

# NEWSLETTER

DECEMBER 2022

# AN EXCITING SEASON FOR CANADA NICKEL

With the holiday season comes many exciting milestones for Canada Nickel.

Resource drilling at the Crawford Project has been completed in the lead up to the Feasibility Study, which is progressing well towards release in 2023.

Canada Nickel would also like to announce acquisition of the Texmont Mine. Originally operated for less than two years in the early 70's, Canada Nickel intends to conduct additional exploration to better define the deposit, with an added objective to improve the safety and environmental liabilities of the site in the coming years.

Permitting for the project is also progressing well. Canada Nickel recently submitted the Detailed Project Description (DPD) and Response to the Summary of Issues (RSOI) to the Impact Assessment Agency of Canada (IAAC) — a key component of Phase 1: Planning

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– for review. Using this submission and the results of their own consultation, IAAC will determine if an impact assessment is required for the Crawford Project. To summarize the steps taken so far:

- ✓ CNC prepares and engages on the Initial Project Description
- ✓ CNC submits IPD
- ✓ IAAC reviews and accepts IPD
- ✓ IAAC conducts consultation on the IPD
- ✓ IAAC prepares the Summary of Issues
- ✓ CNC prepares and submits DPD and RSOI
- lacksquare IAAC determines if impact assessment required

Additional information meetings will be held in 2023 to discuss project updates and the upcoming steps of the impact assessment process for the Crawford Project. Thank you to all who took the time to share your feedback with us in 2022.

#### Major Engagement in 2022

Canada Nickel's most significant engagement with Indigenous communities, stakeholders, and the public in 2022 focused on the *Initial Project Description*. These meetings supported completion and submission of the IPD, with the primary topics of discussion being:

- · Water management practices and discharge into the surrounding environment;
- · Project's potential impact on land use, mainly hunting and fishing;
- Surface and ground water quality and flow;
- Equitable distribution of Project's economic and social benefits;
- Project footprint and potential impacts on wildlife;
- Workforce requirements and early planning; and
- Project's potential impacts to socio-economic conditions, including housing availability and healthcare.

Canada Nickel also took significant steps with community thematic committees, as described on pages 3 and 4 of this newsletter.

## AN EXCITING YEAR OF MAJOR PROJECT **MILESTONES**

A message from Canada Nickel's Chief Executive Officer and Chair, Mark Selby.



Another year working towards development of the Crawford Nickel Project as a next generation source of critical minerals has come to an end, and with it a number of major milestones for Canada Nickel.

In August, Canada Nickel submitted an Initial Project Description to the Impact Assessment Agency of Canada, and officially initiated the federal permitting process for Crawford. With the more recent submission of the Detailed Project Description, Canada Nickel is progressing well on Crawford's Impact Assessment. Given that the Impact Assessment is anticipated to be the longest regulatory process for Crawford, Canada Nickel remains positive on our goal for entering operation in the late 2020s.

Canada Nickel also completed the primary resource drilling program at Crawford, and released an updated resource estimate at double the previously announced value, coming in at 1.4 billion tonnes of Measured and Indicated resources at 0.24% nickel. With an additional 670 million tonnes of Inferred resource, Crawford is believed to be the fifth largest nickel sulphide resource in the world. The results of this program are feeding into our feasibility study, scheduled for release in 2023.

Another significant area of focus for our team this year has been carbon sequestration. Additional research and testing has shed light on an enhanced method for carbon capture that we have termed In-Process Tailings Carbonation, the act of conditioning tailings with a concentrated stream of carbon dioxide before deposition. Latest lab tests demonstrate that we were able to achieve 3x improvement in carbon capture in just 24 hours relative to previous tests, and achieved more than 60% of the capture that had previously taken six days. These latest results move

us further towards production of Net Zero Nickel™ and generation of 21 tonnes of CO2 credits per tonne of nickel, which would produce an estimated average of 710,000 tonnes of CO2 credits annually and 18 million total tonnes of CO2 credits over expected life of mine. IPT Carbonation does not require complex new technologies and major process modifications, and could encourage the development of a net zero carbon industrial cluster in the Cochrane District.

