

JATENERGY LIMITED

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ASX CODE: JAT

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ASX ANNOUNCEMENT

25 November 2014

TTG Resource Technologies, Jiaren Investment and Jatenergy - Manganese

HIGHLIGHTS

- Jatenergy extends its licence with TTG to include world class patented Manganese recovery technology. The technology extracts high grade Mn from Fe-Mn waste or low grade of Mn ores.
- Jiaren Investment, having an extensive business network in China, has an exclusive arrangement with JAT to identify projects and to assist in establishing a processing plant in China.

Recovery Technology (China)

The Directors of Jatenergy Limited ("Jatenergy", "the Company") are pleased to announce that they have extended their current technology marketing licence to include China but specifically Manganese recovery from both waste Ferro-Manganese fumes and Manganese ores that are of low quality (<40% Mn) and/or too fine (<10 mm in size) to be sold.

The agreement is a tri-party negotiation with TTG Resource Technologies (TTG); current licensor for the technology, Jiaren Investment (Jiaren); that has the business network in China and Jatenergy (JAT); licensee and technology marketer.

License Agreement

Jatenergy has extended its current technology marketing licence with TTG to include China and specifically the recovery of Manganese. Jiaren has already identified a number of potential projects in China where Manganese waste streams from the production of Ferro-Manganese can be further processed to high purity Mn products. To exploit the potential, Jiaren is sublicensed to take and market this technology into China. The agreement is for two years and can be extended either by identification of a Manganese project and initial approval for the project or by mutual consent.

Jatenergy, in return for global marketing of the TTG technology and continued reporting of its progress, will receive 10% of the royalty return (i.e. ongoing fee, upfront payment or investment) of the identified/proposed project. The actual returns from the royalty are dependent on the size of the project, its profitability and whether it is vested into by the waste generator, private investment consortium or Mn off-taker interested in selling the final product.



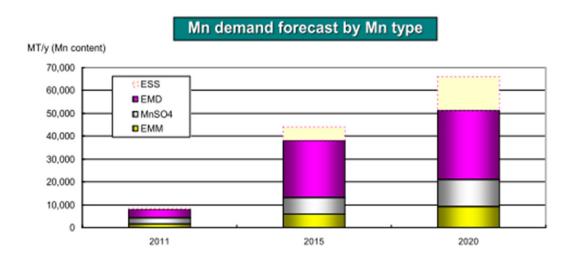
Technology Project Parameters

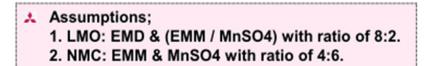
The following is a summary of a typical parameters of a Mn recovery project:

- Recovering over 95% of Mn content in the Fe-Mn fumes, based on conventional roasting, leaching, purification and precipitation techniques.
- Final Product: >99.5% purity MSM (manganese sulphate monohydrate), best in the world so far.
- Uses material and chemicals which are readily available and used commercially.
- OPEX: 800-1,000 USD/tonne MSM.
- PRODUCT PRICE: 1,700 2,200 USD/tonne MSM.
- CAPEX: 13-15 million USD for 11,000 tpa MSM production.
- Feed: 5,000 tpa Fe-Mn fumes at ~70% Mn dry basis.
- Processing plant built near waste generator expected to operate for minimum 20 years.
- Minimum resource for the life of the plant is 400,000 tonnes of Mn Waste.

The Technology

Ferro-Manganese fumes can contain up to 70% Mn, richer than high grade Mn (oxide) ores at 50% Mn. Other impurities including base metals such as Cu, Ni, Zn, alkali (Na, K) and alkali-earth (Ca, Mg) are detrimental to the MSM products used mainly in the production of Li-Mn-Ni-Co cathode material used in high performance Li-ion battery. The technology, incorporating conventional processing steps has already been proven at a demonstration scale operating continuously for several months. The process could remove all of these harmful impurities, yielding a >99.5% purity MSM product. The technology can also be used to produce high purity Mn oxide (Mn₃O₄), Electrolytic Mn metal (EMM), etc. for various applications.







Manganese Uses and Market

EMM is used extensively in special steelmaking with production rate of up to 3Mt/year and increasing gradually. The demand for Li-Mn-Ni-Co cathode material for Li-ion battery is increasing due to its expanding use in medium to large scale energy storage systems (200kW-50 MW) required for more efficient power management or for stand-alone renewable energy sources (eg. from wind or solar energy systems). The market for high purity MSM or Mn_3O_4 used for this application is estimated to be 200,000 t/year and expands rapidly as a result.

Drive for Mineral Recovery

TTG's technology is basically to improve economically the recovery of metals from complex sources, low grade ores and industrial residues. It also has the ability to enhance low grade ore into a viable resource through higher efficiency in downstream processing - as there is no economic value (or the value is asset negative) in low grade ore bodies and industrial residues. With TTG's patented technology there is a value that can be economically extracted. Their beneficiation processes has been developed in a holistic and integrated way to improve resource use and to minimize, and ultimately to prevent hazardous waste and acidic mine drainage in mining industry. Jatenergy's strategy is to extend the resource base for different metals from nonconventional primary and secondary resources for valuable and critical metals and to turn waste into a valuable resource and valorisation of the waste and residue after extraction of valuables.



Jatenergy's Strategy

Jatenergy is pushing its beneficiation technology program to the forefront. "There is ready demand for new technologies that are able to extract high value products from low or no cost feed stock", says Tony Crimmins Executive Chairman of Jatenergy. "This is the common theme for our technology portfolio. Using our marketing expertise and strong Chinese business networks, Jatenergy will succeed in bringing these commercial technologies to project level."



About TTG Resource Technologies

TTG's expertise is in waste and low grade resource process technologies, project management, financing waste remediation projects. Current projects that are being evaluated for commercialisation include Dizon Cu-Au tailing (The Philippines) and Zambia's Luanshya Cu-Co tailing.

The company has access to licensed technologies from Chonnan National University (CNU). These technologies that have been demonstrated for processing of low grade ores or wastes from Fe-Mn and Mo-Re smelters, Li-Mg salar brines or brine discharges (for Li and Mg recovery) for projects in Korea and Australia. Technology being utilized at CNU are specific for mineral processing projects on behalf of Korea Resources Corp, Dong Bu Metals and SIMPAC of Korea.

About Jatenergy

Jatenergy (ASX: JAT) is an ASX listed energy investment company, focused on conventional, second generation and energy conversion technologies. Jatenergy also acquires projects and technologies, and creates value through its extensive marketing and promotion activities.

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Jatenergy Limited is a Sydney-based diversified energy investment company, focused on conventional, second generation and energy conversion technologies. Jatenergy also acquires projects and technologies, and creates value through its extensive marketing and promotion activities.

Directors

Tony Crimmins
Executive Chairman

Mr Xipeng Li Non-Executive Director

Mr Wilton Yao
Non-Executive Director

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Ordinary fully paid shares

108,565,568