Canada Nickel Launches Wholly-owned NetZero Metals Inc. to Develop Zero-Carbon Production of Nickel, Cobalt and Iron

TORONTO, July 27, 2020 – Canada Nickel Company Inc. (TSX-V:CNC) ("**Canada Nickel**" or the "**Company**") is pleased to announce it has created a wholly-owned subsidiary, **NetZero Metals**, to begin the research and development of a processing facility that would be located in the Timmins, Ontario region with the goal of utilizing existing technologies to produce zero-carbon nickel, cobalt and iron products.

The Company has applied for trademarks for the terms NetZero Nickel™, NetZero Cobalt™, and NetZero Iron™ in U.S., Canada, and other jurisdictions related to zero-carbon production of nickel, cobalt, and iron products.

"The electric vehicle industry and many other consumer sectors needs zero-carbon metal this decade – not in a nebulous 2050 timeframe contemplated by many other resource companies," said Mark Selby, Chair & CEO of Canada Nickel.

"As a result of the unique advantages of the Timmins region with its close proximity to zero-carbon hydroelectricity and our Crawford Nickel-Cobalt Sulphide project, comprised largely of serpentine rock that naturally absorbs CO_2 when exposed to air, Canada Nickel has the potential to develop zero-carbon products that our customers are expecting from the mining sector. With nickel as a preferred metal to power the clean energy revolution, our commitment to net zero-carbon production is the right step to take for the environment, for consumers, and for our investors."

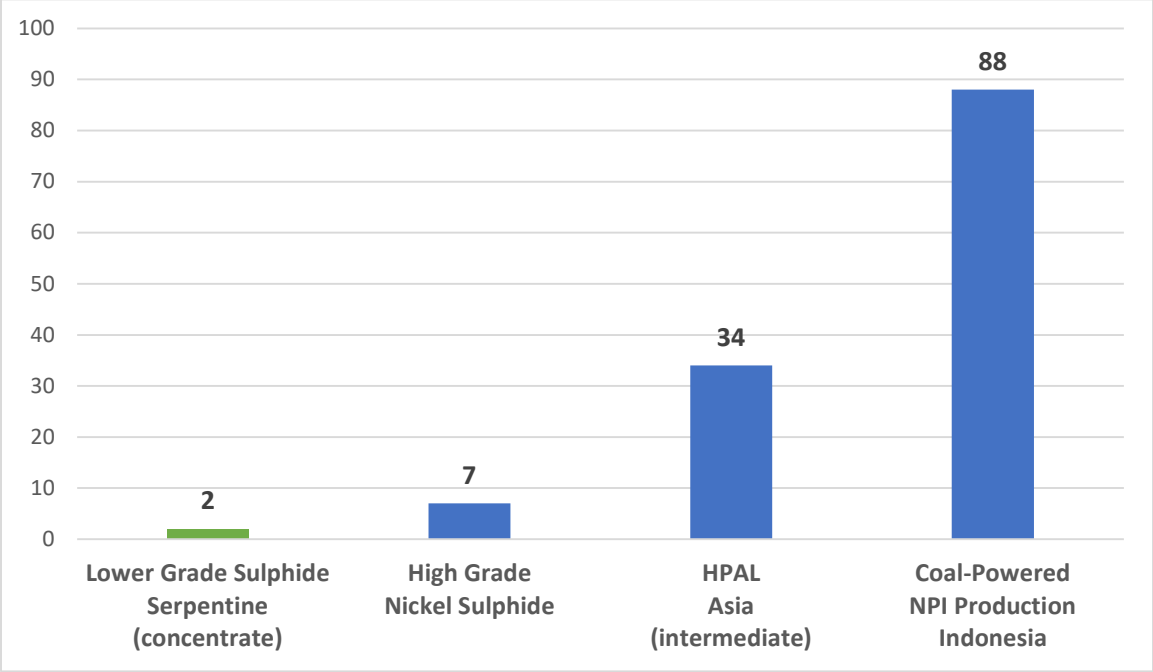
Serpentine rock, the host rock comprising more than 90 per cent of the mass of the resource at the Crawford Nickel-Cobalt Sulphide Project[1], has had numerous studies completed that note that the rock naturally absorbs carbon dioxide (CO_2) when exposed to air through a naturally occurring process of spontaneous mineral carbonation.

The nickel industry faces a number of challenges as the current processing approach of laterite and sulphide ores generate a significant environmental footprint in the form of SO_2 and CO_2 emissions. These environmental challenges will only worsen given the industry supply profile with the bulk of recent nickel supply growth and the main source of future production growth being nickel pig iron production in Indonesia, which, according to industry sources, uses 25-30 tonnes of coal to produce each tonne of nickel, which when combined with other sources of CO_2, generates nearly approximately 90 tonnes of Scope 1 and Scope 2 CO_2 emissions per tonne of nickel produced. (see Figure 1).

For an electric vehicle battery pack that contained 50kg of nickel from this source, *it would represent approximately 4 tonnes of CO_2.*emissions for that vehicle. Other sources of nickel supply growth that have additional environmental footprint issues are HPAL projects in Indonesia that are considering

technologies such as deep-sea discharge of tailings which would result in ocean discharge of approximately 100 tonnes of material per tonne of nickel.

