

West High Yield (W.H.Y.) Resources Ltd. Announces Completion of Positive Pre-Feasibility Study for Magnesium Oxide Production Plant

29.11.2022 | [Newsfile](#)

Key Pre-feasibility Study ("PFS" or the "Study") highlights:

- Robust Project Economics: Post-tax net present value ("NPV") (discount rate 5%) of \$871.8 million and post-tax internal rate of return ("IRR") of 72.03% using a long-term magnesia ("MgO") baseline price of \$1,500/metric tonne ("Mt") and an exchange rate of CAD\$1.00 = US\$0.73.
- Production profile: Annual average production of 86,500 tonnes of 98% purity MgO product at capacity.
- Low capital intensity: Initial capital expenditures ("CAPEX") of \$205.4 million including mine preproduction, processing, and infrastructure (access roads and site preparation)
- Competitive cost profile and rapid payback: All-in-Sustaining Cost ("AISC") of \$375/Mt of MgO product, a post-tax payback of 1.5 years, with \$1,489 million cumulated cash flow and \$871 million discounted cumulated cash flow over 20-year projected life of the project for the purposes of the PFS.

*Based on 250K tonnes per annum of ore throughout.

Calgary, November 29, 2022 - [West High Yield \(W.H.Y.\) Resources Ltd.](#) (TSXV: WHY) ("West High Yield" or the "Company") is pleased to announce the results from its PFS for its high-purity MgO industrial production plant ("the Project"), prepared in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") with cost accuracy of +/- 20% for the Company's Record Ridge property located 10 kilometers southwest of Rossland, British Columbia (the "Record Ridge Property"), which is an intermediate-advanced exploration-stage project and is 100% owned by the Company. All figures are expressed in the currency of the United States of America unless otherwise stated.

Kingston Process Metallurgy Inc. ("KPM"), a company based out of Kingston, Ontario, in consultation with KON Chemical Solutions and Tenova (both companies are based in Austria), was mandated to establish the technical viability of a MgO production facility, to prepare plan and capital estimates of the Project, and to provide detailed design and economic evaluation of a semi-commercial demonstration plant, in addition to a high-level design and economic evaluation of a commercial plant at a location to be determined in southern British Columbia, Canada. The financial model of the Project was prepared by Bumigeme Inc., a company based out of Montreal, Quebec based on (i) information provided to them by the Company, as received from KPM, and (ii) MgO market study prepared for the Company by TAK Industrial Mineral Consultancy (existing under the laws of the United Kingdom). The findings from the aforesaid assessments and models are highlighted in the Study.

Frank Marasco, President and CEO of the Company, reports: "The MgO production Project described by the Study represents extremely positive news for West High Yield and its shareholders. The Study's completion is a significant milestone on the pathway to production. The results as outlined in this news release make a compelling case for the economic viability of the Project. The Company's high-purity MgO plant would create a carbon-free alternative to the currently dominating operations in China that are based on the calcination of carbonate ores (mainly magnesite), thus providing U.S. and European end users a green, secure and independent Canadian source of high purity MgO products. The PFS demonstrates the economic benefit of developing magnesium compounds operation in southern B.C. - a mining-friendly jurisdiction with deep mining talent and exceptional infrastructure."

Study Overview

The Study considered a MgO commercial plant of 250,000 Mt/year ore capacity (the "Plant"), which is based on the installation of five (5) processing modules of 50,000 Mt/year ore capacity (each module called a "Unit"). The Study produced the following information,

1. a detailed design and economic evaluation including capital and operating costs of a demonstration plant;
2. a high-level design and economic evaluation including capital and operating costs of the Plant; and
3. economic analysis of the Plant.

Table 1 below includes excerpts from Table 14 (page 34) of the Study with respect to the capital cost of each Unit.

Table 1: Capital Cost Estimate for the Commercial Plant Unit of 50,000 t/y ore.

Major Units	CAD\$	US\$
Leaching	6,320,000	4,613,600
Precipitation	5,692,000	4,155,160
Pyrohydrolysis	13,897,000	10,144,810
Tank farm	4,306,000	3,143,380
Balance of plant	2,591,000	1,891,430
Buildings	5,120,000	3,737,600
Total Direct Capital Cost	37,926,000	27,685,980
Indirect Costs		
EPCM & Start-up services	5,408,200	3,947,986
Freight	2,305,800	1,683,234
Field indirect & first fill	1,249,000	911,770
Total indirect Capital Cost	8,963,000	6,542,990
Total Direct and Indirect Costs	46,889,000	34,228,970
Contingency (20%)	9,380,000	6,847,400
Total Installed Capital Cost	56,270,000	41,077,100

Table 2 below includes excerpts from Table 16 (page 36) of the Study with respect to the operating costs of the Plant.

Table 2: Operating Cost Estimate for the Commercial Plant unit of 50,000 t/y ore.

