**MATMOR PROCESS SUCCESSFUL IN RECOVERING IRON FROM NICKEL TAILINGS**

**Tuesday 18 November 2008 :** Environmental Clean Technologies (ASX:ESI) has successfully recovered 100% of the iron from nickel tailings using its unique Matmor technology, making it an ideal feedstock for foundries and allowing companies to offset costs.

A recent Matmor test, using Victorian lignite, processed nickel tailings containing a high (>80%) Iron Ore content (Fe2O3).

ECT Chief Executive Kos Galtos said the company was satisfied that the technology recovered 100% of iron from the nickel tailings, thereby allowing producers of nickel tailings to offset the enormous costs they currently incur.

"Several million tonnes of nickel tailings are produced each year in Australia and these essentially cost the producer in waste management processes and storage," he said.

"By applying our Matmor technology to these otherwise useless nickel tailings, producers can offset the cost by using or selling the iron content."

Matmor is ECT's continuous flow, one-step process for producing high grade pig iron using lignite and some sub-bituminous coal.

The technology combines the coal in pellet form with iron oxide bearing media like iron ore, nickel tailings or mill scale. A small amount of limestone is also added as a flux.

The benefits of Matmor include:

- Coking coal (which can sell for up to $350 on the spot market) can be replaced with brown and some sub-bituminous coals (which can cost as little as $5 a tonne to mine)
- Emissions are significantly reduced
- Significantly reduced carbon footprint is a third of the standard iron making plant
- Use high grade iron ore or low grade (waste) iron ore
- Capital expenditure is estimated to be less than half that of a comparable traditional blast furnace since there is no need for coking ovens and sinter plants
- The need for traditional blast furnaces is eliminated

| Raw Input | Traditional Iron Making | Matmor |
|---|---|---|
| Coal | $243 (coking coal) | $10 (sub-bituminous) |
| Iron Ore (65% Fe) | $160 | $155 |
| Flux (Limestone) | $20 | $10 |
| Total | $423 | $175 |

**Table:** *Matmor technology is a low cost iron making option using brown coal*

Matmor is still in its Research and Development phase and can produce up to 1 tonne of metal per day.

The next stage of the R&D effort is focused on scaling up to a 6,000 tonne per annum pilot plant.

For further information please contact ECT Chief Executive Kos Galtos on +61 3 9684 0888.