

**Canadian Metals Inc. modifies its disclosure of April 28<sup>th</sup> 2016 and files an amended technical report for the revised Preliminary Economic Assessment (PEA)**

October 4, 2016. Montréal, Québec – Canadian Metals Inc. (The “Corporation”) (CSE : CME) announces filing of an amended Technical Report for the revised Langis Preliminary Economic Assessment (PEA). The revision was required based on comments from the Autorité Des Marchés Financiers (AMF) regarding the resource model and metallurgical plant final products.

On June 22, 2016 a PEA report was filed to support the April 28<sup>th</sup> 2016 PEA disclosure. At the request of the AMF the corporation prepared an amended technical report including the required principal modifications: a Qualified persons to sign-off mineral resources with appropriate CIM 2014 guidelines disclosure, adjust the project so the PEA reflects the mineral resources available on the Langis property without 3<sup>rd</sup> party feed purchase of feed and a revised achievable plan of the mineral resources processing for the targeted product and the associated cash flow.

The revised divulgation and the revised PEA technical report supersede the disclosure of April 28, 2016 and the technical report of June 22, 2016 should not be relied upon.

The strategy for the work plan was developed around existing resource model for Hybrid Flex with Base Case 100% Ferro Silicon (FeSi). This, as well as other changes to the project assumptions during the revision stage had an impact on the values attributed to the project as announced in the press release of April 28, 2016, a reduction in the NPV, Capex and IRR with light increase in payback time, the project is still positive;

**The results of April 28, 2016, versus those of the current PEA Amended dated October 3<sup>rd</sup> 2016 :**

**Table 1. Summary of the Amended Project Economics Compared to the June 22<sup>nd</sup> Report**

Description	Units	US\$	US\$ (note i)
		Oct. 3, 2016	April. 28, 2016
<b>After Tax</b>			
Payback Period	Years	4.8	4.2
NPV @ 8 %	M US\$	207.9 <sub>i</sub>	380.0*
Internal Rate of Return (IRR)	%	18.0	20.7
Total Capex	M US\$	232.6	302.5

**Notes:**

- Discount Rate of 7.3% used
- A US\$/CAN\$ exchange rate of 0.7616 was assumed.
- i. The numbers in this column are for comparison purposes only and should not be relied upon.

**Cautionary Note: the preliminary economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.**

The Corporation is pleased to announce the successful completion of the Langis Preliminary Economic Assessment (PEA) revision, conducted by CIMA+ With Pre-Tax NPV (at 8% Discount) of CAN\$437.9 Million and IRR of 21.8 % and After-Tax NPV (at 8% Discount) of CAN\$273.1 Million and IRR of 18% with positive project economics and lots of opportunities to consider during the next stage of the project development.

### **The general scope of work involved:**

- Geology and Resource Model review
- Beneficiation Plant design review and optimizations
- Metallurgical Plant review and optimizations
- Capital and Operating costs structure optimization and adhering to the local standards and specifics
- Revised project economics including a new Financial Model, based on the optimized Capital and Operating costs completed in Canadian Dollars (CAN\$)
- The Conclusions and Recommendations area revised
- Complete National Instrument 43-101 Preliminary Economic Assessment Report
- Introduction of new Qualified Persons (QP) under the National Instrument 43-101, qualified to perform the respective mandates with deep understanding and vast experience in their respective fields.

The resources statement was reviewed and revised by the new Qualified Person (QP) Claude Duplessis to the inferred category. In order to increase the quality of the mineral resources to the respective Indicated and Measured resources categories, additional drilling and analysis are required. Canadian Metals Inc. as per latest results of the revised PEA should initiate the recommendation of the PEA to increase resource quality and extent. This is the first step the company will initiate in the forthcoming pre-feasibility study. There are no guaranty the drilling will convert all the inferred into measured and indicated, the company expect to carry sufficient works to achieve this goal.

Mine plan and schedule were revise accordingly to reflect the new resources as well. Other major changes to the report include:

- Revise the beneficiation plant assumptions and costs to a more mobile plant, that can require less civil work and no structural and steelwork, as well as become more environmentally friendly and easy to dismantle at closure with no impact on the surrounding environment.
- Revise the Metallurgy (Smelter) option to produce Ferrosilicon (FeSi) as final product instead of the previously assumed silicon metal (mgSi) to reflect the resources model. Capital and operating costs were revise accordingly based on the new mine production plan and to reflect the local labour environment and the new smelter production of FeSi
- All costs were revise to Canadian Dollar (CAN\$) values
- A complete new Financial Model was developed based on the new production and costs data. In addition the Taxation system was revise to reflect the federal and provincial guidelines and specifics.

During the next stage of development – the pre-feasibility study, the mgSi production option will be evaluated in detail to be able to firmly select the best production option for the project.

