics and drill core lithologies for the deposit.
5. Geological and block models for the Mineral Resource Estimate used data from a total of 28 surface diamond drill holes (core). The drill hole database was validated prior to resource estimation and QA/QC checks were made using industry-standard control charts for blanks, core duplicates and commercial certified reference material inserted into assay batches by EV Nickel Inc.
6. Estimates have been rounded to two significant figures.
7. A cut-off grade of 0.12% NiEq was applied to the resource block model, calculated using the formula NiEq = Ni% + Co% x 2.09, which considers estimated recoveries of 55% for nickel and 40% for cobalt. Iron and sulphur were not considered in the calculation of NiEq. Iron was estimated to review its potential as a future by-product. Sulphur was estimated to be used in future metallurgical and mineralogical studies.
8. The mineral resource estimates have been constrained by conceptual pit envelopes using the following optimization parameters, as provided by EV Nickel Inc. and agreed to by the QP. Metal prices used were (US$) $8.00/lb nickel and $23.00/lb cobalt. An overall pit slope of 45 degrees was used. Mining and processing costs (US$) were based on benchmarking from similar deposit types in the area, utilizing a mining cost of $3.50/t, a processing cost of $4.50/t, a G&A cost of $2.50/t, and a selling cost of $0.80/lb.
9. The geological model comprises two mineralized domains hosted by variably serpentinized ultramafic rocks: a relatively higher-grade core (largely dunite) and a lower grade envelope (combination of dunite and peridotite). Individual wireframes were created for each domain.
10. The block model was prepared using Micromine 2020. A 20 m x 20 m x 15 m block model was created and samples were composited at 7.5 m intervals. Grade estimation from drill hole data was carried out for Ni, Co, Fe, and S using Ordinary Kriging (Ni, Co) and Dual Kriging (Fe, S) interpolation methods.
11. Grade estimation was validated by comparison of input and output statistics (Nearest Neighbour and Inverse Interpolation methods), swath plot analysis, and by visual inspection of the assay data, block model, and grade shells in cross-sections.
12. Density estimation was carried out for the mineralized domains using the Ordinary Kriging interpolation method, on the basis of 940 specific gravity measurements collected during the core logging process, using the same block model parameters of the grade estimation. As a reference, the average estimated density value within the higher-grade is 2.68 g/cm3 (t/m3), while the lower-grade domain of the resource model yielded 2.77 g/cm3 (t/m3).

About EV Nickel Inc.

EV Nickel's mission is to provide the world with clean nickel from Tier 1 jurisdictions. Our projects are located within 30 km of Timmins, a developing hub of clean critical minerals for the North American battery and stainless-steel markets, as well as an important emerging critical mineral district for North American efforts to bring on-shore the full vertical integration of electric batteries and vehicles.

EV Nickel aims to play an integral part of the North American on-shoring initiative as the Company's clean, low carbon deposits can be an important source of supply to support the Inflation Reduction Act (IRA) and Ontario and Federal policies and initiatives which strive to bring clean critical mineral production from Canada into the North American supply chain and globally.

In further support of this initiative, the Company has and will continue to partner with environmentally responsible and ethical organizations from around the province and around the world to assist in developing these essential critical minerals. EV Nickel is also eager to collaborate with all stakeholders and leading sustainable engineering, mining, automotive and battery companies to provide this key input to support global decarbonization initiatives. The governments of Ontario and Canada are also providing significant legislative, policy and financial support to help ensure that the Timmins region becomes a leading participant in the developing North American supply chain for the clean energy transition.

Qualified Person

The Company's Projects are under the direct technical supervision of Paul Davis, P.Geo., and Vice-President of the Company. Mr. Davis is a Qualified Person as defined by NI 43-101. He has reviewed and approved the technical information in this press release. There are no known factors that could materially affect the reliability of the information verified by Mr. Davis.

Cautionary Note Regarding Forward-Looking Statements:

This press release contains forward-looking information. Such forward-looking statements or information are provided for the purpose of providing information about management's current expectations and plans relating to the future. Readers are cautioned that reliance on such information may not be appropriate for other purposes. Any such forward-looking information may be identified by words such as "anticipate", "proposed", "estimates", "would", "expects", "intends", "plans", "may", "will", and similar expressions. Forward-looking statements or information are based on a number of factors and assumptions which have been used to develop such statements and information, but which may prove to be incorrect. Although EVNi believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because the Company can give no assurance that such expectations will prove to be correct. Factors that could cause actual results to differ materially from those described in such forward-looking information include, but are not limited to, changes in business plans and strategies, market conditions, share price, best use of available cash, the ability of the Company to raise sufficient capital to fund its obligations under various contractual arrangements, to maintain its mineral tenures and concessions in good standing, and to explore and develop its projects and for general working capital purposes, changes in economic conditions or financial markets, the inherent hazards associated with mineral exploration, future prices of metals and other commodities, environmental challenges and risks, the Company's ability to obtain the necessary permits and consents required to explore, drill and develop its projects and if obtained, to obtain such permits and consents in a timely fashion relative to the Company's plans and business objectives, changes in environmental and other laws or regulations that could have an impact on the Company's operations, compliance with such laws and regulations, dependence on key management personnel, and general competition in the mining industry. These risks, as well as others, could cause actual results and events to vary significantly. The forward-looking information in this press release reflects the current expectations, assumptions and/or beliefs of EVNi based on information currently available to the Company. Any forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or expressly qualified by this cautionary statement.

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