In addition to the work being completed at Crawford, Canada Nickel completed further acquisitions of exploration properties in the region, including the promising Texmont Mine, previously active in the early 1970s. This property is one of many where Canada Nickel will continue to evaluate resource potential while pursuing our goal of developing a new nickel district in Northeastern Ontario.

This significant progress we made this year could not have been accomplished without the continued engagement of Indigenous communities, project stakeholders, and various levels of government in the project, all of whom have provided crucial and meaningful feedback in the progressive development of our proposed operations. We would like to thank everyone who took the time to speak with us in 2022, and hope we will see you again as our conversations continue in the coming years.

Wishing all a safe, happy, and healthy holiday season,

Mark Selby

Chair and CEO, Canada Nickel Company

Canada Nickel is pleased to announce the official launch of our...

## COMMUNITY CONTRIBUTIONS PROGRAM

Developed in collaboration with Canada Nickel's Community Contributions and Local Procurement Committee (CC&LP Committee), and launched on November 22<sup>nd</sup>, 2022.

Full program details, including deadlines, eligibility, application forms, and templates, can be found at <a href="https://www.canadanickel.com/sustianability">www.canadanickel.com/sustianability</a> under the Contributions Program heading. Please refer to the Guidelines for more information on how to apply.



Visit this link to download the Contributions Guidelines

#### **Available Funding Opportunities**

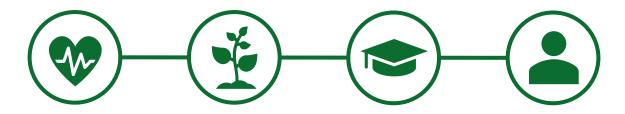
## SHORT TERM CONTRIBUTIONS

Suitable for those Programs with budgets under five-thousand dollars Canadian (≤CAD\$5,000) and completion timelines of under one (1) year which address local or regional economic, social, education, environmental, or health/wellbeing challenges.

## LEGACY CONTRIBUTIONS

Suitable for those Programs with budgets **greater than five-thousand Canadian dollars** (≥ **CAD\$5,000**) whose impacts, duration, or completion may extend **multiple years**, and which have **significant implications** relating to realized benefit or outcome relate directly to existing or potential challenges within a community or the region that may be triggered or amplified by development of the Crawford Project, namely: **Healthcare, Education, Environment, and Social** 

APPLICATIONS CLOSE JUNE 31<sup>ST</sup>, 2023



Of note, programs from applicable First Nation communities will follow a distinct process from these Guidelines. Such groups/programs are encouraged to contact Canada Nickel directly regarding requests for contributions, or to speak with a representative from their community regarding outreach to Canada Nickel. Organizations/Programs not directly affiliated with a community are asked to follow the application guidelines.

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## Formation of Canada Nickel's **Environmental Committee**

#### **COMMITTEE MANDATE**

Comment on the Crawford Project's potential environmental impacts, planned mitigation measures, and other environmental topics during the Project's planning phase, with potential for duties to continue into the construction and operation of the Project;

Discuss proposed solutions to manage or minimize the Project's environmental impacts and to improve Canada Nickel's environmental practices and commitments;

Act as an information relay to the Project's communities and stakeholders for agreed-upon information.

Following the success of the CC&LP Committee, in November 2022 Canada Nickel formed the Environmental Committee, comprised of dedicated environmental representatives from the region whose objectives are to engage in meaningful and productive conversations with the team at Canada Nickel. The Committee will also help to communicate information to and from their organizations/communities, and their general communication networks, to support Canada Nickel's ongoing and dedicated engagement activities. The Committee will meet three to four times a year, or as needed.

The first committee meeting was a success, with excellent participation and productive discussions around the future of the committee. Particular topics of interest highlighted for future conversations were water management and climate change (emissions, carbon sequestration). The full meeting report is available on Canada Nickel's website.

