

# ANNUAL REPORT 2014



## Corporate Directory

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Ashley Moore (Managing Director)

Stephen Carter

Iain McEwin

Company secretary Adam Giles

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Stock exchange listing Environmental Clean Technologies Limited

shares are listed on the Australian Securities Exchange (ASX code: ESI)

Website www.ectltd.com.au

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## Chairman's Message

Sitting down to write this message I reflected on the sheer volume of activity undertaken throughout the year by the team and guided by three overarching strategic themes:

- 1) Continuous operational improvement;
- 2) Methodical and accountable execution; and
- 3) Frugal innovation.

Over the year, the board decided that given the highly dynamic and innovative nature of our business, that spending valuable time and money structuring a largely static, strategic business plan to guide operations would not be effective use of time or money.

Our immediate goals are simple:

- 1) Commercialise Coldry via building our first CDP
- 2) Prepare Matmor for following the same commercialisation path close behind Coldry
- 3) Develop markets for additional plants for both Coldry and Matmor.

To this end, we felt it more frugal to develop a supportive business culture, guided by strong themes, to place us in a better position to attain these goals. These themes are intended to guide everyday decision making by the executive and operations whilst also allowing the board to measure performance and implement management reporting.

Your Managing Director, Ashley Moore will talk to the first two points in his message in coming pages, so I'd like to expand on the third, then provide a few thoughts on our path forward to global deployment, via the Indian market.

One of the keys to our success during the year was the reduction in estimated capital cost of the Coldry demonstration plant via a concept we've come to know as...

#### Frugal Innovation

India has a fast growing reputation for frugal innovation. In our recent experience, it's well deserved.

The Economist Magazine profiled the concept of India's drive for frugal innovation in an April 2010 article highlighting that there is more to this approach than simply cutting costs to the bone. It involves rethinking entire production processes and business models.

Frugal innovation can vary between industries, but for us it means skilled, cost-effective delivery of activities along our commercialisation pathway.

Take Coldry. The completion of the detailed design in August 2013 enabled the appropriate level of costing to be performed in India by Thermax, resulting in a capital estimate for deployment of Coldry in India for less than A\$20 million. This represents a capex reduction of some \$A40 million compared to a similar deployment scenario in Australia and sits within the desired investment range established during our ongoing discussions with NLC.

In short, India offers the opportunity to deliver on our primary objective – Coldry demonstration – at significantly less cost than pursuing the same objective here in Australia. Clearly, this approach achieves greater value for shareholders.

But it's not enough to simply do things cost-effectively. The demand side needs to stack up as well and this is where three interconnected market factors converge to provide Coldry and Matmor with significant opportunity. And nowhere do they converge in a more compelling way, than in India, making it the ideal commercial launch pad.



#### The Indian Market Perspective: E<sup>3</sup>

In short, India is the place to be. It is suffering acutely from challenges around energy and resource security, which in turn hampers economic security that leads to constrained outcomes for environmental security.

These three factors determine the prosperity, growth and sustainability of a nation. Appropriately balanced and managed, they translate into higher living standards across a population.

These three factors, or E<sup>3</sup> as we like to call them, set the scene for the India market and the markets in which we aim to participate globally. Let's briefly touch on each in the context of our India strategy.

Energy and Resource Security: accessible, available, affordable energy, especially electricity, is arguably the single largest determinant in economic security and the standard of living in any nation.

Resources such as iron ore and coking coal underpin a nations infrastructure growth, using

the energy mentioned above to turn these raw materials into things we need and want.

Limited availability or high cost of energy or resources, threatens economic security.

In the context of Coldry, the applications are clear. Electricity generation. Conversion of dried lignite to other energy forms such as liquids and gas. Upgrading to fertiliser and other high-value products.

**Economic Security:** underpinned by energy and resource security, economic security drives growth and improvement in the standard of living for nations as I've mentioned. One of the ways in which economic security is enhanced is through the application of technology to achieve diversification of suppliers and markets. This reduces a nations vulnerability to changes in supply, price and foreign manipulation.

The Coldry and Matmor processes act as economic levers, upgrading lignite to enable higher value applications that can broaden supply options across thermal coal, gas, oil and fertiliser markets, mitigating reliance on imports.

