



TSX/NYSE American  
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## News Release

### Trilogy Metals Announces Positive Feasibility Study Results for the Arctic Project Located in Alaska, USA

**August 20, 2020 - Vancouver, British Columbia – Trilogy Metals Inc. (TSX/NYSE American: TMQ)** ("Trilogy Metals" or the "Company") is pleased to announce the positive results of its Feasibility Study ("FS") for the Arctic Copper-Zinc-Lead-Silver-Gold Project ("Arctic" or the "Arctic Project") in the Ambler mining district of Northwestern Alaska. The Arctic Project is held by Ambler Metals LLC ("Ambler Metals"), the joint venture operating company equally owned by Trilogy and South32 Limited ("South32"). The FS was prepared on a 100% ownership basis, of which Trilogy's share is 50%. All amounts are in U.S. dollars unless otherwise stated.

**Trilogy Metals will host a conference call on August 20, 2020 at 8:00am (Pacific Time) or 11:00am (Eastern Time) to discuss these results. Call-in information is provided in this news release and on our website at [www.trilogymetals.com](http://www.trilogymetals.com).**

#### Highlights of the Arctic Feasibility Study

- **Pre-tax Net Present Value ("NPV")<sub>8%</sub> of \$1.6 Billion and an Internal Rate of Return ("IRR") of 31% for the base case.**
- **After-tax NPV<sub>8%</sub> of \$1.1 Billion and after-tax IRR of 27% for the base case.**
- **At current spot metals prices of \$2.94/lb copper, \$1.09/lb zinc, \$0.89/lb lead, \$2,001/oz gold and \$28.89/oz silver, the pre-tax NPV<sub>8%</sub> is \$1.8 Billion and IRR is 33.8% and after-tax NPV<sub>8%</sub> is \$1.3 Billion and IRR is 29.6%.**

The FS describes the technical and economic viability of establishing a conventional open-pit copper-zinc-lead-silver-gold mine-and-mill complex for a 10,000 tonne-per-day operation for a minimum 12-year mine life. **The base case scenario utilizes long-term metal prices of \$3.00/lb for copper, \$1.10/lb for zinc, \$1.00/lb for lead, \$1,300/oz for gold and \$18.00/oz for silver.**

Tony Giardini, President and Chief Executive Officer of Trilogy Metals comments, "Arctic is a special project due to its unique high-grade polymetallic nature. The only other time that I've seen a project of this quality where the grades were similar was in an underground mining scenario. However, Arctic is mineable in an open pit scenario. I also want to highlight that Arctic contains a significant amount of gold and silver. At current spot metal prices, the precious metals output represents almost 20% of its revenue. The annual gold equivalent (gold and silver) payable output is about 80,000 ounces per year."

Jim Gowans, Director of Trilogy Metals and the Company's representative on the Board of Ambler Metals comments, "Arctic is located in the extremely prospective Ambler Mining



District, in a mining friendly jurisdiction, in Alaska, USA, where solid environmental regulations and a balanced permitting process is established. I am also very pleased that we are working with NANA Regional Corporation, Inc., who understand mining and have an established record of working at the Red Dog Mine.”

The salient details of the FS are displayed in **Tables 1, 2 and 3** below.

**Table 1. Metal Production and Assumed Metal Prices**

<b>Annual Payable Metals Production</b>	
Copper ('000'lb)	155,369
Lead ('000'lb)	32,367
Zinc ('000'lb)	192,023
Gold (oz)	32,165
Silver ('000'oz)	3,382
<b>Metal Price</b>	
Copper (\$/lb)	3.00
Lead (\$/lb)	1.00
Zinc (\$/lb)	1.10
Gold (\$/oz)	1,300.00
Silver (\$/oz)	18.00

**Table 2. Operating and Capital Costs**

<b>On-Site Operating Costs</b>	
Mining (\$/t milled)	18.48
Processing (\$/t milled)	18.31
G&A (\$/t milled)	5.15
Surface Service (\$/t milled)	0.68
Road Toll (\$/t milled)	8.04
<b>Total Operating Cost (\$/t milled)</b>	<b>50.65</b>
<b>Capital Expenditure</b>	
Initial Capital (\$ million)	905.6
Sustaining Capital (\$ million)	113.8
Mine Closure & Reclamation (\$ million)	205.4
<b>Total Capex (\$ million)</b>	<b>1,224.7</b>

