



## EXERGEN PROGRESSES LARGE SCALE DEMONSTRATION

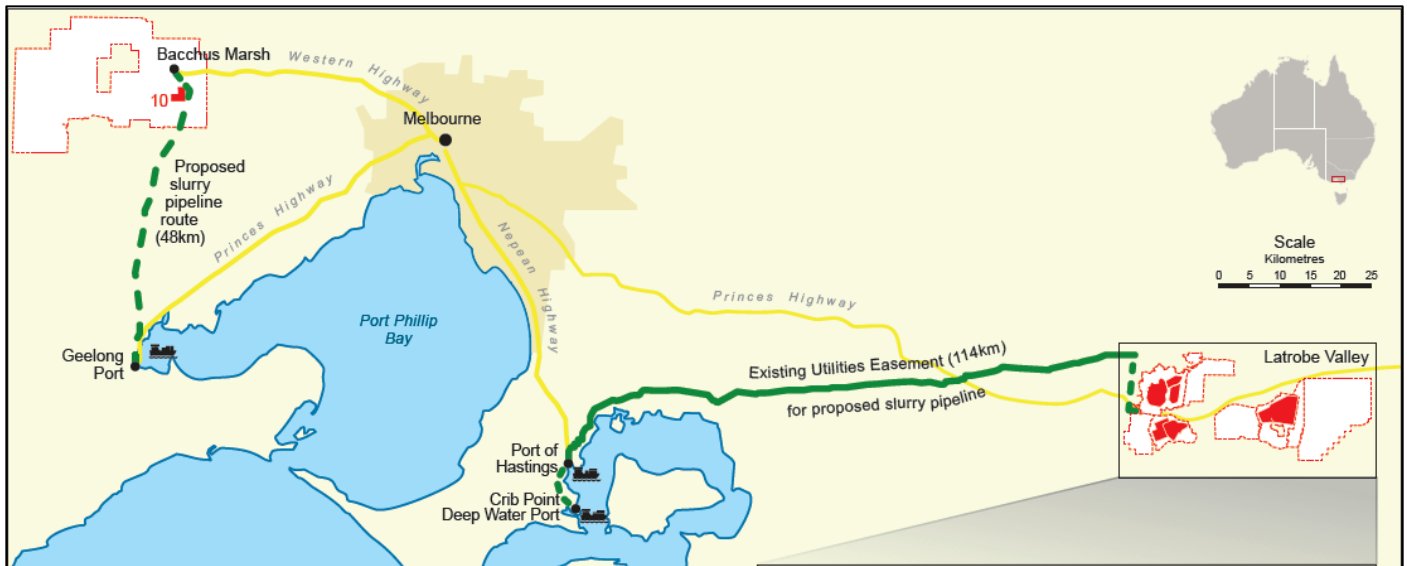
ASX ANNOUNCEMENT

12 FEBRUARY 2014

**Mantle Mining Corporation Limited (ASX: MNM)** is pleased to provide the following update on activities in relation to clean coal technology group, and Bacchus Marsh Joint Venture partner, Exergen Pty Ltd (Exergen)'s commercialisation pathway and large scale demonstration project.

### Highlights:

- Exergen's Continuous Hydro-Thermal Dewatering (CHTD) technology transforms low grade, high moisture coals into cleaner burning products with lower carbon dioxide emissions. CHTD also provides a long distance transportation solution for upgraded coal, via use of slurry pipelines.
- The company's current focus is to prove CHTD at commercial scale by developing a \$70 million Pre-Commercial Demonstration Project PCDP, to be located in the Latrobe Valley. Exergen's cornerstone investors have already committed substantial funding (under certain conditions precedent) towards the PCDP and the company has obtained an Advance Finding certificate from AusIndustry that confirms that the PCDP activities are eligible for R&D Tax rebates.
- While Exergen can bring value to a number of downstream uses for upgraded brown coal, collaborations with other proponents in the brown coal upgrading sector are being sought to reduce process risk and development costs and expand product market potential for all parties. Exergen is generating a high level of interest in this strategy due to its unique position as a low cost solution to front-end dewatering, coal upgrading and overland transportation.
- The PCDP will be hosted by EnergyBrix Australia (EBAC) at the Morwell Power Station site in the Latrobe Valley where Exergen has executed Site Lease and Site Services agreements with EBAC.
- An Alliance Contract between Exergen, Thiess and Sedgman for the PCDP has been drafted. A draft contract for the design and construction of the PCDP has been completed by Thiess, and Sedgman has provided a MOU for operation of the PCDP.
- Exergen is developing a plan to export coal products from the Latrobe Valley pending on success of the PCDP. For this commercial project, Exergen CHTD slurry will be pumped through a pipeline to a processing facility adjacent to a port location, where it will be dewatered and further processed into valuable export products including thermal coal products, char, fertilisers, pyrolysis oils and liquid fuels. Such liquid fuels can be used to feed Direct Injection Coal Engines (DICE).
- A preferred pipeline route from the Latrobe Valley to Crib Point (at the Port of Hastings) has been defined and landholder consultation is expected to start within months (Figure 1).



**Figure 1:** Exergen's proposed export infrastructure map.

### Background:

- Mantle and Exergen are partners in a 50/50% Joint Venture (JV) to upgrade and commercialise the Bacchus Marsh brown coal deposit (MNM ASX Release 2 July 2012).
- Exergen's cornerstone investors include Tata Power, India's largest private power utility, Itochu, one of Japan's largest trading houses with extensive coal trading experience, Leighton Holdings subsidiary Thiess, the world's largest supplier of outsourced mining services, and Sedgman, a global specialist provider of mineral engineering solutions.
- The JV covers Exploration Licences (ELs) 5294 and 5323, located to the west of Melbourne. The ELs contain a 1.6 billion tonne JORC Compliant Inferred Resource of brown coal (MNM ASX Release 15 August 2012).
- A scoping study by Exergen shareholders, Sedgman Ltd and Thiess, found the coal export project was economically viable and would generate substantial local employment. The study found that the project would require an initial capital investment of \$2 billion, delivering a Net Present Value of \$1.4 billion and a mine life of more than 25 years (MNM ASX Release 19 September 2012).

For further information please contact:

Ian Kraemer  
Managing Director  
Mantle Mining Corporation Limited  
[ikraemer@mantlemining.com](mailto:ikraemer@mantlemining.com)  
P: +61 7 3310 8932

Media Enquiries please contact:

Duncan MacFarlane  
P: +61 4 3509 2936

### About Mantle Mining Corporation Limited

Mantle Mining (ASX: MNM) is an Australian based minerals exploration company that is focussed on a range of in high demand commodities. Mantle's principal activities are to acquire exploration tenements and locate economically developable deposits of coal and gold. It is Mantle's intention to progress mineral deposits through feasibility and into mining operations, to the benefit of all stakeholders.