

Orsu Announces Positive Definitive Feasibility Study for the Karchiga VMS Copper Project in Kazakhstan

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Highlights:

- Post-tax NPV7.5 of US\$150 million, IRR of 30% (based on price of US\$3.25/lb Cu);
- Initial capital expenditure of US\$115 million;
- Payback period of 2.75 years (on initial capital expenditure);
- 11.5 years mine production of 149kt (328 Mlb) payable copper:
 - average annual production of 13kt (28.6 Mlb) of copper from sulphide and oxide ore;
 - at a processing rate of 750,000 tonnes of sulphide ore per annum, a total of 136.3kt (300 Mlb) of copper in 27.9% concentrate;
 - at a heap leach processing rate of 360,000 tonnes of oxide ore per annum (over 4.5 years), a total of 12.7kt (27.9 Mlb) of cathode copper;
- Life of mine cash operating cost (pre tax) of US\$1.47/lb Cu;
- Net smelter revenue over the life of mine of US\$971 million.

LONDON, UNITED KINGDOM -- ([Marketwire](#) - Feb. 29, 2012) - [Orsu Metals Corporation](#) ("Orsu", or the "Company") (TSX:OSU) (AIM:OSU), the London-based base and precious metals exploration and development company, is pleased to announce the positive results of a Definitive Feasibility Study ("DFS") for its 94.75% owned Karchiga Volcanogenic Massive Sulphide ("VMS") copper project in northeast Kazakhstan (the "Karchiga Project"). The purpose of the DFS was to determine the viability of open pit copper mining at Karchiga and has been prepared by the Company's lead mining consultant SRK Consulting (UK) Limited ("SRK"), which is independent of Orsu, based on Mineral Reserve Estimates, prepared by SRK and reported according to Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Mineral Reserves (the "CIM Standards").

Mineral Reserves

On the 8th of December 2011, Orsu reported Indicated Mineral Resources for its Karchiga Project comprising 10.8Mt of combined sulphide and oxide mineralisation grading 1.73% Cu for 187,200t (412.7 Mlb) of contained Cu and an Inferred Mineral Resource of 0.02Mt of sulphide mineralisation grading 1.28% Cu for 300t (0.7 Mlb) of contained Cu (see the Company's press release dated 08 December 2011).

Using only the Indicated Mineral Resource Estimates, the DFS supports a Probable Mineral Reserve estimate of 8.5 million tonnes of sulphide ore in the Central and North East pits containing 145,227t (320 Mlb) of copper at an average grade of 1.71% Cu to be amenable to flotation ("FL") and additional 1.5 million tonnes of ore in the Central pit containing 21,399t (47.2 Mlb) of copper at an average grade of 1.43% Cu to be amenable to heap leaching ("HL").

Table 1. Probable Mineral Reserves Estimates as of 18 February 2012
Orebody

Ore Type	Tonnes (Mt)		Cu %	Au g/t
Cu Metal (Mlb)	HL	Au Metal (Koz)		
Central	1.5		1.43	0.00
Central	3.8		1.78	0.14
North East	4.7		1.64	0.00
Total	10.0		1.67	0.14

All figures are on a 100% ownership basis

Pit designs and the final National Instrument 43-101 Mineral Reserve estimate dated 18 February 2012 were completed using two types of software; Whittle 4X optimisation software was used to generate optimal pit

shells which were designed in detail using Vulcan software. Key optimisation parameters are presented in Table 2 below.

Table 2. Whittle Input Parameters

OVERALL	SLOPE ANGLES	PARAMETER	
	CENTRAL PIT		
	HANGING WALL		49°
	FOOTWALL		47°
	NORTH-EASTERN PIT		
	HANGING WALL		51°
	FOOTWALL		45°
	NORTHERN WALL		47°
MINING & PROCESSING			
	MINING RECOVERY		95%
	MINING DILUTION		5%
	FRESH CU PROCESSING RECOVERY		94.0%
	OXIDE CU PROCESSING RECOVERY		55.0%
COSTS			
	MINING COST		
	ORE		1.80 USD/t
	OXIDE		1.30 USD/t
	WASTE		1.60 USD/t
	FRESH PROCESSING COST		9.00 USD/t ore
	OXIDE PROCESSING COST		22.57 USD/t ore
	GENERAL & ADMINISTRATIVE COST		5.00 USD/t ore
	ROYALTY		5.7% of RoM Metal Value (above 0.7% Cu head grade)
PRICE			
	CU SELLING PRICE		6,600 USD/t Cu
	NSR		83% (For Fresh Rock only)

