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## **CANADA CARBON ANNOUNCES PRELIMINARY ECONOMIC ASSESSMENT SHOWING 100.2% PRE-TAX IRR AND 85.0 % POST-TAX IRR FOR MILLER PROJECT**

### ***The Most Advanced Nuclear-Grade Natural Graphite Project in North America***

March 4<sup>th</sup>, 2016, Vancouver, BC, Canada – Canada Carbon Inc. (the “Company”) (TSX-V:CCB), (FF:U7N1) is pleased to announce the results of a positive Preliminary Economic Assessment (“PEA”) for its flagship 100% owned Miller hydrothermal disseminated and lump vein graphite and architectural marble Project located 80 kilometres (“km”) west of Montréal, near Grenville, Québec. The technical report for the PEA was prepared in accordance with the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”) regulations by the independent engineering firm Tetra Tech of Vancouver, British Columbia, in conjunction with SGS Canada Inc. (“SGS”) of Blainville, Quebec. SGS are co-authors of the technical report, and are responsible for the Miller graphite and marble Project’s mineral resource estimates contained therein. The PEA demonstrates that the Miller graphite and marble Project combined has robust economics and excellent potential to become a producer of high-value, high-purity specialty graphite products for high-technology applications, and architectural marble products. The technical report also recommends that the Miller graphite and marble Project be immediately advanced to the pre-feasibility stage of development.

The high grade mineralization on the Miller Property is generally found in veins and pods and as such, the discovery of high grade graphite was best achieved by following the mineralization at surface. Accordingly, once significant high grade showings were discovered, the Company conducted sufficient drilling and sampling to result in a resource calculation that confirmed inferred graphite resources to support an initial 10 year mine life. The Company’s drill program also confirmed significant inferred marble resources. The drill results indicate that the deposit is still open at depth and on both strike extensions. While the PEA clearly indicates a financially viable project, it assumes that the Company’s resources are limited to the estimated inferred resources from drilling completed prior to the resource calculation. The Company plans to adopt a rolling resource approach to manage its deposit and accordingly, would continue to explore while in the resources definition and production stages. This approach would enable the Company to begin production sooner and to utilize the cash flows from operations to fund future exploration. The portion of the Miller Project which is the subject of the PEA and resource estimate occupies only 0.22 km<sup>2</sup> of the Company’s approximately 100 km<sup>2</sup> claims package.

### **PEA HIGHLIGHTS**

Highlights of the Miller graphite and marble Project’s PEA are summarized below. All dollar amounts are based in Canadian currency unless otherwise stated:

- The estimated mineral resources comprise 952,000 tonnes of inferred graphite resources at an average grade of 2.00% Cg within the graphite pit shells (cut-off grade of 0.8% Cg) and 1.2 million tonnes of inferred graphite resources at an average grade of 0.53% Cg within the architectural marble pit limits (cut-off grade of 0.4% Cg).
- The architectural marble mineral resources comprise 1.52 million tonnes of inferred marble with an average probability factor of 0.82.

- The PEA is based on the Miller project producing and selling two products: specialty, thermally-processed graphite product of >99.99% Cg and marble product suitable for architectural applications. The PEA is not modelled on producing and selling final run-of-mine (“ROM”) graphite concentrate product typical of other conventional flake graphite projects;
- Mining is expected to occur in three pits (two for graphite and one for marble). Marble will be mined for eight years and graphite will be mined for 10 years;
- The marble quarry is expected to produce and sell approximately 150,000 tonnes of architectural marble annually;
- Milling, concentrating and thermal processing will occur over 17 years producing a maximum of 1,500 tonnes of specialty high-purity graphite product annually;
- Initial Capital Expenditure (“CAPEX”) of \$44.4 million, with a payback period of 1.9 years (pre-tax) and 2.0 years (post-tax);
- Base-case pre-tax Net Present Value (“NPV”) of \$150 million, post-tax NPV \$110 million (8% discount rate); pre-tax NPV of \$131 million, post-tax NPV of \$96 million (10% discount rate);
- Pre-tax Internal Rate of Return (“IRR”) of 100.2%; post-tax IRR of 85.0%;
- Life of Mine (“LOM”) Gross Revenue of \$550 million and Operating Expenses (“OPEX”) of \$231 million;
- Selling price for purified graphite at US\$13,000 per tonne (CDN\$17,333 ) and marble at CDN\$184 per tonne; exchange rate used for the estimates is \$US:\$CDN = 0.75: 1.00;
- Life of Mine average cash operating costs of \$8,666 per tonne (\$6,880 for the first five years) for final graphite product and \$54/tonne for marble product.

