

Red Chris Block Cave Pre-Feasibility Study Confirms Low Cost, Long Life

Vancouver | **October 11, 2021** | **Imperial Metals Corporation** (the “Company”) (TSX:III) reports the highlights of the Red Chris Block Cave Pre-Feasibility Study (PFS) which confirms the potential to develop a world class, low cost, long life mine. Newcrest’s recently completed PFS indicates the project has an estimated 17% IRR and CAD\$2.3 billion NPV over an initial 31 year mine life at prices of US\$3.30 per pound copper and US\$1500 per troy ounce gold. Some key results from the PFS are noted below:

- Production projected to average 80 thousand tonnes of copper and 316,000 ounces of gold per annum for 6 years starting July 2028
- Impressive Block Cave Life-of-Mine All-In Sustaining Cost of negative US\$144 per ounce of gold
- Initial Mineral Reserve estimate of 8.1 million ounces gold and 2.2 million tonnes copper
- Payback of 3.2 years
- Block Cave First Ore first half of 2026
- Further optimization underway to assess opportunities proximate to the mining area, incl. East Ridge
- Studies are underway to consider “early mining” of high-grade pods to enhance cashflows prior to development of a block cave

With the completion of the PFS, Newcrest has approved preparation of a Feasibility Study which is expected to be completed in the first half 2023. Newcrest intends to release a National Instrument 43-101 (NI 43-101) technical report on Red Chris within 45 days of this release.

Imperial President, Brian Kynoch, said *“The Red Chris Block Cave Pre-Feasibility Study confirms Imperial’s long held view that Red Chris has the potential to be a long life, low cost mine capable of producing both copper and gold at low unit costs. Additionally, with British Columbia’s hydro-generated grid powering the project and the efficient block cave mining to be utilized at Red Chris, we believe the project’s carbon footprint will be low.”*

The exploration results being obtained in the East Ridge and the multiple high-grade pods being defined by additional drilling in the East Zone provide further project upside beyond the scope of this Study. ‘Early mining’ of the high grade pods in the East Zone prior the initiation of a block cave is being evaluated and could help fund the block cave development.”

The findings contained in this release with respect to the Red Chris PFS are in 100% terms, Imperial is a 30% Joint venture partner in the project. Further details with the respect to the PFS are available on each the Newcrest and Imperial website (www.imperialmetals.com).

Mineral Resources and Mineral Reserves

The Red Chris Mineral Resource has been updated for mining depletion to 30 June 2021 from that reported in the release titled ‘Newcrest announces its initial Mineral Resource estimate for Red Chris’ dated 31 March 2021. All other assumptions remain unchanged. Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Data is reported to two significant figures to reflect appropriate precision in the estimates and this may cause some apparent discrepancies in totals. Data represents 100% of the Mineral Resources and Mineral Reserves for Red Chris. Imperial’s joint venture interest in the Mineral Resources and Mineral Reserves is 30%.

Red Chris Gold (100%)		Measured Resource			Indicated Resource			Measured and Indicated Mineral Resource		
Gold Measured and Indicated Mineral Resources	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	
Red Chris Open Pit (incl.stockpiles)	11	0.17	0.062	290	0.28	2.6	300	0.28	2.7	
Red Chris Underground	-	-	-	670	0.46	10	670	0.46	10	
Total Red Chris Province	11	0.17	0.062	960	0.41	13	980	0.41	13	

Red Chris Gold (100%)		Inferred Mineral Resource		
Gold Inferred Mineral Resources	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	
Red Chris Open Pit (incl.stockpiles)	11	0.23	0.083	
Red Chris Underground	180	0.32	1.8	
Total Red Chris Province	190	0.31	1.9	

Red Chris Copper (100%)		Measured Resource			Indicated Resource			Measured and Indicated Mineral Resource		
Copper Measured and Indicated Mineral Resources	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	
Red Chris Open Pit (incl.stockpiles)	11	0.24	0.028	290	0.34	1.0	300	0.33	1.0	
Red Chris Underground	-	-	-	670	0.40	2.7	670	0.40	2.7	
Total Red Chris Province	11	0.24	0.028	960	0.38	3.7	980	0.38	3.7	

Red Chris Copper (100%)		Inferred Mineral Resource		
Copper Inferred Mineral Resources	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	
Red Chris Open Pit (incl.stockpiles)	11	0.27	0.030	
Red Chris Underground	180	0.30	0.54	
Total Red Chris Province	190	0.30	0.57	

