Canadian Metals Inc. **CSE: CME**

Canadian Metals Inc. announces positive results from the Langis project Prefeasibility Study by CIMA+ with After-Tax NPV (at 8% Discount) of CAD 388.0M and IRR of 22.0%.

April 19th, 2018. Montreal, Quebec—Canadian Metals Inc. (the "Corporation") (CSE: CME) is very pleased to announce positive project economics of the Langis prefeasibility study (PFS), with opportunities to further optimize the project during the next stage of the project development and this way enhance the economics.

The Prefeasibility Study was prepared by CIMA+in partnership with several Quebec-based engineering firms: GoldMinds Geoservices for Mineral Resources & Reserve Estimate and Mining; WSP for Environmental Impact and Strategy; Michel Bilodeau for Financial Analysis and CIMA+ for Metallurgical Process, CAPEX, OPEX, and Engineering.

Table 1: The following lists the Highlights provided by the PFS:

Prefeasibility Study Results Highlights	Units	Pre-Tax	After-Tax
NPV @ 8% Discount Rate	CAD	525	388
Internal Rate of Return (IRR)	%	24.5	22.0
Payback Period	year	3.8	4
Average annual SiO_2 raw production to the quarry (Mineralization)	tonne	225,000	
Quarry Process Recovery of raw material	%	75	
Average annual SiO_2 production of lump for the smelter	tonne	129,692	
Average production of excess SiO_2 for local market	tonne	40,000	
Average production of FeSi75 (1.8 SiO_2 per tonne of FeSI75)	tonne	72,051	
Average production of Microsilica/Slag	tonne	13,320/5,180	
Weighted average selling FeSi75 price (in USD 1,819.03)	CAD	2,425	
Weighted average selling Microsilica/Slag (in USD 250/100)	CAD	333/133	
Weighted average selling of SiO_2 for local sale (in USD 24.38)	CAD	32.50	
Direct CAPEX	CAD	220,299,241	
Indirect CAPEX	CAD	90,834,078	
Contingency (15%)	CAD	32,884,236	
Owner costs	CAD	8,029,992	
Total CAPEX	CAD	311,133,319	
Projected Construction Period	month	18 to 24	

Tonne = 1,000 kg = 2,205 lb.
Exchange rate USD 0.75 = CAD 1.00 use throughout this press release.

Cautionary Note: Prefeasibility Study information is not a guarantee of future performance. Furthermore, such forward-looking information involves a variety of know and unknown risks, uncertainties, and other factors, which may cause the actual plans, intentions, activities, results, performances, or achievements of CME to be materially different from any plans defined in the Prefeasibility Study. The purpose of this PFS is to inform the reader of the economic potential of the mineral property within a degree of accuracy of ±25%.

Mr. Vallée, President and CEO of Canadian Metals, stated: "We are extremely motivated by the successful prefeasibility study and very encouraging project financials. We worked as one team with our partners CIMA+, building on the previously successful completion of the Preliminary Economic Assessment of the project, and as a result, we are pleased to conclude yet another successful step towards building our Langis project."

Compared with the results of the Pre-Economic Assessment (PEA), the following can be highlighted:

- From PEA a NPV @ 8% of CAD 273.1 and an IRR of 18.0% after-tax;
- From PFS a NPV @ 8% of CAD 388 and an IRR of 22% after-tax. It has increased the NPV @ 8% by 42% and the IRR by four points;
- The metallurgical plan has been relocated from Matane to Baie-Comeau with a significant optimization around the plant layout and production of the FeSi75;
- We have increased the percentage of budget quotes and estimated items to secure the CAPEX (according to AACE estimate standards class 4 @ ±25 (range -30% to 40%) engineering completions 5 to 12%);
- We have increased the OPEX budget quotes from several items for the raw materials, including coal, woodchips, and quartz (transport and quarry operation);
- Construction activities were not factorized but estimated based on an equipment list, preliminary MTO, and technology suppliers' background;
- We have optimized the furnace size based on the operators', experts', and technology suppliers' advice. The aim was to have a stable operation with less innovation to commission;
- The price market study came from a list of experts such as Roskill, CRU, MetalBulletin, Platts, CIBC, BMO, Argus ferro-Alloys, and Ryan's note (Peter Ryan);
- For the PFS, formal quotes for mining, crushing, and screening costs at the quarry compares to estimation in the PEA.