Canada Carbon Executive Chairman and Chief Executive Officer Mr. R. Bruce Duncan stated, “We are pleased that the PEA has confirmed the financial viability of our proposed business model. CCB is positioning itself to be both a marble and low volume high value specialty graphite producer. We have been fortunate to have found significant quantities of quality marble on the Miller property which the PEA has demonstrated to be a profitable commodity. Given the low CAPEX costs for marble extraction, the less onerous quarry permit process and the marble sales contract already in place, the Company’s business plan envisions that operations on the Miller property would begin with the extraction of marble. This is the fastest path to cash flow which will in turn be utilized to fund some of the graphite CAPEX costs.

The business model presented in the PEA shows that the extraction and processing of graphite will occur approximately one year after the extraction of marble. While our lower graphite processing volumes result in higher processing costs per tonne compared with large producing mines, our high purity graphite commands higher prices which more than offset the costs (revenues exceed cash mining and processing costs by an average of \$8,667 per tonne). While the PEA assumes no more than 1,500 tonnes of graphite produced and sold annually, we believe there is growth potential and our proposed processing facilities are scalable. Given the fixed nature of a significant portion of the operating costs, higher volumes or higher head grade will reduce costs and increase profits. It is our understanding that lower processing volumes will have a positive impact on the permitting process.

We are excited to advance to the pre-feasibility stage of development.”

## **PROJECT OVERVIEW**

The 100%-owned Miller hydrothermal disseminated and lump-vein graphite and architectural marble Project is located in the Outaouais Region of southern Québec, Canada, about 80 km west of Montréal, Québec and 90 km east of Ottawa, Ontario, Canada. The closest cities are Grenville, Québec (5 km to the south) and Hawkesbury, Ontario (8 km to the south). The property is easily accessible from Highway 50, which runs approximately 2 km to the south of the deposit limit, and Scotch road, which traverses the property from south to north. A wide range of local resources are available in the town of Grenville and at the nearby cities of Hawkesbury or Lachute. A local skilled labor force would be able to support a mining operation. A power line crosses the southern part of the property and a railroad passes through the Ottawa Valley near Grenville.

The graphite mineralization is hosted within a marble unit in the Grenville Province. The mineralization comprises disseminated graphite in the marble unit and lump-vein associated with skarn and at the contact between the marble and host meta-arkose and paragneiss. The architectural marble consists of white marble lithologies observed within the entire marble units and bounded by paragneiss and meta-arkose.

The volume used in the current mineral resources estimate does not take into account the material from the historical stockpiles of the Miller mine found on the property. Further work, including volume and grade characterization, will be needed before the stockpiles can be included in the mineral resource.

### **Mineral Resources**

The mineral resources were estimated by Jean-Philippe Paiement, M.Sc. P.Geo., of SGS Geostat with an effective date of February 16, 2016. This estimate is the first mineral resources estimate produced by Canada Carbon since the acquisition of the property in January 2013. The mineral resources for the graphite and architectural marble were estimated separately using different sets of data and parameters.

The mineral resources were estimated based on the following geological and resources block modeling parameters which are based on the geological interpretations, geostatistical studies and best practices in mineral estimation:

#### ***Graphite Mineral Resources***

- Mineral resources were estimated from the diamond drill hole and channel sampling analytical results completed by Canada Carbon since 2013. Analytical data from a total of 99 drill holes and 89 surface/channels, comprising 7,985 assays in total, were used for the mineral resources model.
- The graphite mineral resources 3-D modeling of mineralized marble and high grade veins was conducted using a minimal modeling grade of 0.50% Cg over a 2 metre (“m”) horizontal thickness.
- The interpolation was conducted using Ordinary and Indicator Kriging with composited assays of 1.5 m in length.
- The block model was defined by a block size of 5 m long by 5 m wide by 3 m thick and covers a strike length of approximately 860 m to a maximal depth of 75 m below surface. The model is open both at depth and on strike.
- The In-pit mineral resources were constrained inside an optimized pit shell. The interpolated blocks of the model located below the optimised pit shell are not included in the mineral resources. The In-pit mineral resources reach 75 m below surface (maximum depth of optimised pit).
- The cut-off grade of the reported mineral resources is 0.8% Cg.
- The blocks not considered for architectural marble production with graphite grades greater than 0.4% Cg inside the marble pit were also considered as part of the graphite mineral resources.