Red Chris Gold (100%)		Proven Reserve			Probable Reserve			Proven and Probable Mineral Reserve		
Gold Proven and Probable Mineral Reserve	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	
Red Chris Open Pit (incl.stockpiles)	-	-	-	75	0.36	0.86	75	0.36	0.86	
Red Chris Underground	-	-	-	410	0.55	7.2	410	0.55	7.2	
Total Red Chris Province	-	-	-	480	0.52	8.1	480	0.52	8.1	

Red Chris Copper (100%)		Proven Reserve			Probable Reserve			Proven and Probable Mineral Reserve		
Copper Proven and Probable Mineral Reserve	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	
Red Chris Open Pit (incl.stockpiles)	-	-	-	75	0.42	0.31	75	0.42	0.31	
Red Chris Underground	-	-	-	410	0.45	1.8	410	0.45	1.8	
Total Red Chris Province	-	-	-	480	0.45	2.2	480	0.45	2.2	

Material Assumptions for Mineral Reserves

Red Chris is an operating open pit mining both the East and Main Zone resources. The underground Mineral Reserves are based on transitioning from open pit to underground mining of the East Zone resource at depth. The Mineral Reserves are supported by the PFS. The Project is progressing to the Feasibility Stage. If required any adjustments to the Mineral Reserves statements will be made at the completion of the Feasibility Study.

Mineral Reserve Classification

The Probable Mineral Reserve is based on Indicated Mineral Resources and diluting material. Diluting material is either low grade Indicated Mineral Resource or material carrying no grade. No Measured Mineral Resources are stated for this deposit. The resource classification is based on an assessment of geological confidence as a function of geological and mineralisation continuity.

Mining Method

Various mining methods have been considered for the extraction of the East Zone resources. Based on the depth, size, grade and existing site production rate block caving has been deemed the most appropriate mining method by the PFS and supported via independent reviews. On-going data collection and geotechnical and mining studies will provide ongoing design parameters for the Project.

Mineral Processing

Processing of the Red Chris Underground ore stream will be through the Red Chris Concentrator, which will be upgraded to accommodate a combination of larger throughput, increased hardness and higher gold and copper head grades. The upgraded plant will utilise grinding and flotation to produce a copper-gold concentrate using similar unit operations to the current plant. A parallel single-stage SAG (SSAG) grinding circuit will be installed, with a dedicated coarse ore stockpile. Underground ore will be divided between the existing grinding circuit and the new SSAG circuit at a ratio of approximately 60:40. The combined throughput of the upgraded plant will be 13.6 Mtpa. Additional rougher and cleaner flotation capacity, a new regrind circuit, and expanded concentrate dewatering equipment and concentrate load-out facility are also included in the plant upgrade. The application of coarse particle flotation has also been considered for moderate future throughput expansion, and the selection of a SSAG enables further expansion through addition of a ball mill in the future.

Metallurgical testwork, plant design and capital and operating cost estimation were completed to Pre-Feasibility level of accuracy. Metallurgical testing on a range of underground samples provided data to size the single-stage SAG mill and estimate copper and gold recoveries attributable to underground ore. The anticipated recoveries for underground ore are 81 to 86% for copper and 60 to 75% for gold across the life of the project. Test samples focused mostly on the first 15 years of underground production but included some material from the remainder of the anticipated mine life. The mineralogy of underground samples was found to be more favourable for gold recovery than for current Red Chris open pit operations. Underground ore mineralogy was shown to have some upside for producing high copper concentrate grades due to the presence of enriched copper minerals such as bornite in certain zones in the orebody. The overall metallurgical recoveries for open pit ore varies by pit location and is based on historic production data and laboratory test samples and have been estimated as 79% for copper and 51% for gold.

Cut-Off Grade

The Red Chris Mineral Reserve employs a value-based cut-off determined from the Net Smelter Return (NSR) value equal to the site operating cost derived from the PFS. The NSR calculation takes into account Mineral Reserve revenue factors, metallurgical recovery assumptions, transport costs, refining charges, and royalty charges. The site operating costs include mining cost, processing cost, relevant site general & administration costs and relevant sustaining capital costs. The cut-off value for reporting within the open pit mining area is based on an NSR value above C\$16.50/tonne milled, whilst the shut off values for each underground macro block is as follows: MB1 = C\$22.00/t Milled, MB2 and MB3 C\$22.80/t Milled. The

Mineral Reserve revenue factors are consistent with Newcrest metal price guideline reporting with a gold price of US\$1300/oz, copper price of US\$3.00/lb, and a CAD:USD exchange rate of 0.75.