The new location of the metallurgical plant in Baie-Comeau has advantages such as significant HQ electrical grid location (capacity and availability), access, and retention of skilled labour. Furthermore, Baie-Comeau has the benefits of an industrial platform to support operation and maintenance contracting strategy as well as easy access to service-industrial providers.

Mineral Resources

- High-grade silica sandstone deposit at surface open-pit constrained resources at a cut-off grade of 97% SiO_2;
- Major increase in resource estimates 217% for Langis compared to the October 2016 resources;
- The block model is a 5m x 5m x 3m three-dimensional block model with each block containing major elements SiO_2%, Fe_2O_3%, Al_2O_3%, MgO%, MnO%, K_2O%, CaO%, Na_2O%, TiO_2% grades, density, and resource classification (Measured, Indicated, and Inferred).

Table 2: Mineral Resources

Category	Total Silica (mt)	SiO_2 Grade (%)
Measured	3.9	99.01%
Indicated	3.7	98.97%
Total (M+I)	7.6	98.96%
Inferred	14.0	98.97%

Cautionary Note: Mineral Resources are not Mineral Reserves and have no demonstrated economic viability. The estimate of Mineral Resources may be materially affected by mining, processing,

metallurgical, infrastructure, economic, marketing, legal, environmental, social, and governmental factors.

Mining

The mining method selected for the project is a conventional open pit, truck and shovel, drill and blast operation.

Based on client request, contract operation was used as a basis for the PFS Study, and GMG was provided with four (4) budgetary pricing from different regional contractors after running RFP for the turnkey operation of the quarry based on the required tonnage and product specifications.
The contractor will operate a seasonal quarry operation with five (5) days per week, eleven (11) hours per day, five (5) months of the year during the warmer seasons to reduce the social impact of the project.

Mineral Reserves

The open-pit design includes 6.3 Mt of Probable & Proven Mineral Reserves at a grade of 99% SiO_2 taken from the 7.6 Mt of M+I resources. In order to access these reserves, 0.8 Mt of overburden and 2.6 Mt of waste rock will need to be removed. This results in a stripping ratio (waste to ore) of 0.41.

The first following table presents the parameters used for the pit optimization, while the second one shows the parameters used for the reserve estimation.

Table 3: Pit Optimization Parameters

Item	Value	Units
Mining Cost—Ore and Waste	5.00	$/t (mined)
Processing Cost	10.00	$/t
Quarry Recovery	95.00	%
%SiO_2 Cut-Off Grade	97.00	%
Overall Pit Slope	45	degree
Material Density Selling Price Assumption	2.33 44	t/m^3 $/t
Limiting Resource Classification	Measured & Indicated	
Pit Design Method	Lerchs-Grossmann	

Table 4: Parameters Used for the Reserve Estimation

Activity	Rate	Units
Contractor Costs		
Drill and Blast	CAD	4.36
Ore/Waste Excavation and Crushing (primary and secondary)	CAD	10.78
Loading and Handling (stockpiling at quarry site)	CAD	3.90
Total from Rock face to Stockpile ready for shipment (ore)	CAD	**19.04**
General & Administrative Costs		
CME supervision staff Production (QA/QC)	CAD	0.59
CME supervision staff Environment (regulation & monitoring)	CAD	0.59
HQ power supply (estimated)	CAD	0.25
Environmental monitoring (analytical costs)	CAD	0.05
Quebec government MERN	CAD	0.40
MRC for road use	CAD	0.58
Insurance	CAD	0.04
Social Saint-Vianney	CAD	0.25
Total G&A Costs	CAD	**2.75**
Ore Total (contractor + G&A Costs)	CAD	**21.79**
Waste (contractor mining costs)	CAD	**8.26**

Next table presents the open-pit reserves for the Langis deposit for a LOM of 28 years.