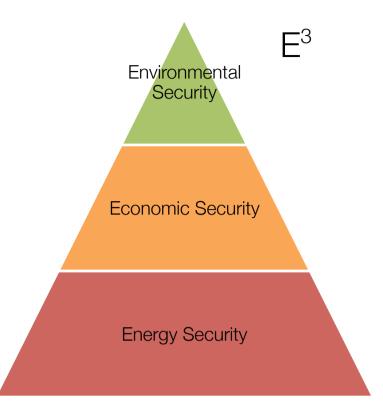
Coldry increases the efficiency at which the lignite resource is used, extending its useful life or squeezing more value out of the resource while it lasts.

Matmor's potential lies in its ability to take 'waste' iron ore, combine it with low-cost lignite and turn it into a high value product. It opens the door to alternative iron ore sources, diversifying supply and mitigating imports, resulting in improved balance of payments, increases in GDP and contributes to affordable iron and steel supply in support of infrastructure growth.

**Environmental Security:** Energy security underpins economic security, which in turn supports the cost of environmentally cleaner pathways.

In general, richer is eventually greener. As incomes go up, people often focus first on cleaning up their drinking water, and progressively on air pollutants such as sulphur dioxide.

As wealth grows, people consume more energy, and move to more efficient and cleaner sources — from wood to coal and oil, and then to natural gas and nuclear power and renewables, progressively emitting less CO<sub>2</sub> per unit of energy.





The premise being that greater wealth supports the infrastructure and regulatory framework needed to create, monitor and enforce environmental protection systems, and the ability to allocate human and financial capital to fixing, maintaining or improving our environment.

In this context, and given the forecast increase coal use to satisfy expected electricity demand that will drive economic growth, Coldry can play two important roles:

- 1. Wealth creation by upgrading lower value lignite, Coldry contributes to economic outcomes, helping deliver income growth and greater gross domestic product
- 2. Mitigation increased coal use generally means increased lignite use. Lignite, when not upgraded, is less efficient than black coal, emitting more  $CO_2$  per unit of electricity. Upgrading lignite and bringing it in line with black coal mitigate emissions by as much as 30%.

With regard to Matmor, the environmental benefits are clear. Iron ore mining creates mountains of 'waste' tailings. These tailings are 'out of spec' iron ore that can't be used by traditional blast furnaces. It may be that the iron content is too low or the particle size is too fine. Whatever the reason, these tailings often don't have commercial value and simply continue to pile up. Matmor is an ideal waste remediation solution, taking an environmental liability and turning it into nation building materials. In addition to being able to deal with the waste problem, Matmor is less  $CO_2$  intensive than traditional blast furnace iron making - which includes coke production - reducing the environmental impact of iron production.

As I mentioned, India is the place to be. It's combination of frugal innovation and market conditions make it the ideal commercial launch pad for both the Coldry and Matmor technologies.

Following demonstration in India, the commercial opportunities globally become more attainable.

Finally I'd like to thank you, our shareholders (and option holders) for your ongoing support.

Your company is in the best position in its short history, and our ambitions are bold.

The work ahead is challenging, yet achievable. With your continued support, and the dedication of the ECT team toward delivering our objectives, I believe we can realise the considerable potential of both the Coldry and Matmor technologies.

Sincerely

Glenn Fozard Chairman

## Managing Director's Message

Dear fellow shareholders,

I am very pleased to provide this report on your Company for the period of the 2013-14 financial year.

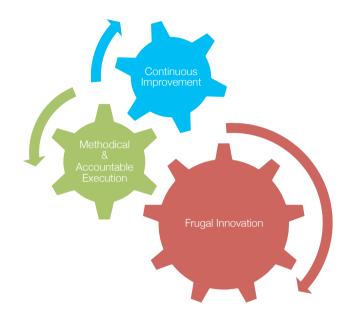
Our Chairman, Glenn Fozard identified three overarching themes:

- 1) Continuous operational improvement;
- 2) Methodical execution; and
- 3) Frugal innovation.

He touched on the third theme, frugal innovation, in addition to providing context around the market opportunity in India via  ${\sf E}^3$ .