The following lists the highlights provided by the PEA:

### **Mineral Resources Statement**

**Cautionary Note: Mineral resources that are not mineral reserves have not demonstrated economic viability. Additional trenching and/or drilling will be required to convert inferred mineral resources to indicated or measured mineral resources. There is no certainty that the resources development, production, and economic forecasts on which this PEA is based will be realized.**

All classified as Inferred mineral resources (due to the additional drilling work required) 9.95 million tonnes of in-pit resources, with average, SiO<sub>2</sub> 98.71%, Al<sub>2</sub>O<sub>3</sub> 0.38%, TiO<sub>2</sub> 0.05%, Fe<sub>2</sub>O<sub>3</sub> 0.12%

- Waste in pit: 3.76 Million tonnes for a stripping ratio of 0.38 to 1
- Mining cost Mineralized Material CAN\$5/t

- Mining Cost waste CAN\$4/t
- Processing Cost of Quarry including G & A CAN\$10/t
- Recovery 95%
- Slope angle of 45 degrees
- Product value fixed at CAN\$44/t purchase price at the Quarry (these new current mineral resources are free of constraints and surface right limits).

With the above verification, the Author is confident that numbers used in the original mine plan for the in-pit resource for the PEA is reliable and conservative in the context.

**Notes:**

1. 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.
2. CIM definitions of May 10<sup>th</sup> 2014 were followed with reasonable prospect of economic extraction.
3. The resources are pit constrained by the Lerchs-Grossman pit optimizer with MineSight software.
4. Density of rock used 2.5 t/m<sup>3</sup>.
5. Parameters used for the definition of mineral resources
  - a. Mining cost of CAN\$5/tonne;
  - b. Processing cost (crushing, screening, hauling to plant plus Quarry G&A) CAN\$10/tonne;
  - c. Plant purchase price to Quarry CAN\$44/tonne with mine recovery of 95% with no dilution.

**Mining and Pit optimization**

The final conceptual pit design, summary of the results for it is presented in Table 2 with difference between the optimization (mathematical) and the pit design (operational)

**Table 2. Optimization results**

	Total Silica (kt)	Total SiO <sub>2</sub> (%)	Total Waste (kt)	Strip Ratio
Operational pit	5.038	98.47	2.094	0.42
Mathematics pit	4.834	98.51	1.848	0.38
Difference	4.04%	-0.03%	11.77%	8.05%

**Processing and Smelting**

The Langis silica deposit will be quarried and recovered for use as a feedstock into a downstream ferrosilicon smelter in nearby Matane, the Hybrid Flex Plant to produce metallurgical products such as FeSi75 (Ferrosilicon 75 standard).

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

The smelter in Matane will produce ferrosilicon by a pyrometallurgical process that combines silica from the Langis quarry with a carbon source, iron ore and wood chips in a SAF (submerged arc furnace or simply “furnace”) in which these raw materials are smelted into ferrosilicon. Molten ferrosilicon is tapped from the furnace into ladles, refined as necessary, and then poured into molds to cool and solidify into large ingots. The ingots are removed from the mold after they have cooled sufficiently, then crushed and classified into chunks or powder for sale.

## Capital and Operating Costs Summary

The capital cost of the project is the cost for the initial development of the project. Summary of the Project Capital Costs is shown below. The improvement in Capital costs is due to optimized mine development, assuming mobile vs static beneficiation plant, actual quotes for camp, offices and infrastructure buildings from local vendors, revised HF Plant cost structure and indirect costs reflecting the local specifics.

**Table 3. Summary of the Project Capital Costs**

<b>CAPEX Item</b>	<b>Cost, CAN\$ Oct.3, 2016</b>
<b>Direct Costs</b>	
Mine Development/Pre-stripping	\$ 295,201
Mine Equipment	\$ 3,462,107
Mine Infrastructure	\$ 435,000
Beneficiation Plant	\$ 1,338,000
HF Plant	\$ 206,759,839
HF Plant Infrastructure	\$ 20,565,835
<b>TOTAL DIRECT</b>	<b>\$ 232,855,982</b>
<b>Indirect Costs</b>	
Owner's Costs	\$ 8,544,000
EPCM	\$ 24,139,998
Contingency	\$ 39,830,997
<b>TOTAL INDIRECT</b>	<b>\$ 72,514,995</b>
<b>TOTAL DIRECT &amp; INDIRECT</b>	<b>\$ 305,370,977</b>

The operating costs for the project were estimated annually. A summary of these operating costs are shown in the following Table 4. The improved operating costs are mostly due to actual labor wages in the region, the preferred electricity rate for industrial projects from hydro Quebec, and changes from mgSi to FeSi production at the HF Plant operations.

**Table 4. Summary of the Project Operating Costs**

Area	Annual Cost	Unit Cost
		(\$/t FeSi)
Mining	1,877,238	16.70
Beneficiation	1,273,532	16.19
G&A mining site	395,000	5.02
Transportation to HF Plant	443,451	5.64
HF Plant (after Hydro Quebec Discount)	63,885,248	812.10
<b>TOTAL</b>	<b>67,874,469</b>	<b>855.64</b>

**Project Economics Summary**

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In the analysis, FOB-HF Plant selling prices of US\$1,600 per tonne for Ferrosilicon and US\$250 per tonne for Silica Fume were used. A US\$/CAN\$ exchange rate of 0.7407 was assumed. Additional sensitivity analysis is performed to evaluate the effect of potential changes in selling price, exchange rate, capital and operating cost values.