Table 5: Open-Pit Mineral Reserves

Category	Total Silica (mt)	SiO_2 Grade (%)
Proven	3.5	99%
Probable	2.8	99%
Total (Proven + Probable)	6.3	99%

Table 6: Grades of Major Elements in the Mineral Reserves

Total Proven & Probable (mT)	SiO_2 (%)	CaO (%)	Cr_2O_3 (%)	K_2O (%)	MgO (%)	MnO (%)	Na_2O (%)	P_2O_5 (%)	SO_3 (%)	SrO (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)
6.30	99.0	0.06	0.01	0.09	0.12	0.01	0.02	0.01	0.02	0.01	0.46	0.13	0.05

The above table indicates the expected average grade of the major elements. All within the CME expected values for the Langis deposit.

Processing and Smelting

The Langis silica deposit will be quarried and recovered for use as a feedstock into a downstream ferrosilicon smelter in Baie-Comeau to produce metallurgical products such as FeSi75 (ferrosilicon 75 standard).

Process steps at the quarry site will consist of blasting, crushing, and sizing the silica before transportation to the smelter. Silica that is too fine for use in the smelter can be marketed to local industries, while lumps will be used directly in the smelter.

The smelter at Baie-Comeau will produce FeSi75 by a pyrometallurgical process that combines silica from the Langis quarry with a coal for fixed carbon source, iron ore, and wood chips in an SAF in which these raw materials are smelted into ferrosilicon. Molten ferrosilicon is tapped from the furnace into ladles, and then a multiple layer casting method will be used. The solidifying product is crushed and classified into saleable FeSi75 products after sufficient cooling.

The metallurgical facility will produce on annual basis 72,051 tonnes of FeSi75 as well as the following process by-products: 13,583 tonnes of microsilica and 5,282 tonnes of slag. The raw materials request to produce the FeSi75 are:

- Silica (Quartzite)—Langis Silica (129,692 tonnes) ;
- Reducing Agent—Coal (83,839 tonnes);
- Iron ore (25,218 tonnes);
- Wood chips (72,051 tonnes);
- Electrode paste—Søderberg Paste (3,603 tonnes).

Capital and Operating Costs Summary

The capital cost requirements for the project are presented in Table 7 below. The capital cost assumes a fully contracted quarry and beneficiation operations from local operators. The metallurgical plant relocates to Baie-Comeau; the cost structure and indirect costs were optimized to reflect the local conditions. The capital cost estimate, summarized below, covers the development of the quarry, ore processing facilities, and infrastructure required for Canadian Metals project. It is based on the application of standard costing methods of achieving a PFS, which provides an accuracy of ±25% and follows AACE Class 4 Guidelines. The operating cost covers mining, transportation, processing, tailings and water management, general and administration fees, as well as infrastructure and services.

Table 7: Capital Costs Summary

CAPEX Item	Cost in CAD
Direct Costs	
Quarry Development/Pre-Stripping	250,000
Quarry Infrastructure	821,000
Metallurgical Plant Buildings	50,422,496
Metallurgical Plant Process	135,921,510
Metallurgical Plant Infrastructure	32,884,236
TOTAL DIRECT	**220,299,241**
Indirect Costs	
Owner Costs	8,029,992
Freight	5,867,813
Heavy Lift (250-T Crane)	620,000
Construction Indirect Costs	11,509,212
Supplier Engineering	10,000,000
EPCM	21,922,824
Contingency	32,884,236
TOTAL INDIRECT	**90,834,078**
TOTAL DIRECT & INDIRECT	**311,133,319**

The estimate has followed the AACE Standards for a Prefeasibility level class 4 ±25% (range -30% to 40%)

The operating costs for the project were estimated annually. A summary of these operating costs is presented in the following table.

Table 8: Operating Costs Summary

Operating Costs Breakdown (28 years project life)	Annual Average	Average Costs (CAD/t FeSi75)
Energy	26,226,570	364.00
Raw materials and supplies	31,582,115	438.33
Transport SiO_2 (Langis to metallurgical plant)	9,078,426	126.00
G&A all area	7,285,797	101.12
Quarry operation	5,034,203	69.87
Labour metallurgical plant	11,744,313	163.00
TOTAL	**90,952,284**	**1,262.00**
Projected Revenues from Sales	**175,099,774**	**2,430.00**

Overall, operating cost covers quarry operations, transportation, metallurgical processing, energy and raw materials, G&A fees, infrastructure, and services.