**Table 3. Financial Results**

<b>Financial Summary</b>	
Pre-tax NPV (\$ million) at 8%	1,550.9
After-tax Cash Flow (\$ million)	2,843.4
After-tax NPV (\$ million) at 8%	1,134.7
Cash Costs, Net of By-product Credits (\$/lb Cu payable)	0.32
All-in Cost, Net of By-product Credits (\$/lb Cu payable)	0.98
Pre-tax IRR (%)	30.8
Pre-tax Payback Period (years)	2.4
Post-tax IRR (%)	27.1
Post-tax Payback Period (years)	2.6

The FS was prepared on a 100% ownership basis, under National Instrument 43-101 standards by independent consultant, Ausenco Engineering Canada Inc. ("Ausenco") of Vancouver, British Columbia, Canada and the full technical report will be filed on SEDAR and EDGAR within 45 days of this news release. The Company also engaged Wood Canada Limited ("Wood") to complete mine planning and SRK Consulting (Canada) Inc. ("SRK") to complete tailings and waste design, hydrology and water management studies.

The FS forecasts an average annual payable production to be more than 155 million pounds of copper, 192 million pounds of zinc, 32 million pounds of lead, 32,165 ounces of gold and 3.4 million ounces of silver. Total life of mine 12-year production is projected at 1.9 billion pounds of copper, 2.3 billion pounds of zinc, 388 million pounds of lead, 386 thousand ounces of gold and 40.6 million ounces of silver.

The Company's current mineral reserve and mineral resources tables can be found on the Company's website at the following link [https://trilogy tables](https://trilogytables.com). There has been no material change to the mineral reserve and mineral resource estimates for the Arctic Project as reported in the Company's previous technical report entitled "Arctic Project, Northwest Alaska, USA, NI 43-101 Technical Report on Pre-Feasibility Study" with an effective date of February 20, 2018. However, there is a slight decrease in contained metal due to additional mining dilution.

The FS is based on a 10,000 tonne-per-day open-pit mining with a conventional milling and flotation process that results in the production of copper, zinc and lead concentrates. Based on the feasibility level metallurgical work on the sulphide mineralization, the average recoveries are projected to be 89.9% for copper, 90.6% for zinc and 79.0% for lead, in their respective concentrates. Over 60% of the recovered payable silver and gold report to the lead concentrate at 95% payable. Life of mine strip ratio is approximately 6.9 to 1.

Initial capital expenditure of \$906 million and sustaining capital of \$114 million for total estimated capital expenditures of \$1,020 million. In addition, closure and reclamation costs are estimated at \$205 million. The Arctic FS offers a favourable capital intensity ratio on initial capital of approximately \$6,432 per tonne of average annual copper equivalent produced. Estimated pre-tax and after-tax payback of initial capital of 2.4 years and 2.6 years respectively. Estimated cash costs of \$0.32/lb of payable copper (C1 cash costs include on-site mining and processing costs, road tolls and maintenance, transport, royalties, and is net of by-product credits). Total "all-in" cash costs (initial/sustaining capital, operating, closure costs and is net of by-product metal credits) estimated at \$0.98/lb of payable copper.

## **NANA Agreement**

Under the Exploration Agreement and Option to Lease (“NANA Agreement”) with NANA Regional Corporation, Inc. (“NANA”), NANA has the right, following a construction decision, to elect to purchase a 16% to 25% direct interest in the Arctic Project or, alternatively, to receive a 15% Net Proceeds Royalty (“NPR”). This FS was carried out on a 100% ownership basis and does not include the impact on Trilogy Metals if NANA elects to purchase an interest in the Arctic Project under the NANA Agreement or, alternatively, the impact on Trilogy Metals and the Arctic Project if the NPR becomes applicable. The FS does include the 1.0% Net Smelter Royalty to be granted to NANA under the NANA Agreement in exchange for a surface use agreement.

## **Joint Venture with South32 Limited**

The Company commenced work on the Arctic FS in 2019 and subsequently, on December 19, 2019, South32 exercised the right to form a 50/50 Joint Venture with respect to the Company’s Alaskan assets, including the Company’s Arctic Project. In February 2020, the Company transferred its Alaskan assets, including the Arctic Project, and South32 contributed \$145 million, to a newly formed 50/50 joint venture named Ambler Metals LLC. This FS was carried out on a 100% ownership basis and does not take into account South32’s interest in the Arctic Project. The information generated from this FS will be provided to Ambler Metals for its use as it carries forward advancing the Arctic Project. For more information on the Trilogy Metals and South32 Joint Venture see the Company’s press releases on December 19, 2019 and February 11, 2020 at [www.trilogymetals.com/news](http://www.trilogymetals.com/news).