Capital Expenditure

The estimated total project capital expenditure ("CAPEX") over the mine life of US\$147 million, including the solvent extraction with electrowinning ("SXEW") plant to treat the oxide ores, is made up as follows:

- US\$21.5 million for mining equipment
- US\$40.1 million for copper in concentrate processing plant and equipment
- US\$26.3 million for SXEW plant
- US\$21.7 million for mine site facilities and infrastructure
- US\$26.3 million for sustaining capital & closure costs
- US\$11.3 million for contingency

The estimated initial CAPEX is US\$115 million, which excludes the SXEW plant, sustaining capital & closure costs but includes pre-production development costs.

The initial CAPEX estimate is comparable to the initial capital cost estimate of US\$100 million contained in the technical report entitled "Preliminary Assessment of the Karchiga Copper Project, East Kazakhstan Region, Kazakhstan" dated May 25, 2010 and prepared by Micon International Co. Limited (the "Karchiga Preliminary Assessment Study") (see Company's press-release dated 25 May 2010). The Company estimates that a 12 to 15 month period is sufficient for the construction of the processing facilities and pre-production development at the Karchiga Project.

Mine Plan

The open pit mining schedule produced by SRK calculated a producing mine life of 11.5 years. The mining schedule envisages the mining of 10 Mt of sulphide and oxide ore and 124 Mt of waste with a stripping ratio of 1:12.4 over the mine life. The average mining rate of the operation is 750kt per annum.

For the first 2.25 years of the mine life, the mining schedule includes open pit mining of the Central sulphide ore body alone in order to maximise the sulphide copper grade and hence sulphide copper recovery. The optimised mine schedule has been developed to minimise the stripping ratio in the initial three years of the

mine life. In addition, the use of stockpiling has enabled the Company to increase the processed ore grade. From Year 4 until Year 7, sulphide ore will be mined from both the Central and North East open pits. From Year 8 until the end of mine life in Year 12, all mining will continue in the North East pit.

The average mining cost over the mine life is US\$1.7 per tonne of material moved.

Processing Plan and Economic Model

The plant is designed to process approximately 750,000 tonnes per annum of sulphide ore. A conventional processing route was chosen using relatively fine grinding and selective sulphide flotation to produce a 27.9% bulk concentrate. The first production has been scheduled for Q4 2013 through to final production in 2025.

Copper from the oxide ore will be extracted using SXEW process. The oxides will be treated over a period of 4.5 years starting in 2018 at an annual production rate of 360,000 tonnes and is expected to produce an average of 2.8kt (6.22Mlb) of copper cathode per annum over that period. Production of cathode copper will continue until 2022.

In order to reduce the initial CAPEX, the SXEW plant construction has been delayed until after the initial CAPEX payback period (which is anticipated to be 2.75 years). The plant has been designed to treat an average of 30,000 tonnes of leachable oxide ore per month.

The results of the DFS demonstrate that economically the best option is to delay the SXEW construction until 2017, allowing the cost of construction to be financed from the revenue generated by the sulphide ore treatment.

The project key performance indicators are shown in Table 3 below.

Table 3. Key Performance Indicators

Parameter	Units	Key Performance Indicator	
Average annual mining rate		Tonnes	750,000
Average mining cost	US\$/t of ore		22.99
Annual processing rate (FL)		Tonnes	750,000
Mine life (FL)	Years	11.5	
Processing cost (FL)	US\$/t of ore		8.91
Metallurgical recovery (FL)	%		93.4
Average annual copper production, over 11.5 years (FL)			'000 tonnes
Average annual copper production (FL)		Mlb	26.1
Annual processing rate (HL)		Tonnes	360,000
Mine life (HL)	Years	4.5	
Processing cost (HL)	US\$/t of ore		18.7
Metallurgical recovery (HL)	%		61.1
Average annual copper production, over 4.5 years (HL)			'000 tonnes
Average annual copper production (HL)		Mlb	6.2
Cash operating cost over the mine life (pre tax)		US\$/lb Cu	1.47

The mine is expected to produce a total of 149kt (328 Mlb) of payable copper, with an average of 12,957t (28.57 Mlb) of copper production per annum. Figure 1 below shows the production scenario on a 100% owned basis for the two types of payable copper products from the Karchiga Project.