#### ***Architectural Mineral Resources***

- Mineral resources were estimated from the diamond drill holes completed by Canada Carbon since 2013. A total of 99 drill holes were logged according to marble quality by Canada Carbon. The white marble suitable

for production was converted to a positive (1) indicator and unsuitable material received a negative (0) indicator. These binary values were used for the mineral resources model.

- The marble mineral resources 3-D modeling of architectural marble was conducted using the geological entries of the database in combination with the geophysical 3D inversion data.
- The interpolation was conducted using Indicator Kriging on composited assays of 1.5 m in length.
- The block model was defined by a block size of 5 m long by 5 m wide by 3 m thick and covers a strike length of approximately 860 m to a maximal depth of 115 m below surface. The model is open in all directions.
- The cut-off grade of the reported mineral resources is 0.6 which represents the probability, on a scale of 0 to 1, that the block is white marble. The In-pit mineral resources were constrained inside an optimized pit shell using the blocks with a probability factor above 0.6. The interpolated blocks of the model located below the optimised pit shell are not included in the mineral resources. The In-pit mineral resources reach 108 m below surface (maximum depth of optimised pit).
- Only the blocks within the architectural marble pit were considered as mineral resources.

## GRAPHITE AND ARCHITECTURAL MARBLE MINERAL RESOURCES

Mineral Resources within the 2 Graphite Pit Shells				
Cut Off (%Cg)	Category	Tonnage	Average Cg%	Graphite (tonnes)
0.8	Inferred	952,000	2.00	19,000

Mineral Resources within the Marble Pit Shell							
Cut Off		Category		Tonnage	Average		Marble or Graphite (tonnes)
0.6	Prob	Marble	Inferred	1,500,000	0.82	Prob	1,519,000
0.4	% Cg	Graphite	Inferred	1,200,000	0.53	% Cg	6,200

- 1) The mineral resource estimate has been conducted using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions Standards for mineral resources in accordance with National Instrument 43-101, Standards of Disclosure for Mineral Projects.
- 2) Mineral resources, which are not mineral reserves, do not have demonstrated economic viability.
- 3) Inferred mineral resources are exclusive of the Measured and Indicated resources.
- 4) A fixed density of 2.81 t/m<sup>3</sup> was used to estimate the tonnage from block model volumes.
- 5) Resources are constrained by the pit shell and the topography of the overburden layer.
- 6) Effective date 16-02-2016

## Mining

The PEA proposes a 19-year project life including 1 year of preproduction, 11 years of active mining operations and 7 years of stockpile re-handling. Graphite material will be mined from two open pits and marble will be quarried from a separate pit. Graphite pits will be mined using conventional truck/loader open pit mining. The production cycle includes drilling, blasting, loading and hauling and will be performed by a mining contractor. Over the 10-year life of the graphite mine, the total production is estimated to be 890,800 tonne of graphite material, 1,479,800 tonnes of waste rock and 158,300 tonnes of overburden. The LOM stripping ratio is 1.8 and LOM average mill feed grade is 1.87% Cg, with an initial graphite mill feed grade of 2.45% Cg.

The marble pit is scheduled to produce a maximum annual marble tonnage of 150,000 tonnes. Marble will be cut into blocks using special marble cutting machinery. Low grade graphite mineralization mined from the marble pit will be stockpiled and reclaimed starting in year 9. Over the 8-year marble mine life, the pit is expected to produce 1,182,000 tonnes of marble, 1,206,000 tonnes of graphite material grading 0.53% Cg, 5,031,800 tonnes of waste and 210,500 tonnes of overburden. The overall LOM stripping ratio is 2.2.