A Labour and Training Committee is planned for formation in 2023.

#### COMMITTEE MEMBERS

#### **Community Representatives**

Representative - Town of Cochrane

Representative - Town of Smooth Rock Falls

Representative - City of Timmins

Representative - Town of Iroquois Falls

Socio-Environmental Organizations

Representatives

Representative – Friends of the Porcupine

River Watershed

Representative – Porcupine Health Unit

Representative – Mattagami Region Source

**Protection Committee** 

Representative – Cochrane Local Citizen

Committee

#### **Canada Nickel Representatives (Coordination)**

Vice President Sustainability

**Community Relations and Communications** 

Coordinator

**Environmental Manager** 

#### STEPS TOWARDS ACHIEVING CARBON NEUTRALITY

And what is carbon sequestration?

Canada Nickel's objective is to achieve carbon neutral production at the Crawford Project. Before explaining how this objective can be reached, here are a few helpful definitions:

Carbon Neutral/Net Zero Carbon: Achieved when the amount of carbon emitted is equal to or less than the amount of carbon being absorbed by a carbon sink

Carbon Sink: An aspect of the natural environment able to capture carbon dioxide from the atmosphere. At Crawford, the tailings management facility (TMF) and waste rock stockpiles act as a carbon sink. When developed, Crawford's TMF may represent one of the largest carbon sinks in Ontario, and even all of Canada.

Mineral Carbon Sequestration: A process by which carbon is removed from the atmosphere and permanently stored in a stable mineral form.

Tailings: The materials left over after the removal of valuable minerals (nickel, iron, cobalt, chrome, platinum, palladium) during processing

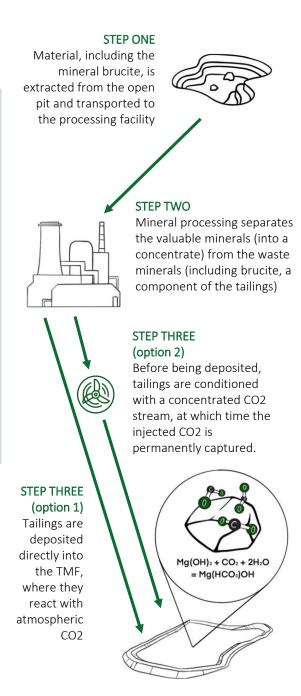
Carbon Credit: A unit created in a carbon trading market, where trading generally occurs between projects generating credits by diminishing their carbon emissions and projects buying credits to compensate their carbon emissions

Crawford is estimated to have relatively low carbon emissions, made possible by access to low carbon grid power (hydroelectric) and use of electrified vehicles (rope shovels and trolley trucks).

Now factor in carbon sequestration. Crawford's tailings and waste rock, in particular the minerals brucite, olivine, and **serpentine**, can naturally sequester carbon – a process explained in the infographic to the right, focusing on brucite.

CNC is also researching a new opportunity known as In Process Tailings (IPT) Carbonation. At the end of the processing cycle, the tailings are briefly conditioned with concentrated CO2 before being deposited into the TMF. The tailings, while sitting in the TMF, will then gradually precipitate out the solid carbon. While only demonstrated at lab scale, this process is 8-12times faster than natural sequestration. CNC is continuing to work with regulators and partner institutes to evaluate the full extent of carbon sequestration at Crawford, including the feasibility of IPT, and will continue to share details as they become available. \*

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#### Once deposited in the TMF

For both options 1 and 2, brucite reacts with atmospheric CO2 to form a magnesium carbonate

\*For more information on carbon sequestration, please refer to Canada Nickel's website and see our Investor's Presentation and the relevant news releases. More information will be available in the upcoming feasibility study, as well as future permitting documents and technical reports.