Before covering the first two points, I'd like to acknowledge the Board's hands-on support of the team in its execution of our strategy.

This support, combined with the day-to-day effort of our highly capable team, has resulted in quality outcomes for Coldry and Matmor during the past year.



#### Continuous Operational Improvement

Those efforts are covered in the Directors Report, which starts on page 23, and provides a review of Operations, with key figures highlighting continuous operational improvements against the backdrop of advancing our key objective – Coldry demonstration – via a set of critical activities:

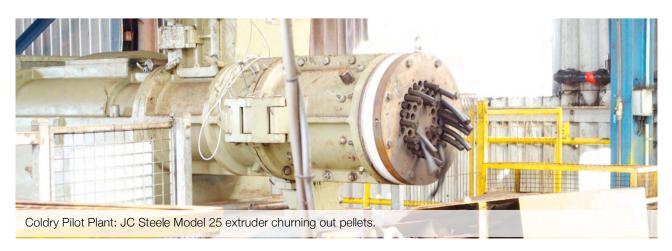
Our primary objective - Coldry commercialisation - made its greatest advancements in the past year:

- ✓ Completion of the detailed demonstration plant design
- ✓ Identification and appointment of a world-class fabricator in Thermax
- ✓ Significant capex reduction of more than 60%
- Development toward a proposed commercial demonstration project in India with Neyveli Lignite Corporation (NLC)

Subsequent to the end of the financial year the Company has taken another positive step forward in its engagement with NLC for the deployment of the Coldry technology at its site in India.

NLC have formed a high-level committee to guide our proposal through the internal assessment process necessary within a large Government Enterprise to arrive at an investment decision.

Our aim is to continue working toward a binding agreement for the deployment of the Coldry demonstration plant by the end of this calendar year, and this represents another step in that direction.



#### Methodical Execution

An indicative timeline highlighting projected key activities was outlined at the Company's shareholder meeting back in May, with an NLC decision to proceed to the next stage expected around late September and with a target to achieve binding agreements prior to the end of the year (an updated indicative timeline is provided on page 7).

Below is an update of those key activities on the indicative timeline, accompanied by explanatory notes:

Indigenisation and firm cost estimate

- •Status: Complete
- •Comments: Prepared with support from our Indian engineering partner Thermax, this activity informed a significant element within the FS Report and was key to establishing commercial feasibility.

Finalising funding structure proposals

- •Status: Complete
- •Comments: The development of the proposed funding structures was an important component within the FS Report. Following responses from NLC, the precise structures will be reviewed.

Submission of Feasibility Study Report to NLC

- •Status: Complete
- •Comments: A key milestone, the development of the FS Report was a collaborative process with YES Bank and Thermax and included a comprehensive review of the technical, commercial, financial and operational impacts, as well as the strategic outcomes from the delivery of the CDP on NLC's site. The FS Report has been received positively by NLC.

Agreement to proceed with NLC

- •Status: Proceeding
- •Comments: In recent discussions, senior NLC officials advised of their decision to proceed to the next stages of detailed project and investment review. A high-level assessment committee has been formed, reporting directly to their Board and charged with guiding the FS Report through the review process necessary to reach an investment decision. To this end ECT will provide support to the assessment committee.

Establishment of ECT India

- •Status: In progress
- •Comments: The formation of ECT India involves the establishment of a corporate entity with an appropriate structure to facilitate the company's long-term objectives in India. Activity has commenced and key advisers are in the process of developing and assessing suitable legal and tax structures for the new company.

Definitive EPC contract with Thermax  Comments: Framework established, with details to be progressively completed pending investment decision from NLC We also recently delivered the beginnings of what we hope to become a substantial collaboration with the National Mineral Development Corporation (NMDC) of India on Matmor development. As we advised in April this year, we've been working to attract a joint venture partner in India, and this is the first major step in that direction. There's a lot of work ahead to advance Matmor toward pilot plant, and your Board has a clear, methodical development pathway planned out. More on this in the Matmor section on page 16 of this Annual Report.

#### The path forward

I'd like to draw your attention for a moment to the fundamentals of commercialisation as we see them and how we believe methodical execution, risk mitigation and frugal innovation can combine to bring our technologies to market.