Based on the contract between Canada Carbon and a mining contractor, the contractor will mine, move and consume all waste materials produced from the graphite and marble pits off-site. The contractor is to pay Canada Carbon \$1.00 per tonne of waste extracted from the pits.

### **Metallurgy and Processing**

Five metallurgical test programs have been conducted on various head grade samples from the Miller deposit, including a pilot plant campaign processing approximately 125 tonnes of a bulk sample from the Miller deposit. The test work indicates that the Miller mineralization can be upgraded by conventional flotation into a graphite concentrate containing approximately 95% Cg or higher. Preliminary graphite concentrate upgrading tests were also conducted, including hydrometallurgical and thermal upgrading purifications. The tests, using a proprietary thermal treatment indicate that a graphite concentrate produced from the pilot plant runs can be directly upgraded to a high-purity specialty graphite containing 99.9998% Cg which may be suitable for nuclear, aerospace and other high-technology applications. The proposed graphite concentration plant will process the Miller graphite using conventional froth flotation, based on the pilot plant test work report produced by SGS Lakefield. The flotation plant is to be located at the Miller site. The concentrate produced will be upgraded at the Company's Asbury site by a proprietary thermal treatment process to generate a high-value, high-purity specialty graphite product which is anticipated to contain higher than 99.99% Cg. The designed annual production rate of the high purity graphite product is approximately 1,500 tonnes.

### **Project Economics**

Over the LOM, the project is planned to produce 19,200 tonnes of the high purity graphite and 1,182,000 tonnes of architectural marble. Below are the highlights of capital cost requirements and the economic results.

Initial capital costs are estimated at \$44.38 million. In addition, sustaining capital requirements are estimated at \$3.61 million, land acquisition \$1.05 million and closure and reclamation costs \$1.04 million. Total capital requirements are \$50.08 million.

### **INITIAL CAPITAL COSTS**

<b>Capital Category</b>	<b>Value (in CDN \$Million)</b>
Overall Site	\$ 1.30
Open Pit Mining	\$ 0.85
Miller Site Process (Flotation)	\$ 9.47
Asbury Site Process (Thermal Upgrading)	\$ 14.92
On-site Infrastructure and Services	\$ 1.10
Project Indirects	\$ 8.24
Owner's Cost	\$1.38
Contingencies	\$ 7.12
<b>TOTAL</b>	<b>\$44.38</b>

## PROJECT ECONOMICS

Category	Unit	Pre-Tax	Post-Tax
Selling Price, Refined Graphite >99.99% Carbon	\$/tonne	US\$ 13,000 (Cdn\$17,333)	US\$ 13,000 (Cdn\$17,333)
Exchange Rate	US\$: CDN\$	0.75:1.00	0.75:1.00
Selling Price, Marble	\$/tonne	\$ 184	\$ 184
Cash Operating Cost, Refined Graphite	\$/tonne	8,666	8,666
Cash Operating Cost, Marble	\$/tonne	54	54
Refined Graphite Peak Annual Production	tonnes	1,500	1,500
Marble Peak Annual Production	tonnes	150,000	150,000
NPV (0%)	\$ Million	268	198
NPV (8%)	\$ Million	150	110
NPV (10%)	\$ Million	131	96
IRR %	%	100.2	85.0
Payback Period	Years	1.9	2.0
Gross Revenue	\$ Million	550	550
Total Operating Cost	\$ Million	231	231
Total Capital Cost	\$ Million	50	50
Pre-Tax Net Cash Flow	\$ Million	268	n/a
Post-Tax Net Cash Flow	\$ Million	n/a	198

*\*Note: All dollar amounts are based in Canadian currency unless otherwise specified*

**Cautionary Note:** This PEA is considered by Tetra Tech to meet the requirements of a Preliminary Economic Assessment as defined by Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101") Standards of Disclosure for Mineral Projects. The economic analysis contained in the technical report is based on Inferred Resources (as defined in NI 43-101) and is preliminary in nature. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Inferred Resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves (as defined in NI 43-101). Additional trenching and/or drilling will be required to convert Inferred Mineral Resources to Measured or Indicated. There is no certainty that the reserve's development, production and economic forecasts on which the PEA is based will be realized.