The project will see the creation of approximately 135 direct jobs in the metallurgical plant located in Baie-Comeau. Although Canadian Metals has already received some contractor budget quotes for quarry operation and SiO_2 transportation, CME will manage an official Request for Proposal (RFP) at the next phase. Canadian Metals wants to allow contractors to submit their bids without constraints on staff numbers and the strategy to reach operational objectives.

Project Economics Summary

Metallurgical ex-plant selling prices of USD 1,820 per tonne (USD 1.10/lb) for ferrosilicon, USD 250 per tonne for silica fume, and USD 100 for the slag were used for the financial analysis as well as CAD/USD exchange rate of 0.75.

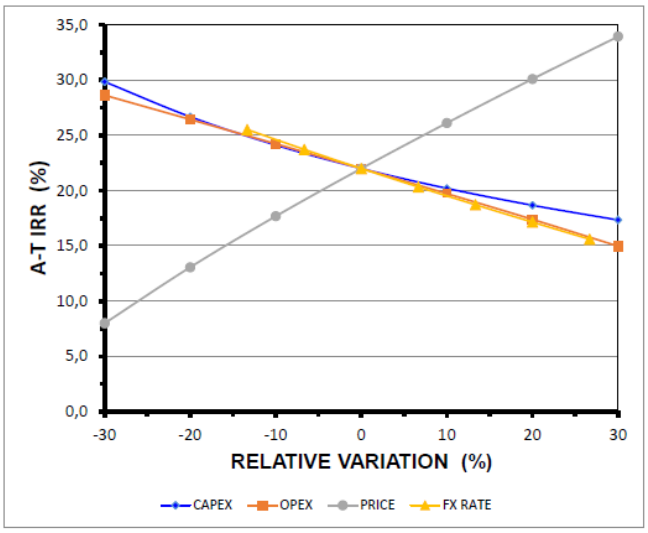
Table 9: Cash Flow and Project Financials Summary

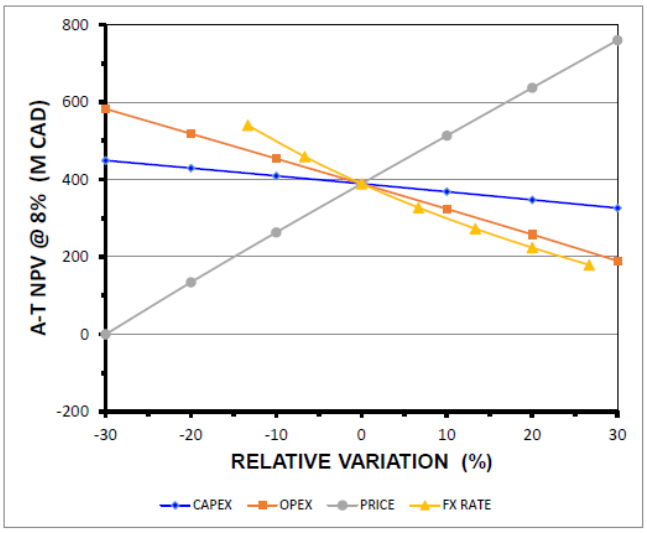
Description	Units	Parameter
Pre-Tax		
Payback Period	years	3.8
Cash Flow	CAD	2,085,795,383
NPV @ 6%	CAD	727,276,748
NPV @ 8%	CAD	525,596,925
NPV @ 10%	CAD	381,554,086
Internal Rate of Return	%	24.5%
After Tax		
Payback Period	years	4.0
Cash Flow	CAD	1,573,346,507
NPV @ 6%	CAD	543,677,358
NPV @ 8%	CAD	388,832,363
NPV @ 10%	CAD	277,533,159
Internal Rate of Return	%	22.0%

Sensitivity Analysis

The following sensitivity graphs for the Pre-Tax IRR and NPV @ 8% indicate that increase/decrease in CAPEX, OPEX, and the FX rate will have a positive/negative effect respectively; but the greatest sensitivity is on the selling price, then FX rate followed by OPEX and CAPEX.