**Table 5. Summary of the Life of Project Production, Revenues and Costs**

Description	Units	
Production – Mineralization	k tonnes	3,900.00
Production – Silica Product Feed to HF Plant	k tonnes	2,924.70
Revenue	M CAN\$	4,668.90
Initial Capital Costs (excludes Working Capital)	M CAN\$	305.4
Sustaining Capital Costs	M CAN\$	5.8
Operating Costs (excludes royalty payments)	M CAN\$	2,479.10
Closure Costs	M CAN\$	3
Total Pre-Tax Cash Flow	M CAN\$	1,735.60
Total After-Tax Cash Flow	M CAN\$	1,187.30

The financial indicators associated with the economic analysis are summarized in Table 6.

**Table 6: Summary of Financial Indicators**

Description	Units	CAN\$
<b><u>Pre-Tax</u></b>		
Payback Period	Years	4.2
NPV @ 6 %	M CAN\$	611.9
NPV @ 8 %	M CAN\$	437.9
NPV @ 10 %	M CAN\$	312.0
Internal Rate of Return (IRR)	%	21.8
<b><u>After-Tax</u></b>		
Payback Period	Years	4.8
NPV @ 6 %	M CAN\$	396.5
<b>NPV @ 8 %</b>	<b>M CAN\$</b>	<b>273.1*</b>
NPV @ 10 %	M CAN\$	183.7
Internal Rate of Return (IRR)	%	18.0

**Note:**

- \* Base Case

**Qualified Persons (QP)**

Michel L. Bilodeau, Eng. Independent Consultant, Claude Duplessis, Eng. Goldminds Geoservices Inc., Valdiney Domingos de Oliveira, Eng., MBA, CEng. VIRIDIS-IQ, Caroline Lachance, Eng., M.Env. Biofilia, Jean-Sebastien Tremblay, Eng. Independent Consultant and Georgi Doundarov, P.Eng., PMP, CCP. CIMA+ are the independent qualified persons which have reviewed and prepared the information in the technical report and have approved the technical information contained in this news release.

**Quality Control and Assurance**

Claude Duplessis, Eng. of Goldminds Geoservices Inc. has reviewed the procedures, the results and quality control on the analytical results with had inclusions of blanks and standards. The results were in line with expected values, certificates of analysis were reviewed against the drill hole database. The site visit has allowed to verify and validate geology and review the core at the core shack where witness core is kept. The QA/QC, the verifications and the site visit enable the disclosure of reliable mineral resources of the Langis Silica project for the PEA in conformity with CIM standards and National Instrument 43-101.

*Mr. Leblanc, president and CEO of Canadian Metals, stated: " We are very proud of the continued support of our shareholders and financial partners and we look forward to further expanding our relationship through the development of a project that the Company considers financially and technically viable. The results speak volumes to the quality of the project and the Company. We will continue to have discussions with more than 15 identified institutional potential shareholders, many of whom are local and some of them government sponsored, to advance the project towards financing and execution. At the appropriate time, other financing alternatives, such as royalties and strategic partnerships, will be evaluated to provide the Company with the most efficient and optimal financing package.*

*We are very excited to have at the helm of the Company a team with true silica experience cumulating over six decades in the sector. The team has a proven track record of successfully producing, developing and marketing ferrosilicon into all applications, including the value-added markets. We believe that the Langis deposit*

*possesses one of the world's highest silica specifications and, when combined with our access to low cost hydroelectric power available in Quebec, should allow Canadian Metals to become one of the lowest cost ferrosilicon producers in the world."*

*Canadian Metals looks forward to a continuous partnership with CIMA+ going to the next stages of the Project Development.*

### **About Canadian Metals**

Canadian Metals Inc. is focused exclusively on the development of its Langis Project, a high-purity silica deposit located in the province of Quebec. The Company is rapidly positioning itself to eventually become a North American ferrosilicon producer.

### **For more information, please contact:**

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### **Cautionary Statements Regarding Forward Looking Information**

This news release contains forward-looking information within the meaning of applicable Canadian securities laws. All information other than historical fact is forward-looking information. Forward-looking information relates to future events or future performance and is based on CME current internal expectations, estimates, projections, assumptions and beliefs. Forward-looking information is often, but not always, identified by the use of words such as "expect", "project", "proposed", "intend", "seek", "anticipate", "budget", "plan", "continue", "estimate", "forecast", "may", "will", "predict", "potential", "targeting", "could", "might", "should", "believe" and similar expressions. Although management considers the assumptions and estimates, reflected in forward-looking information, to be reasonable, based on information currently available, there can be no assurance that such information will prove to be correct. As a consequence, actual results may differ materially from those anticipated.

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