



RESOURCES LIMITED

NEWS RELEASE 12-07

**“Developments in Gossan’s Magnesium Project”
Paper Presented at the 69th World Magnesium Conference**

May 22, 2012 – Gossan Resources Limited’s (GSS-TSX.V & GSR-Frankfurt/Freiverkehr & Xetra – WKN 904435) Technical Advisor, Dr. Zuliani, will be delivering a paper entitled, “Developments in the Zuliani Process for Gossan Resources’ Magnesium Project” at the 69th Annual World Magnesium Conference on May 22th in San Francisco. The conference, sponsored by the International Magnesium Association (IMA), focuses on current developments throughout all aspects of the magnesium industry.

Dr. Zuliani’s paper outlines the two fundamental paradigm shifts affecting magnesium production costs & pricing; magnesium’s competitive position with aluminum; magnesium’s environmental Life Cycle Analysis (LCA); and current developments in the Zuliani Process for the primary production of magnesium. The paper addresses the following issues:

- The 1st paradigm shift commencing about 1990 when China first began to produce magnesium metal using the 1940’s Pidgeon Process which was ideally suited to low labour costs and lax environmental regulation. Rapid growth in Chinese production led to a dramatic decline in magnesium prices resulting in substantial 10% per annum growth in the magnesium market and the demise of major western producers.
- The 2nd paradigm shift began in about 2005 and became evident in 2007 when rapidly escalating Chinese costs resulted in a steep climb in the free market price of magnesium. Price increases in thermal coal, electricity, ferrosilicon and labour rates have resulted in the cost base of Chinese Pidgeon Process producers increasing to date by 70-90%. Accordingly, the price of magnesium has increased materially and growth in demand for the light metal has waned.
- Higher magnesium prices have made the metal less competitive with aluminum, generally trending to a level in excess of 130% which is the competitive point of actual weight savings provided by magnesium over aluminum in structural applications. Additionally, factors are in play in China which may drive the costs of producing magnesium higher into an increasingly uncompetitive position vis-à-vis the more globally-based producers of aluminum.
- Based on the high raw material utilization efficiency of the Zuliani Process and the use of low-cost hydro-electricity, natural gas and high-purity dolomite, magnesium ingot production costs are expected to be about 25-30% less than the direct cost of Chinese magnesium ingot landed in western markets.
- Environmental Life Cycle Analysis utilizing Global Warming Potential (GWP) is increasingly important and the Zuliani Process compares very favourably with aluminum and has a substantially lower carbon footprint than Chinese Pidgeon magnesium.
- Gossan is currently planning and sourcing Stage 3 – Large Scale Batch and Process Testing – which should enable detailed design engineering of the first commercial stage which is envisioned to be a 5,000 tonne per annum pilot/demonstration scale plant.

A copy of Dr. Zuliani's 69th WMC paper may be found at:

www.gossan.ca/pdfs/Conference69WMCPaperSanFrancisco-May2012.pdf

And a copy of Dr. Zuliani's 69th WMC presentation may be found at:

www.gossan.ca/pdfs/Conference69WMCPresentationSanFrancisco-May2012.pdf

Based on the extensive bench scale testing and thermodynamic modeling completed to date, the Zuliani Process has demonstrated a magnesium recovery for producing magnesium ingot from calcined dolomite of 90.4% which compares to about 74.0% for Chinese magnesium producers using the Pidgeon Process (about 80% of world supply utilizing technology originally developed in the 1940's). More importantly, the Zuliani Process uses 29% less ferrosilicon, which is the largest single input cost in magnesium production. Subject to confirmation of the process on a commercial scale, the direct cost of magnesium ingot produced with the Zuliani Process is expected to be about 25-30% less than the direct cost of Chinese magnesium ingot landed in western markets. The low operating costs, as well as, a dramatic reduction in carbon emissions, is achieved by the high raw material utilization efficiency of the production process and the use of hydro-electricity, natural gas and high-purity dolomite.

An independent Green House Gas Study recently reported that primary magnesium produced using the Gossan-Zuliani Process has a Global Warming Potential (GWP – reported in kg CO₂ per kg Mg) of only 9.1. The GWP achieved through the Zuliani Process is materially lower than the GWP for magnesium produced by the Pidgeon Process in China - the IMA recently estimated the GWP 26.2 for Chinese plants utilizing waste coke gas as fuel whereas previous reports indicate a GWP of 43.3 for Chinese plants utilizing coal. In a broader comparison, the GWP for the Gossan –Zuliani Process is about 28% lower than the average GWP for aluminum (GWP 12.7). The study concludes that midsize car carbon emissions could be reduced by almost 7% over the car's life expectancy by light-weighting using magnesium produced by the Zuliani Process. Fuel efficiency would improve by an even greater amount.

A copy of the Process Research ORTECH report entitled "Lowering of CO₂ Emission for Magnesium Production by Gossan-Zuliani Process" may be found at: www.gossan.ca/projects/pdf/MgGHGReport.pdf

Gossan Resources Limited is engaged in mineral exploration and development in Manitoba and northwestern Ontario. It has a well-diversified portfolio of properties hosting gold, platinum group and base metals, as well as the specialty and minor metals, vanadium, titanium, tantalum, lithium and chromium. The Company also has a large deposit of magnesium-rich dolomite, the world-wide rights to the Zuliani high-efficiency magnesium production process, and a silica frac sand deposit. Gossan trades on the TSX Venture and the Frankfurt/Freiverkehr & Xetra Exchanges and has 33,140,400 common shares outstanding.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

For further information, please bookmark www.gossan.ca or contact:

Douglas Reeson, Chairman & CEO

Gossan Resources Limited

Tel: (416) 533-9664

E-Mail: info@gossan.ca