Table 10 and 11: Sensitivity Analysis (IRR and NPV @ 8%)





Technical Report Filing

The Technical Report will be posted on Canadian Metals website at www.canadianmetalsinc.com and on SEDAR at www.sedar.ca, within 45 days following this news release.

Project Summary

The prefeasibility study work plan is based on the recently completed updated resource model for the Langis project that shows a major increase over the previous resources statement results. The metallurgical plant planned location has been moved from Matane to Baie-Comeau in Quebec. The design includes a quarry, situated at Saint-Vianney, QC, with a simple beneficiation plant on site from where the Langis quartz will be transported approximately 105 km (including 60 km across seaway) to a metallurgical plant (smelter) in Baie-Comeau, QC, to produce ferrosilicon75 (FeSi75) as the final product as well as other saleable process by-products. Other raw materials for the process include coal for reducing agent, iron, wood chips, and Söderberg electrode paste. The smelter is designed to operate with two (2) 35-MW Submerged Arc Furnaces (SAF), followed by standard tapping, cooling, and crushing facility for the final FeSi75 product. At the smelter, there will be an off-gas treatment system to capture microsilica (or silica fumes) as a by-product for sale and keep environmentally friendly metallurgical operations.

The quarry operation assumes 28 years Life-of-Mine (LOM) with an average annual capacity of approximately 225,000 tonnes of quartz, of which 75% of recovery will be sized at the beneficiation plant at Langis to feed the Baie-Comeau smelter requirements with approximately 129,692 tonnes and an average of 38,883 tonnes for the local market. Over this quantity, the quarry will produce fines amount and a low-grade volume for an average of 55,468 tonnes per year, which it will also be sold to the local market.

The distance from Saint-Vianney to Matane and Baie-Comeau Port to Metallurgical plant is about 40 km/15 km on standard road trucks (30 tonnes of capacity) used for transportation via existing public roads. Distance from Matane to Baie-Comeau is around 65 km, a barge system or the existing facilities will be used for transportation across Saint-Lawrence River from May to February. The global strategy is to contract all included for the transportation. The strategy is to handle the traffic between Langis to Matane for ten (10) months and to stop during the thaw period for around two (2) months. The trucking activities will be restricted from 7 am to 6 pm to minimize noise and ground vibrations to neighbours and the local communities.

Land Acquisition for the Smelter in Baie-Comeau

Dated July 11th, 2017 Canadian Metals applied to get the land (581,000 m^2) from the Quebec *Ministère de l'Énergie et des Ressources Naturelle* (MERN) for the future smelter in Baie-Comeau, the analysis by the MERN of their request was almost completed. In parallel, Canadian Metals work with Baie-Comeau authorities with regards to the official transfer of this land in the Jean Noel Tessier Industrial area; for them, this means easier access to municipal infrastructure. It is expected that this will be achieved in a few months, as the discussions involves well among Canadian Metals, MERN, and Baie-Comeau.

Certificate of Authorization (CA) for Baie-Comeau Site

Dated March 19th, 2018, Canadian Metals officially issued Project Notice to Quebec *Ministère du Developpement Durable, de l'Environnement et de la lutte contre les changements climatiques* (MDDELCC); data collection on site was performed during the summer 2017 by WSP and will be completed in 2018. Recently, Canadian Metals has mandated WSP to perform the environmental impact study to acquire the CA for the Baie-Comeau site. Canadian Metals expect this study being completed by the second quarter of 2019.

Permit for the Langis Quarry Operation

Langis project, a high-purity silica deposit located in Saint-Vianney, Quebec, with fully permitted with the certificate of authorization (CA) for the Langis silica project from the Quebec *Ministère du Developpement Durable, de l'Environnement et de la lutte contre les changements climatiques* (MDDELCC). The certificate of authorization represents the principal regulatory approval required to start the operation of the Langis quarry and has been issued by the Quebec regulators.

Canadian Metals owns its operating lease (BEX) from the Quebec Ministry of Energy and Natural Resources. Canadian Metals will update all authorizations and permits to operate the Langis pit at 225,000 tonnes per year.