### Qualified Persons

Independent engineering firms Tetra Tech and SGS Canada Inc. completed the Miller Graphite and Marble Project Preliminary Economic Assessment technical report. Both Tetra Tech and SGS Canada Inc. are independent of the Company under National Instrument 43-101 ("NI 43-101") guidelines. The technical information in this news release relating to the mining and metallurgy portions of the 2016 Miller Graphite and Marble Project Preliminary Economic Assessment was prepared by Tetra Tech's Dr. John Huang, P.Eng., an independent Qualified Person as defined by National Instrument 43-101 guidelines and Dr. Sabry AbdelHafez, P.Eng., an independent Qualified Person as defined by National Instrument 43-101 guidelines. The technical information in this news release that relates to the geology and mineral resource estimation portions of the report was prepared by Mr. Jean-Philippe Paiement, P.Geo, M.Sc., from SGS Canada Inc., an independent Qualified Person as defined by National Instrument 43-101 guidelines.

Dr. John Huang, P.Eng., of Tetra Tech, is a Qualified Person as defined by National Instrument 43-101 (“NI 43-101”) guidelines, and has reviewed and approved the technical related content of this news release.

## **CANADA CARBON INC.**

“R. Bruce Duncan”  
CEO and Director

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### **About Canada Carbon Inc.**

The 100%-owned Miller hydrothermal disseminated and lump-vein graphite and marble Project is located 80 km west of Montreal in the Grenville Township of Quebec, approximately 7 km from the center of the town of Grenville. The Miller Project, which is the subject of the PEA and resource estimate, occupies less than ¼ km<sup>2</sup> surrounding the historic Miller Pit, within approximately 100 km<sup>2</sup> of the mineral claims package held by the Company. In addition to the Miller Pit, numerous other historic graphite mines, exploration pits, and showings lie within the Company’s mineral claim package and will become the subject of prospective exploration activities. Geophysical anomalies similar to the Miller Pit signature also add a significant number of exploration targets in addition to the historical showings.

The Miller Project has exceptional infrastructure already in place, situated within 2 km of major highways, rail, power and water. Paved roads come within 800 metres of the Miller Project development area, and abut or cross the claim boundaries in many places. Existing forestry roads crisscross the property, permitting vehicle access with very low impact on the environment. All mineral claims lie on private land.

A pilot plant scale flotation concentration program was conducted by SGS Canada (Lakefield), based on a blended 125 tonne sample obtained from all known graphite exposures at the Miller Project. The pilot plant concentrate graded 95% Cg or higher, and was upgraded to 99.9998% Cg by commercially available thermal upgrading techniques. The Company thereafter received a pricing letter for the 99.9998% purity graphite, assigning a market value of US\$12,000-14,000/tonne for the high purity material. Upon request by ASTM International, the Company submitted samples of the thermally upgraded Miller graphite (99.9998% purity), for the development of a new nuclear standard test method for natural graphite. Four international laboratories, with membership in Subcommittee D02.F0 on Manufactured Carbon and Graphite Products of ASTM International, have completed the round-robin testing of the Miller graphite. The Company currently awaits the final ASTM report, certifying both the material and the new test method.

On November 16<sup>th</sup>, 2015 the Company signed a comprehensive agreement to sell 75,000 tonnes of architectural-quality marble material from the Miller property. This agreement was signed subsequent to an independent market assessment of architectural blocks and slabs of the Miller marble, which is the host rock of the Miller hydrothermal disseminated and lump-vein graphite. The agreed base valuation for marble blocks or slabs is \$14 per cubic foot, which is approximately \$184 per tonne.

## **Disclaimer for Forward-Looking Information**

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*By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or other future events, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among other things, the interpretation and actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of graphite; possible variations in grade or recovery rates; failure of equipment or processes to operate as anticipated; the failure of contracted parties to perform; labor disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of exploration, as well as those factors disclosed in the Company’s publicly filed documents. Forward-looking statements are also based on a number of assumptions, including that contracted parties provide goods and/or services on the agreed timeframes, that equipment necessary for exploration is available as scheduled and does not incur unforeseen breakdowns, that no labor shortages or delays are incurred, that plant and equipment function as specified, that no unusual geological or technical problems occur, and that laboratory and other related services are available and perform as contracted.*

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