Additional information on the NANA Agreement and the joint venture with South32 is included in the Company’s 2019 Annual Report on Form 10-K, which is available on SEDAR and EDGAR.

## **Conference Call**

Call-in details for the conference call to be held on August 20, 2020 at 8:00am (Pacific Time) or 11:00am (Eastern Time) are:

**Canada and USA Toll-Free: 1-800-319-4610**  
**International Toll Dial-in: 1-604-638-5340**  
**Australia Toll-Free: 1-800-423-528**  
**UK Toll-Free: 0808-101-2791**

Callers should dial in 5-10 minutes prior to the scheduled start time and ask to join the call.

Participants can access the Company’s presentation by a live webcast of the conference call at the following link:

<http://services.choruscall.ca/links/trilogy20200820.html>

A replay of this conference call will be available on the Company’s website at [www.trilogymetals.com](http://www.trilogymetals.com).

## **Qualified Persons and NI 43-101 Technical Report**

The FS for the Arctic Project was prepared by Ausenco and the contributors listed below each of whom is a Qualified Person under National Instrument 43-101 (“NI 43-101”)

A technical report containing the FS and prepared in accordance with NI 43-101 will be available on SEDAR and Edgar within the time frames prescribed under applicable securities laws.

### **FS Contributors**

<b>Qualified Person</b>	<b>Scope of Responsibility</b>
L. Paul Staples, VP and Global Practice Lead, Minerals and Metals Ausenco	Plant and infrastructure design and consolidation of the capital costs and operating costs and the overall financial model
Dr. Antonio Peralta, PhD, P.Eng, Principal Mining Engineer Wood	Mine design and mineral reserve estimates
Calvin Boese, P.Eng, M.Sc., Principal Consultant SRK	Tailings and waste design
Bruce Murphy, P.Eng., Principal Consultant, Rock Mechanics SRK	Pit slope design
Dr. Tom Sharp, PhD, P.Eng, Principal Consultant, Water Management and Treatment Engineering SRK	Hydrology and water management
Bruce Davis, FAusIMM, President BD Resource Consulting, Inc. and Robert Sim, P.Geo, SIM Geological Inc.	Mineral resource estimates
Jeffrey B. Austin, P.Eng, President International Metallurgical & Environmental Inc.	Metallurgy and recoveries
AJ MacDonald, P.Eng, Vice President, Operations Integrated Sustainability Consultants	Selenium water treatment plant design

### **Data Verification**

Messrs. Staples, Peralta, Boese, Murphy and Davis have visited the site of the Arctic Project. The FS Contributors have had discussions with relevant site personnel and Company management and have reviewed supporting documentation. Additional information can be found in the technical report.

### **Qualified Persons**

The FS Contributors prepared or supervised the preparation of the information that forms the basis of the FS disclosure in this press release and have reviewed and approved the disclosure

regarding the FS contained herein.

Andrew W. West, Certified Professional Geologist, Exploration Manager for Trilogy Metals Inc., is a Qualified Person as defined by National Instrument 43-101. Mr. West has reviewed and approves the disclosure contained herein.

### **About Trilogy Metals**

Trilogy Metals Inc. is a metals exploration and development company which holds a 50 percent interest in Ambler Metals which has a 100 percent interest in the Upper Kobuk Mineral Projects ("UKMP") in north-western Alaska. On December 19, 2020, South32, which is a globally diversified mining and metals company, exercised its option to form a 50/50 joint venture with Trilogy. The UKMP is located within the Ambler Mining District which is one of the richest and most-prospective known copper-dominant districts located in one of the safest geopolitical jurisdictions in the world. It hosts world-class polymetallic volcanogenic massive sulphide ("VMS") deposits that contain copper, zinc, lead, gold and silver, and carbonate replacement deposits which have been found to host high-grade copper and cobalt mineralization. Exploration efforts have been focused on two deposits in the Ambler mining district - the Arctic VMS deposit and the Bornite carbonate replacement deposit. Both deposits are located within land package that spans approximately 172,636 hectares. Ambler Metals has an agreement with NANA Regional Corporation, Inc., a Regional Alaska Native Corporation that provides a framework for the exploration and potential development of the Ambler mining district in cooperation with local communities. Our vision is to develop the Ambler mining district into a premier North American copper producer.