### **NEWS RELEASE HIGHLIGHTS**

Canada Nickel Acquires Past Producing Texmont Mine, Highlights High Grade Potential of Regional Land Package *December 19th, 2022* 

Canada Nickel signed a deal to acquire a 100% interest in the past producing Texmont property situated south of Timmins, Ontario, providing potential for near-term open pit production from near-surface mineralization. Historic results at Canada Nickel's regional properties Texmont, Sothman, and Bannockburn demonstrate important potential for potential future development. At Canada Nickel's Crawford Deposit, the PGM zone includes two holes with core length of 30 metres of 1.82 g/t palladium and platinum and 15.0 metres of 1.88 g/t platinum and palladium.

#### Canada Nickel Appoints Financial Advisors, Reaches Next Permitting Milestone

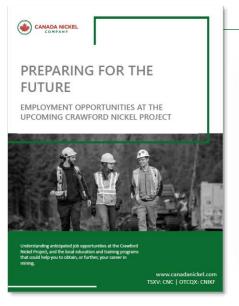
*December 15<sup>th</sup>, 2022* 

Canada Nickel has engaged Deutsche Bank Securities Inc and Scotiabank as financial advisors for the equity component of financing for the Crawford Nickel Project. This decision comes as Canada Nickel submits the Detailed Project Description to the Impact Assessment Agency of Canada, a key step in progressing the federal permitting process and moving Crawford closer to production.

#### Canada Nickel Confirms Higher Grade Interval at Reid, Announces Discovery at Sothman

December 1st, 2022

Results continue to pour in from Canada Nickel's regional exploration program. Additional assay results confirmed a higher-grade interval at Reid of 325 metres of 0.29% nickel including 81 metres of 0.35% nickel. Drilling has also continued at the Sothman property, with assay results pending.



#### PLANNING FOR THE FUTURE

Canada Nickel has developed an outline of different jobs that are anticipated requirements for the successful operation of the Crawford Nickel Project, and the local education and training programs that could help prepare individuals for these opportunities. For more information, please see the full document at www.canadanickel.com/sustainability.

Additional efforts in preparing the workforce for the construction and operation of our Project will be undertaken with the Labour and Training Committee, to be formed in the new year.

Canada Nickel would like to give a special thank you to Collège Boréal, Northern College, NORCAT, and Keepers of the Circle for their support in compiling this information package.

#### Canada Nickel Announces Improved Iron and Chromium Recoveries from Pilot Plant Testing

*November 15<sup>th</sup>, 2022* 

Completion of the initial phase of the pilot plant, involving 34 tonnes of material from the Crawford Nickel Project, has confirmed significant improvements in both recovery and product quality from the updated magnetite circuit. This includes 18% improvement in iron recovery, 15% improvement in chromium recovery, and 16% improvement in iron grade to 55%. Discussions are underway with multiple stainless and ferroalloy producers regarding downstream processing partnerships.

#### Canada Nickel Announces Improvements to Accelerated CO<sub>2</sub> Capture Process

November 8<sup>th</sup>, 2022

Following up to Canada Nickel's news release regarding an enhanced carbon capture process, further lab scale tests have built upon the initial work on the In Process Tailings (IPT) Carbonation Process. Recent test work accelerates carbon capture by three times and achieves predominant carbon capture in just 24 hours. This simple carbon capture approach could allow production of Net Zero Nickel and generation of 21 tonnes of CO2 credits per tonne of nickel.

#### Canada Nickel Closes Previously Announced US\$10 Million Loan Facility with Auramet International, Inc. October 18th, 2022

