



## Shareholder Update: Design for Tender (DFT)

**Monday, 18 February 2013:** Environmental Clean Technologies Limited (ASX: ESI) (ECT or Company) wishes to provide the following update on the Coldry Design for Tender (DFT) program.

### Key points

- Core plant design complete
- DFT realigned to support ALDP submission
- Project execution phase planned to commence Q4 2013

### Background

Arup formally commenced work on the Design for Tender (DFT) program for ECT's planned 2 million tonnes per year Coldry Commercial Scale Plant (CSP) on the 28<sup>th</sup> October 2011 (ASX announcement 31 October 2011).

The initial scope of works focused on the delivery of a preliminary design, sufficient to allow a skilled construction contractor to provide a tender quote for construction purposes. Whilst this scope of works is largely unchanged, it has evolved to accommodate recent events, allowing the strategic re-focus of activity to meet changing needs and emerging opportunities.

### Changing Needs

As previously announced, the full package of works was broken into several phases, commencing with the core process module and the design development options associated with equipment selection, layout and optimisation of key performance parameters.

As ECT progressed the DFT activity, concurrent work to develop investment interest into the CSP made it increasingly clear that attracting funding for the CSP would rely on a staged approach involving commercial demonstration to de-risk the project. This re-focused the design effort to prioritise the detail associated with the delivery of a Commercial Demonstration Plant (CDP) and connecting services.

Phases 2 & 3 of the DFT continued to progress in line with the re-focus on the CDP.

### New Opportunity

In August 2012, the State and Federal Governments announced the Advanced Lignite Demonstration Program (ALDP), aimed at supporting technologies to bridge the gap between Pilot plant and Commercial demonstration. The program (<http://www.dpi.vic.gov.au/energy/innovation-and-research/etis/advanced-lignite-demonstration-program>) appeared an ideal match to the stage and development readiness of Coldry technology's CDP. Indeed, ECT announced it had been shortlisted for consideration under the program (ASX announcement 13 December 2012) and will deliver a detailed proposal by 19 March 2013.

As a result of this new opportunity, the decision was made to align the DFT program, objectives and timelines with the ALDP objectives and timelines to provide for the strongest possible chance for positive outcomes.

To that end, the status today is:

- The original DFT scope associated with the CSP has been strategically aligned to the ALDP objectives to deliver the design for the Commercial Demonstration Plant. These design works will contribute towards the subsequent Commercial Scale Plant here in Victoria and form the basis for plant design globally.
- The 'end point' for the DFT will remain "ready for tender" however we will have captured a greater level of design detail in some areas; accommodated constructability input through early contractor involvement; and facilitated a value engineering exercise as a result of early contractor estimates bringing the level of detail closer to 'construction ready'.

- Initial cost estimation has commenced internally in collaboration with Arup & construction partner McConnell Dowell. The initial estimation activity is part of an iterative process aimed at providing increasing levels of accuracy and highlighting further value engineering and design improvement opportunities.

### **Next Steps**

- Conclude the initial estimation phase
- Finalise site selection, and adapt design works where required
- Commence required project approvals works (mainly Local Government & State Government)

Following these steps, we expect to be in a position to finalise the design and move towards the construction phase of the project, which includes finalising funding, signing construction agreements and commencing site works. While the timeline has many elements, we aim to begin the construction phase in Q4 this year.

**For further information contact:** *Mike Davies – Managing Director*  
*+61 3 9909 7684 or [info@ectltd.com.au](mailto:info@ectltd.com.au)*

---

### **About ECT**

ECT is in the business of commercialising leading-edge coal and iron making technologies, which are capable of delivering financial and environmental benefits.

We are focused on advancing a portfolio of technologies, which have significant market potential globally.

ECT's business plan is to pragmatically commercialise these technologies and secure sustainable, profitable income streams through licencing and other commercial mechanisms.

### **About Coldry**

When applied to lignite and some sub-bituminous coals, the relatively simple Coldry beneficiation process produces a black coal equivalent (BCE) in the form of pellets. Coldry pellets have equal or superior energy value to many black coals and produce lower CO2 emissions than raw lignite.

### **About MATMOR**

The MATMOR process has the potential to revolutionise primary iron making.

MATMOR is a simple, low cost, low emission, production technology, utilising the patented MATMOR retort, which enables the use of cheaper feedstocks to produce primary iron.

---