To view Figure 1. Production Profile of Copper in Concentrate and Cathode Copper, please visit the following link:
<http://media3.marketwire.com/docs/OSU0229.pdf>.

The Karchiga Project site is located 10 km from the main road and a 110 kV national power grid and is expected to be connected to the same as part of construction. An adequate supply of water can be sourced from the River Kalzhir as well as from aquifers in the immediate vicinity of the designed project facilities.

The project key economic indicators are shown in Table 4 below.

Table 4. Key Economic Indicators

Parameter	Units	Key Economic Indicator
Total project CAPEX	US\$m	147
Initial CAPEX	US\$m	115
Total Net Smelter Revenue	US\$m	971
Sulphide and Oxide Case @ US\$3.25/lb Cu:		
- Post-Tax NPV7.5	US\$m	150
- Post-Tax IRR	%	30
- Payback period	Years	2.75
Sulphide and Oxide Case @ US\$3.00/lb Cu:		
- Post-Tax NPV7.5	US\$m	113
- Post-Tax IRR	%	25
- Payback period	Years	3.0

All figures are on a 100% ownership basis

The Environmental and Social Impact Assessment Study for the Karchiga Project was successfully completed by Wardell Armstrong International on 31 January 2012. The Company expects to receive the necessary construction permitting approvals from the Kazakh authorities by the middle of 2012.

A copy of the DFS will be available on the Company's website and on www.sedar.com in due course.

Dr Sergey V Kurzin, Executive Chairman of Orsu, commented: "I am pleased with the successful completion of the DFS, a key milestone in the development of Orsu as a company. The DFS demonstrates that Karchiga is a technically feasible project, which can be developed as a high grade, medium cost open pit copper mine with robust project economics and a rapid payback period. The Company has been working on the DFS in parallel with local Kazakhstan consulting companies in order to complete the local Technical Project required under Kazakhstan laws and regulations and we have already started the process of obtaining the necessary approvals and permits for project construction and development, which should accelerate the commencement of construction. In addition, the Company, together with their consultants Endeavour Financial have been working on project debt finance options with a number of commercial and development banks with a view to enabling commencement of project construction in Q3 2012."

Qualified Persons

The "qualified person" (as such term is defined in National Instrument 43-101) who supervised the preparation of the Mineral Reserve estimates for the Karchiga Project disclosed in this press release is Dr Alexander Yakubchuk, Chief Operating Officer, Orsu Metals Corporation. Dr Yakubchuk has reviewed and approved the contents of this press release.

The "qualified person" (as such term is defined in National Instrument 43-101) who supervised the preparation of the Mineral Reserve estimates for the Karchiga Project disclosed in this press release from SRK is Mr Michael Beare, Corporate Consultant, an employee at SRK Consulting UK Ltd, and independent of Orsu. Mr Beare was responsible for review and compilation of the Karchiga Project DFS and has reviewed and approved the contents of this press release.

Dr Mike Armitage, CEng, CGeol, Group Chairman and Corporate Consultant (Resource Geology) with SRK, Ms Tracey Laight, MSc, CGeol, FGS, Principal Consultant (Mining Geology) of SRK, both "qualified persons" (as such term is defined in National Instrument 43-101) and independent of Orsu, are the persons responsible for the preparation and verification of the Mineral Resource estimates for Karchiga Project disclosed in this press release.

Forward-looking information

This press release contains forward-looking information which is not comprised of historical facts. Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, performance and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward-looking information contained (or referred to) in this press release includes, but may not be limited to, the Karchiga Project's expected life of mine and estimated net present value and rate of return, forecasts relating to future production and processing and the timing thereof, expected copper grades, estimates relating to key performance and economic indicators for the Karchiga

Project, anticipated costs/expenditures relating to operations and capital, estimates relating to the future price of copper, future revenues, cash flows and capital payback, mineral resource and mineral reserve estimates, anticipated construction at the Karchiga Project and the timing related thereto, the Company's mine plan and processing plan and the expected results thereof, the Company's expectation that it will receive necessary construction and development permits and approvals and the timing related thereto, and management's expectations relating to the potential of the Karchiga Project.