Estimation Methodology

Capital cost estimation for the project has been based on a blend of material take-offs and factored quantities with semi-detailed unit costs targeting a Class 4 Capital Cost per Association for the Advancement of Cost Engineering International (AACEI) guidelines and an accuracy range $\pm 25\%$. The Operating Cost estimate has been compiled to an accuracy of $\pm 25\%$. Contingency has been calculated and applied to the Capital Cost estimate. No contingency has been applied to the Operating Cost estimate. All inputs are in June 2021 Canadian Dollars.

Material Modifying Factors

All development has mining factors for dilution and mining recovery applied to accurately represent the expected mined tonnes. PCBC™ software is used for cave production scheduling and estimation of grade for material drawn from the block caves. The resource estimate includes internal dilution, and external dilution is included as part of the draw model, with no mining recovery factors applied to the Mineral Reserve estimate. Red Chris has no block cave operational data supporting the assumptions within the PCBC™. The parameters are based on deposits and operations of similar properties providing confidence in the applicability. These parameters have been independently reviewed and found to be suitable to support the Mineral Reserves.

Other Modifying Factors

Red Chris Operations and the Red Chris Open pit are in material compliance with all legal and regulatory requirements. Management of water resources was a primary focus of the PFS and involved the creation of a water balance model for PFS decision-making and to support environmental studies. The results of the water balance indicate that the demands for water for the Block Cave Project, which result from the increase in production rates over current practice, can be achieved by applying water management processes, largely aimed at improving reclaim and recycling of water.

The permitting plan proposes a staged approach to permitting, appropriate to the long-term nature of the Project. The Energy, Mines & Low Carbon Innovation, Environmental Assessment Office and Tahltan Central Government through its representatives have been consulted by Red Chris¹ on the permit applications submitted by Red Chris to date. Red Chris¹ will continue to engage and consult with the Tahltan Central Government and government agencies on the development of the permitting plan and applications for the Project. The timing of obtaining the authorisations remains a risk to the Project and is being actively managed through engagement with the relevant parties. The permitting process has been informed by engagement of independent experts in British Columbia permitting. Obtaining permits to extract the reserves using the block cave mining method has sufficient confidence to support the reserves statement.

The technical and scientific information contained in this document relating to Red Chris was reviewed and approved by Philip Stephenson, Newcrest's Chief Operating Officer Australia and Americas, FAusIMM and a Qualified Person as defined in NI 43-101.

1. In these contexts, Red Chris equates to Newcrest Red Chris Mining Limited as operator of the Red Chris Joint Venture

About Imperial

Imperial is a Vancouver based exploration, mine development and operating company. The Company, through its subsidiaries, owns a 30% interest in the Red Chris mine, and a 100% interest in both the Mount Polley and Huckleberry copper mines in British Columbia.

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Cautionary Note Regarding Forward-Looking Statements

Certain information contained in this news release are not statements of historical fact and are “forward-looking” statements. Forward-looking statements relate to future events or future performance and reflect Company management’s expectations or beliefs regarding future events and include, but are not limited to, statements regarding the Company’s expectations with respect to Red Chris, including its mineral resources and reserves, proposed mining methodologies, proposed mineral processing, capital cost estimates and underlying assumptions, cost and length of life mine, Newcrest’s expected progression to and timing for completion of the Feasibility Stage, the release of the PFS on Red Chris, the potential upside provided by exploration results and additional drilling in the East Zone, the expected carbon footprint of the project, the early mining of high grade pods and its potential to fund block cave development, water management and the permitting process.

In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "outlook", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative of these terms or comparable terminology. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In making the forward-looking statements in this release, the Company has applied certain factors and assumptions that are based on information currently available to the Company as well as the Company’s current beliefs and assumptions. These factors and assumptions and beliefs and assumptions include, the risk factors detailed from time to time in the Company’s interim and annual financial statements and management’s discussion and analysis of those statements, all of which are filed and available for review on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended, many of which are beyond the Company’s ability to control or predict. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and all forward-looking statements in this news release are qualified by these cautionary statements. Such information is given only as of the date of this news release. The Company does not assume any obligation to update its forward-looking information to reflect new information, subsequent events or otherwise, except as required by law.