Item	Annual Quantity	Unit	Unit Cost (CAD\$)	CAD\$/year	US\$/year
Sodium hydroxide	72	t	700	51,000	37,230
Sodium thiosulfate	115	t	800	93,000	67,890
Chlorine	2,160	t	500	1,080,000	788,400
Process water	262,800	t	1	316,000	230,680
Electrical power	14,904	t	57	996,000	727,080
Natural gas	684,000	t	4	2,501,000	1,825,730
Labour	21	t	78,002	1,639,000	1,196,470
Solid waste disposal	200	t	500	100,000	73,000
Product bags	8,640	t	15	130,000	94,900
Maintenance materials				1,138,000	830,740
General and Administration				410,000	299,300
Total Annual Operating Cost				8,454,000	6,171,420
Total Annual Operating Cost per tonne of MgO product				489	375

The Study considered the capital costs of the Plant to be about \$205 million with operating costs of \$375/Mt of MgO product, which included mining costs, processing costs, and mine and plant levels general and

administrative expenses.

Project Economics

The economic analysis of the Project in the PFS was performed assuming a 5% discount rate. On a pre-tax basis, the NPV is \$993.5 million, the IRR is 80.1% and the payback period is 1.34 years. On a post-tax basis, the NPV is \$872 million, the IRR is 72.0% and the payback period is 3.5 years. A summary of the Project economics is listed in Table 3 below.

Table 3: Project economics for the commercial plant of 250,000 t/y ore

Business Results	Project Value	Conditions	Decision
NPV of Cash Flow	\$871,774,903	>0	Yes
IRR	72.00%	>5%	Yes
Simple Payback	1.43	<5	Yes
Discounted Payback	1.50	<5	Yes
Profitability Index	15.50	>4	Yes

Sensitivity Analysis

A sensitivity analysis was conducted on the base case after-tax NPV and IRR of the Project, using the following variables: MgO price, total CAPEX and total operating cost. The figure and table below (found on page 47 of the Study) provide a summary.

Single Factor Sensitivity

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/5602/145985_whyfigure1.jpg

Two-factor sensitivity price and discount rate shows a positive valuation is maintained across a wide range of sensitivities on key assumptions such as MgO prices and discount rate, as in Table 4 below (found on page 47 of the Study).

Table 4: Two-factor NPV (in \$M) sensitivity - product price and discount rate

	\$ 871 774 903	\$ 1050	\$ 1200	\$ 1350	\$ 1500	\$ 1650	\$ 1800	\$ 19
3.50%	\$ 527 859 780	\$ 690 024 438	\$ 852 189 097	\$ 1 014 353 756	\$ 1 176 518 414	\$ 1 338 683 073	\$ 1 500 8	
4.00%	\$ 498 407 986	\$ 653 474 697	\$ 808 541 408	\$ 963 608 119	\$ 1 118 674 830	\$ 1 273 741 540	\$ 1 428 8	
4.50%	\$ 470 901 899	\$ 619 323 495	\$ 767 745 090	\$ 916 166 686	\$ 1 064 588 282	\$ 1 213 009 877	\$ 1 361 4	
5.00%	\$ 445 190 452	\$ 587 385 269	\$ 729 580 086	\$ 871 774 903	\$ 1 013 969 720	\$ 1 156 164 537	\$ 1 298 3	
5.50%	\$ 421 135 594	\$ 557 490 414	\$ 693 845 234	\$ 830 200 054	\$ 966 554 874	\$ 1 102 909 695	\$ 1 239 2	
6.00%	\$ 398 611 079	\$ 529 483 798	\$ 660 356 517	\$ 791 229 235	\$ 922 101 954	\$ 1 052 974 673	\$ 1 183 8	
6.50%	\$ 377 501 374	\$ 503 223 423	\$ 628 945 473	\$ 754 667 522	\$ 880 389 571	\$ 1 006 111 620	\$ 1 131 8	

Plant Design

The Study provided detailed design of the demonstration plant and a high-level design of the Plant, which included detailed process flow diagrams and process description, and plant mass and energy balance for both plants.

More Information

For additional information, please refer to the Study available on the Company website and filed on SEDAR under the Company's profile at www.sedar.com which contains more comprehensive technical information.

Qualified Person

Kevin Watson is an independent Qualified Person as defined by NI43-101 and has reviewed and approved Sections 17 and 21 of the Study..

Florent Baril is an independent Qualified Person as defined by NI43-101 and has reviewed and approved Section 22 of the Study..

Next Steps

Following the release of this PFS, the Company will move the semi-commercial demonstration project forward, which is a crucial step to provide the necessary bridging work for the commencement of the feasibility-level studies for the successful development of the Plant.

About West High Yield

West High Yield is a publicly traded junior mining exploration and development company focused on the acquisition, exploration, and development of mineral resource properties in Canada with a primary objective to develop its Record Ridge magnesium, silica, and nickel deposit using green processing techniques to minimize waste and CO₂ emissions.

The Company's Record Ridge magnesium deposit located 10 kilometers southwest of Rossland, British Columbia has approximately 10.6 million tonnes of contained magnesium based on an independently produced preliminary economic assessment technical report prepared by SRK in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects.

Contact Information:

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Forward-looking information is based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking information. Some of the risks and other factors that could cause the results to differ materially from those expressed in the forward-looking information include, but are not limited to: general economic conditions in Canada and globally; industry conditions, including governmental regulation; failure to obtain industry partner and other third party consents and approvals, if and when required; the availability of capital on acceptable terms; the need to obtain required approvals from regulatory authorities; and other factors. Readers are cautioned that this list of risk factors should not be construed as exhaustive.

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<https://www.rohstoff-welt.de/news/429460--West-High-Yield-W.H.Y.-Resources-Ltd.-Announces-Completion-of-Positive-Pre-Feasibility-Study-for-Magnesium->

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