Community Relations

Since 2016, Canadian Metals has held several meetings with people or groups from the town of Saint-Vianney and Baie-Comeau and nearby communities. During these presentations and consultations, important ties of trust have been forged between the population and the company. An accompanying committee, composed of citizens and regional experts, is working with Canadian Metals technical team to ensure that the project grows while respecting the host environment and, above all, contributes to the regional dynamism.

Risks and Opportunities

During the PFS processing, some risks have been considered by the operator and investor perspective. The following risk list presents some of the major flaws and opportunities that we have considered during the prefeasibility study:

- **Product Sale Price and Market:** We have managed several pieces of information from many market inputs. For example, we have considered the many outlooks recommendations from experts and bankers;
- **Exchange Rate:** It can improve or worsen the project economy. We have considered the bank forecasts considering the project strategies.
- **Raw Material Transport:** The costs of transport (quartz and coal) might have a major impact on the Opex. We have considered several bids or quotations to minimize this impact on the project operation costs.su
- **Technology:** We based our design to avoid commissioning innovation technology and first design. The design is based on the Submerged Arc Furnace (SAF) a well-known technology.

Quality Assurance and Quality Control (QA/QC) Preparation for the mineral resources

The samples were analyzed by at the independent laboratory at SGS Lakefield in Ontario. The half core sample are dried, crushed to have 75% passing 2 mm and afterward riffle split to have 250 grams which is pulverized with tungsten carbide puck pulverizer to have a pulp 85% passing 75 microns. Afterwards, an XRF borate fusion with 12-element analysis was done. The independent standards are in line with expected results as well as laboratory QA/QC and allow public disclosure of the results.

Qualified Persons

The technical information derived from the PFS and presented in this news release was prepared and approved by Georgi Doundarov, P. Eng., PMP, CCP, of CIMA+; Nathalie Fortin P. Eng., of WSP Canada Inc.; Claude Duplessis and Claude Bisaillon, P. Eng., of Goldminds Geoservices—all independent Qualified Persons as defined by National Instrument 43-101.

About Canadian Metals

Canadian Metals is a diversified resource company focused on creating shareholder value through the development of large-scale industrial mineral portfolios in specific commodities and jurisdictions that will fuel the new energy economy. The Company is uniquely positioned to pursue this strategy and controls significant interest in Silicon and Zinc/Cobalt assets throughout North America.

Our main activities are directed towards the development of Langis project, a high-purity silica deposit located in the province of Quebec with fully permitted with the BEX and the certificate of authorization from the MDDELCC. The Company is rapidly positioning itself as a supplier of high-purity silica and silicon alloy in North America. Silicon-based materials can be formulated to provide a broad range of products from more durable, faster building materials with smarter electronic devices, solar panels, and more efficient wind turbines. We expect to become a global supplier for a number of industries and applications but without limitation: glass, ceramics, lighting, oil and gas, paint, plastic, and rubber. We also want to become an integrated supplier to metallurgical industries including foundries, and participate in a wide range of civil, industrial, environmental, and related applications. These target markets are an integral part of the lives of millions of people every day.

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Cautionary Statements Regarding Forward-Looking Information

Certain statements included herein may constitute "forward-looking statements". All statements included in this press release that address future events, conditions, or results, including in connection with the prefeasibility study, its financing, job creation, the investments to complete the project and the potential performance, production, and environmental footprint of the ferrosilicon plant, are forward-looking statements. These forward-looking statements can be identified by the use of words such as "may", "must", "plan", "believe", "expect", "estimate", "think", "continue", "should", "will", "could", "intend", "anticipate", or "future", or the negative forms thereof or similar variations. These forward-looking statements are based on certain assumptions and analyses made by management in light of their experiences and their perception of historical trends, current conditions, and expected future developments, as well as other factors they believe are appropriate in the circumstances. These statements are subject to risks, uncertainties, and assumptions, including those mentioned in the Corporation's continuous disclosure documents, which can be found under its profile on SEDAR (www.sedar.com). Many of such risks and uncertainties are outside the control of the Corporation and could cause actual results to differ materially from those expressed or implied by such forward-looking statements. In making such forward-looking statements, management has relied upon a number of material factors and assumptions, on the basis of currently available information, for which there is no insurance that such information will prove accurate. All forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth above. The Corporation is under no obligation, and expressly disclaims any intention or obligation, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable law.