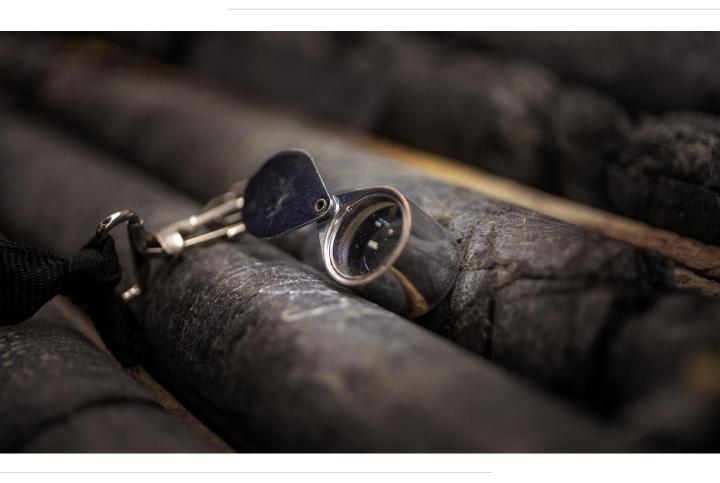
Canada Nickel announces closure of secured loan facility with Auramet International, Inc. of US\$10 million previously announced on September 29, 2022. The proceeds will allow the Company to execute post feasibility study work on permitting and detailed engineering which is advantageous to complete during the coming winter months and allows the Company to remain well-funded as it continues to aggressively advance the project.



#### Shawn MacFarlane Geotechnician

Shawn joined Canada Nickel in 2019, taking on the role of Lead Geotechnician. Originally from South Porcupine, Shawn began his career in mining exploration in 2008 and continued throughout his education, gaining experience in gold and nickel projects in both Northwestern and Northeastern Ontario. Shawn attended Trent University where he completed Honors degrees in Biochemistry and Molecular Biology (B.Sc.) and Environmental and Life Sciences (M.Sc.). Shawn enjoys learning about the geology of Crawford and the surrounding regional properties, as well as supporting and providing guidance to his fellow technicians. In his spare time, Shawn enjoys wood working, nature and ruffing it with his fiancée and two huskies.

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#### **DISCLOSURE STATEMENT**

#### **Cautionary Statement Concerning Forward Looking Statements**

This press release contains certain information that may constitute "forward-looking information" under applicable Canadian securities legislation. Forward looking information includes, but is not limited to, the carbon capture approach could allow production of Net Zero nickel and generation of an additional tonnes of CO2 credits per tonne of nickel produced after offsetting all emissions, the potential to turn nickel mine into a generator of carbon credits rather than generator of carbon emissions, the production of estimated average of 710,000 tonnes of carbon credits annually and 18 million total tonnes of CO2 of credits over expected life of mine at Crawford, the ability to monetize carbon credits, the ability to quantify carbon capture, emission estimates, the brucite content of the deposit, the scalability of the process, the metallurgical results, the timing and results of the feasibility study, the results of Crawford's PEA, including statements relating to net present value, future production, estimates of cash cost, proposed mining plans and methods, mine life estimates, cash flow forecasts, metal recoveries, estimates of capital and operating costs, timing for permitting and environmental assessments, realization of mineral resource estimates, capital and operating cost estimates, project and life of mine estimates, ability to obtain permitting by the time targeted, size and ranking of project upon achieving production, economic return estimates, the timing and amount of estimated future production and capital, operating and exploration expenditures and potential upside and alternatives. Readers should not place undue reliance on forward-looking statements.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Canada Nickel to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. The PEA results are estimates only and are based on a number of assumptions, any of which, if incorrect, could materially change the projected outcome. There are no assurances that Crawford will be placed into production. Factors that could affect the outcome include, among others: the actual results of development activities; project delays; inability to raise the funds necessary to complete development; general business, economic, competitive, political and social uncertainties; future prices of metals or project costs could differ substantially and make any commercialization uneconomic; availability of alternative nickel sources or substitutes; actual nickel recovery; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; accidents, labour disputes, the availability and productivity of skilled labour and other risks of the mining industry; political instability, terrorism, insurrection or war; delays in obtaining governmental approvals, necessary permitting or in the completion of development or construction activities; mineral resource estimates relating to Crawford could prove to be inaccurate for any reason whatsoever; additional but currently unforeseen work may be required to advance to the feasibility stage; and even if Crawford goes into production, there is no assurance that operations will be profitable.

Although Canada Nickel has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this news release and Canada Nickel disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws.

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