Figure 1 – Estimated Carbon Footprint (tonnes CO2/tonne of Nickel produced)
Selected Types of Nickel Production – Existing Projects/Producers



Source: Canada Nickel analysis, WoodMackenzie Nickel Industry Costs

Key Technologies Being Explored to Develop a Zero-Carbon Footprint Operation

Canada Nickel will explore the use of various alternatives to achieve its NetZero objectives in each stage of the mining process: Mining, Milling and Processing.

Mining

The biggest single technology to reduce the carbon footprint of mining activities is the utilization of electric rope shovels and trolley trucks which utilize electricity, rather than diesel fuel, as a power source wherever possible. Given the close proximity to zero carbon hydroelectric generating capacity, electricity use in place of diesel fuel has the potential to significantly reduce carbon emissions.

The deposition of waste rock and tailings during the mining process will also expose the serpentine rock to air which provides the potential for this material to absorb CO_2 through natural mineral carbonation and offsetting any CO_2 emissions from the project. The exact amount and rate at which CO_2 can be absorbed from materials mined at Crawford will be analyzed during upcoming phases of work.

Milling

Traditionally, large scale processing of lower grade sulphide ores utilizes a significant amount of electricity. Again, the local proximity to hydroelectricity provide the potential to minimize carbon emissions for this stage of production.

NetZero Metals - Nickel-Cobalt Concentrate Processing

Existing processes for processing nickel-cobalt concentrates to remove sulphur, iron, and other impurities have resulted in the generation of significant quantities of CO_2, SO_2, and other impurities for a number of producers worldwide.

Canada Nickel will explore the potential for producing nickel and cobalt products from existing pyrometallurgical processes such as roasting, sulphation roasting, and reduction using electric arc furnaces (utilizing natural gas rather coke or coal as a reductant) with the offgases captured and re-routed to allow the CO_2 be captured by the waste rock and tailings from the Crawford nickel-cobalt sulphide project[1] The Company will also look at existing hydrometallurgical processes to produce nickel and cobalt products such as the Albion or other similar processes, which generate minimal off-gases to produce nickel and cobalt products. The off-gases will again be captured and treated to ensure CO2 and SO2 emissions are minimized.

NetZero Metals - Magnetite Concentrate Processing

The Company will explore the potential for the production of iron products utilizing existing direct reduced iron (DRI) processes or reduction in electric arc furnaces utilizing natural gas and then re-routed to allow the CO_2 to be captured by the waste rock and tailings from the deposit.

Next Steps

The Company will announce some key leadership changes at the Board level to help guide the Company in this important endeavour. The NetZero approach will be incorporated into the work done for the engineering for the Preliminary Economic Assessment which has been previously announced and currently underway. Specific studies to analyze the quantity and timing of CO_2 absorption by the host rock at Crawford and process design for downstream processing of nickel and cobalt materials and magnetite concentrate will be announced and get underway through the remainder of the year.

[1] The Crawford Nickel-Cobalt Sulphide Project is an early stage exploration and development project. There is no guarantee that the project will reach advanced development or production stage. The economic viability and technical feasibility of the Company's Crawford Nickel-Cobalt Sulphide Project has not been established at any level of confidence supported by a PEA, PFS or FS, and as such there is currently no evidence to support that the project would result in a "net zero-carbon" footprint. The Company is currently planning to complete a PEA by year-end 2020.

About Canada Nickel Company

Canada Nickel Company Inc. is advancing the next generation of nickel-cobalt sulphide projects to deliver nickel and cobalt required to feed the high growth electric vehicle and stainless steel markets. Canada Nickel Company has applied in multiple jurisdictions to trademark the terms NetZero Nickel™, NetZero Cobalt™, NetZero Iron™ and is pursuing the development of processes to allow the production of net zero carbon nickel, cobalt, and iron products. Canada Nickel provides investors with leverage to nickel and cobalt in low political risk jurisdictions. Canada Nickel is currently anchored by its 100% owned flagship Crawford Nickel-Cobalt Sulphide Project in the heart of the prolific Timmins-Cochrane mining camp.

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, drill results relating to the Crawford Nickel-Cobalt Sulphide Project, timing of economic studies, the potential of the Crawford Nickel-Cobalt Sulphide Project, the potential development of zero-carbon production of nickel, cobalt and iron, strategic plans, including future exploration and development results, and corporate and technical objectives. Forward-looking information is necessarily based upon a number of assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking information. Factors that could affect the outcome include, among others: future prices and the supply of metals, the future demand for metals, the results of drilling, inability to raise the money necessary to incur the expenditures required to retain and advance the property, environmental liabilities (known and unknown), general business, economic, competitive, political and social uncertainties, results of exploration programs, timing of the updated resource estimate, risks of the mining industry, delays in obtaining governmental approvals, and failure to obtain regulatory or shareholder approvals. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. All forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of management and information available to management as at the date hereof. Canada Nickel disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.

For further information, please contact:
Mark Selby, Chair and CEO
Phone: +1 647-256-1954
Email: info@canadanickel.com