### **Company Contacts**

Tony Giardini  
President & Chief Executive Officer

Patrick Donnelly  
Vice President Corporate Communications  
& Development

**604-638-8088 or 1-855-638-8088**

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### **Cautionary Note Regarding Forward-Looking Statements**

*This press release includes certain "forward-looking information" and "forward-looking statements" (collectively "forward-looking statements") within the meaning of applicable Canadian and United States securities legislation including the United States Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, included herein, including, without limitation, the future price of copper, zinc, lead, gold and silver; the timing and amount of estimated future production; net present values and internal rates of return at Arctic; recovery rates; payback periods; costs of production; capital expenditures; costs and timing of the development of projects; mine life; the potential future development of Arctic and the future operating or financial performance of the Company, are forward-looking statements. Forward-looking statements are frequently, but not always, identified by words such as "expects", "anticipates", "believes", "intends", "estimates", "potential", "possible", and similar expressions, or statements that events, conditions, or results "will", "may", "could", or "should" occur or be achieved. These forward-looking statements may include statements regarding perceived merit of properties; exploration plans and budgets; mineral reserves and resource estimates; work programs; capital expenditures; timelines; strategic plans; market*



prices for precious and base metals; or other statements that are not statements of fact. Forward-looking statements involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the Company's ability to finance the development of its mineral properties; assumptions and discount rates being appropriately applied to the FS, uncertainty as to whether there will ever be production at the Company's mineral exploration and development properties; risks related to the Company's ability to commence production and generate material revenues or obtain adequate financing for its planned exploration and development activities; risks related to lack of infrastructure including but not limited to the risk whether or not the Ambler Mining District Industrial Access Project, or AMDIAP, will receive the requisite permits and, if it does, whether the Alaska Industrial Development and Export Authority will build the AMDIAP; risks related to inclement weather which may delay or hinder activities at the Company's mineral properties; risks related to the Company's dependence on a third party for the development of its projects; commodity price fluctuations; uncertainties relating to the assumptions underlying resource and reserve estimates; mining and development risks, including risks related to infrastructure, accidents, equipment breakdowns, labor disputes, bad weather, non-compliance with environmental and permit requirements or other unanticipated difficulties with or interruptions in development, construction or production; the geology, grade and continuity of the Company's mineral deposits; the uncertainties involving success of exploration, development and mining activities; permitting timelines; risks pertaining to the outbreak of the coronavirus (COVID-19); government regulation of mining operations; environmental risks; unanticipated reclamation expenses; prices for energy inputs, labour, materials, supplies and services; uncertainties involved in the interpretation of drilling results and geological tests and the estimation of reserves and resources; the need for cooperation of government agencies and native groups in the development and operation of properties as well as the construction of the AMDIAP; unanticipated variation in geological structures, metal grades or recovery rates; fluctuations in currency exchange rates; unexpected cost increases in estimated capital and operating costs; the need to obtain permits and government approvals; uncertainty related to title to the Company's mineral properties and other risks and uncertainties disclosed in the Company's Annual Report on Form 10-K for the year ended November 30, 2019 filed with Canadian securities regulatory authorities and with the United States Securities and Exchange Commission and in other Company reports and documents filed with applicable securities regulatory authorities from time to time. The Company's forward-looking statements reflect the beliefs, opinions and projections on the date the statements are made. The Company assumes no obligation to update the forward-looking statements or beliefs, opinions, projections, or other factors, should they change, except as required by law.

### **Cautionary Note to United States Investors**

This press release has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all resource and reserve estimates included or referenced in this press release have been prepared in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (CIM)—CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended ("CIM Definition Standards"). NI 43-101 is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Canadian standards, including NI 43-101, differ significantly from

*the requirements of the United States Securities and Exchange Commission (SEC), and resource and reserve information contained herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, the term "resource" does not equate to the term "reserves". Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. The SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. Investors are cautioned not to assume that all or any part of "measured" or "indicated resources" will ever be converted into "reserves". Investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. Under Canadian rules, estimated "inferred mineral resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in-place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of "reserves" are also not the same as those of the SEC, and reserves reported by Trilogy Metals in compliance with NI 43-101 may not qualify as "reserves" under SEC standards. Arctic does not have known reserves, as defined under SEC Industry Guide 7. Accordingly, information concerning mineral deposits set forth or referenced herein may not be comparable with information made public by companies that report in accordance with U.S. standards.*