Factors that could cause actual results to differ materially from those described in such forward-looking information include, but are not limited to, risks normally incidental to the development of mineral properties and operating hazards, the possibility that future development or mining results will not be consistent with expectations, uncertainty of mineral resource and mineral reserve estimates, technical and design factors, the Company's inability to obtain, maintain, renew and/or extend required licences, permits, authorizations and/or approvals from the appropriate regulatory authorities, including (without limitation) the Company's inability to obtain (or a delay in obtaining) the necessary construction and development permits and approvals from Kazakh authorities, and other risks relating to the regulatory and/or legal framework in Kazakhstan, the Company's inability to obtain financing for the development of the Karchiga Project on favourable terms or at all, fluctuations in the price of copper, as well as certain other risks set out in the Company's public documents, including its annual information form dated March 24, 2010, filed under the Company's profile on SEDAR at www.sedar.com.

The forward-looking information in this press release reflects the current expectations, assumptions and/or beliefs of the Company based on information currently available to the Company. In connection with the forward-looking information contained in this press release, the Company has made certain assumptions about the Company's business, the economy and the mineral exploration industry in general, future capital, operating and production costs, the future price of copper, the accuracy of the Company's anticipated timing for construction at the Karchiga Project, anticipated mining and processing rates, the key performance and economic indicators relating to the Karchiga Project, the regulatory framework in Kazakhstan with respect to, among other things, the Company's ability to obtain, maintain, renew and/or extend required permits, licences, authorizations and/or approvals from the appropriate regulatory authorities, including the necessary construction and development permits and approvals from Kazakh authorities required to develop the Karchiga Project as anticipated, the Company's ability to continue to obtain qualified staff and equipment in a timely and cost-efficient manner to meet the Company's demand, and has also assumed that no unusual geological or technical problems occur, plant and equipment work as anticipated and no significant events occur outside of the Company's normal course of business. Although the Company believes that the assumptions inherent in the forward-looking information are reasonable, forward-looking information is not a guarantee of future performance and accordingly undue reliance should not be put on such information due to the inherent uncertainty therein.

The mineral resource and mineral reserve figures contained to in this press release are estimates only and no assurances can be given that the indicated levels of copper will be produced. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While the Company believes that the mineral resource and mineral reserve estimates contained herein are well established, by their nature, mineral resource and mineral reserve estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. If such mineral resource and mineral reserve estimates are inaccurate or are reduced in the future, this could have a material adverse impact on the Company. Due to the uncertainty that may be attached to inferred mineral resources, it cannot be assumed that all or any part of an inferred mineral resource will be upgraded to an indicated or measured mineral resource as a result of continued exploration.

Any forward-looking information speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise.

GLOSSARY of technical terms:

- Au - a chemical symbol for gold
- Cu - a chemical symbol for copper
- Cut-off grade - the lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification
- g/t - grammes per tonne, equivalent to parts per million

- Indicated Mineral Resource - that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- Inferred Mineral Resource - that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- lb - pound (=453.59237 grammes)
- Massive sulphide - a large, usually stratiform, conformable orebody composed mainly of iron sulphide, usually pyrite +/- pyrrhotite, and other base metal sulphides, such as chalcopyrite, along interfaces between volcanic units and sediments
- Mineral Reserve - an economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Mineral Reserves are subdivided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.
- Mineral Resource - a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
- MIb - million pounds
- Moz - million troy ounces
- Oxide Mineral Resource - A Mineral Resource comprising mineralisation formed by the chemical interaction of an element or elements with oxygen, usually affected by surface waters
- oz - troy ounce (=31.103477 grammes)
- Probable Mineral Reserve - an economically mineable part of Indicated Mineral Resource. It includes diluting material and allowances for losses which may occur when the material is mined. A Probable Ore Reserve has a lower level of confidence than a Proved Ore Reserve but is of sufficient quality to serve as the basis for a decision on the development of the deposit.
- Proved Mineral Reserve - an economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. A Proved Ore Reserve represents the highest confidence category of reserve estimate. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits.
- Sulphide - a mineral composed of a chemical compound between a metal and sulphur
- t - tonne (=1 million grammes)

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