Let's step through.

#### Strategy

Coldry is poised to advance to commercial-scale demonstration. Matmor is poised to progress to pilot-scale, ahead of subsequent larger-scale demonstration.

Demonstration is the key step prior to commercial deployment.

Commercial deployment is the key to generating revenue from the Coldry and Matmor technologies.

Revenue is the key to establishing a basis for fundamental valuation of the business and delivering on long-term shareholder value.

To deliver on the Coldry demonstration objective, we embarked on the detailed engineering work with Arup in November 2011.

This crucial activity concluded in August 2013, delivering the level of detail and accuracy necessary to enable a qualified constructor to build the demonstration plant.

The demonstration of the Coldry process at suitable scale is aimed at delivering the process guarantee required for potential end users of the Coldry technology to make an investment decision and deploy Coldry at commercial scale.

Matmor is developed to test plant scale, capable of producing around ~40kg of hot liquid metal per hour. The plant is in 'maintenance mode' at present, pending the commencement of the next stage of development. In the meantime we've continued raw materials testing at lab scale and further refined the fundamental science around the reduction of various metal oxides in the process.

The Matmor Process requires a slightly modified version of the Coldry Process at the front end to produce the

dewatered 'composite' pellets that are fed into the Matmor retort.

The rationale behind the strategy of developing Coldry ahead of Matmor is simple; it de-risks the Coldry aspect of a Matmor plant, lowering the overall risk on the way through and enabling focus on the required furnace engineering rather than feed preparation.

Our next objective in relation to Matmor is to develop the process to pilot scale, with a capacity of ~6,000 to 8,000 tonnes per year. With an expected investment of up to \$20 million to develop the Matmor pilot plant, we believe this approach to de-risking is prudent.

With this in mind, let me drill down on our activities beginning with a view of the commercialisation pathway and moving then to the practical steps underpinning our drive to deliver tangible results for both Coldry and Matmor.

Commercialisation is a broad term. It covers many discreet activities that, when sequenced appropriately and executed well, result in a product that meets a demand, at a cost that's competitive and a price that's profitable.

Commercialising a first-of-a-kind technology like Coldry or Matmor comes with inherent risk. One of the keys to successful commercialisation is risk management. One of the ways in which we manage risk is the appropriate scale steps on the way from concept through to commercial deployment.

How we tackle the commercialisation pathway and manage that inherent risk is within our control.

Your company has been following, and will continue to follow, a methodical, stepwise approach to commercial scale up of both technologies to minimise technical and financial risk.

During the course of the next year we aim to progress the Coldry demonstration project with NLC and build on our recent engagement with NMDC.

The Coldry demonstration project is quite simply targeted at getting on with construction, commissioning, validation trials and then commercial expansion.

Being a Government of India enterprise, NLC's processes and probity requirements are rigorous and detailed, as expected.

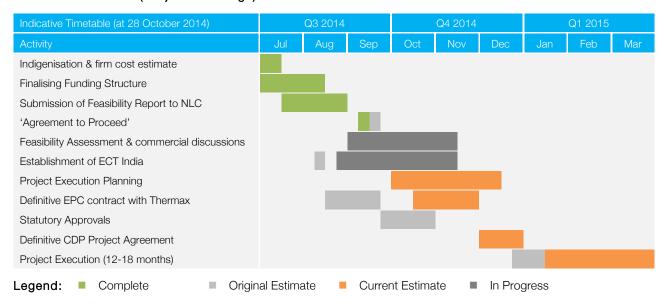
Following NLC's positive initial assessment of the Coldry FS Report and as part of their in-depth process, a high-level committee has been formed at the direction of NLC's Board, involving key stakeholders across NLC's organisation.

With NLC's commitment of resources to the detailed review process, the companies are proceeding with techno-commercial discussions, ahead of financial and investment discussions, which would then lead to an investment decision.

The next objective for the Company is the securing of a binding project construction agreement with NLC for the CDP.

Progress is encouraging, and broadly aligns to indicative timelines highlighted earlier this year.

#### Indicative Timetable (subject to change)



And while Matmor next steps are significantly more technically involved than Coldry due to the high temperature and chemistry of the process, requiring significant process modelling on the way through to scale-up, it boils down to following the same path of methodical execution of discreet disciplines combined with frugal innovation enabled via skilled, cost-effective partners in the Indian market.

Which leads me back to the National Mineral Development Corporation of India (NMDC).

We announced recently that discussions were underway and preliminary testing had ben completed, with encouraging results.

We had previously advised, via our update to the market on 1 April 2014:

- "... the Company commenced discussions with significant mineral development parties interested in exploring the potential opportunity around our Matmor iron making technology...
- ... ECT will shortly receive samples of iron ore and suitable lignite, drawn from India, for evaluation in Matmor technology.

The Company's aim is to attract a joint venture partner in India to commercialise Matmor."

Following on from these activities, NMDC's Chairman & Managing Director Mr Narendra Kothari made reference to ECT and Matmor in his speech to NMDC's shareholders at their recent AGM, which was subsequently picked up by some media.

I can't add anything further at the time of printing other than to reconfirm our ongoing discussions with NMDC.

On that note, I'll leave you to absorb the rest of this Annual Report, and welcome any feedback you may have via email to info@ectltd.com.au.

Yours sincerely,

Ashley Moore
Managing Director

## **Board of Directors**

#### Glenn Fozard - Chairman

- Mr. Fozard brings to ECT a strong commercial background and extensive experience in the finance and capital markets at both the Board and executive management level.
- Mr. Fozard has over 13 years experience in the finance sector holding various senior management and sales roles, including 5 years at Macquarie Bank's Securitised Lending division.
- With in-depth experience in tailored financing solutions for SME's in the 'cleantech' and agricultural industries Mr. Fozard is the founding partner of Greenard Willing, a specialist financial advisory firm.
- Mr. Fozard has held an advisory position with ECT for over 5 years and has contributed significantly towards the capital raising for the company during that time.

#### Ashley Moore - Managing Director

- Mr Moore is a seasoned Chemical Industry professional with extensive experience in all facets of Manufacturing, Supply Chain, Sales and Industrial Marketing. He holds a Bachelors degree in Chemical Engineering from the University of Melbourne, and has more than twenty years of industry experience in Australia and internationally
- His career started with global specialty chemical manufacturing firm Cabot Corporation in Australia, and proceeded to include assignments in various parts of the manufacturing field in the U.S.A., the U.K., Japan, Indonesia and Malaysia. He covered roles ranging from plant engineering and management, construction and commissioning, as well as regional operations management. His career expanded to later cover regional Marketing in Asia Pacific. In 2005, he joined Delta EMD, a global specialty chemical firm in the downstream minerals sector responsible for Sales, Marketing and Supply Chain
- He joined ECT in 2009 and has held various roles, being appointed to the Managing Director role in April 2013

#### Stephen Carter - Non-Executive Director

- Experienced high level, strategic executive Stephen Carter joined the ECT Board in May 2009. With an impressive background as head of many high profile organisations, Mr Carter has achieved significant commercial results in a range of sectors
- As the inaugural chief executive of Spotlight Group, the retail giant had a record annual turnover of \$800M in 2007/08, Mr Carter's second year in the job
- Prior to this he was at the helm of the Royal Agriculture Society of Victoria when it won more than \$100M State Government funding to redevelop the Melbourne Showgrounds
- Other appointments have included Vice President Planning and Strategy at Air New Zealand and Executive General Manager Property Services of Crown Limited

#### lain McEwin

#### Non-Executive Director

- lain has considerable business experience in the ownership and operation of his own business as a supplier to the building and construction industry.
- His success is founded upon the introduction and commercialisation of new technologies and products to the industry.
- lain is one of the top five shareholders in the Company.









## Coldry

- Low rank coal upgrading
- Energy Security and Diversity for nations with low rank coal resources
- Gateway technology for value added coal processes
- Creation of export opportunities for low rank coal mines
- Cost-effective CO<sub>2</sub> reduction

#### Drivers for lignite drying

Coal has made up almost half the increase in energy use over the last decade. The global demand for coal is forecast to increase by more than 1 billion tonnes per annum by 2035, despite concern over its role in global warming.

Long term demand growth, driven primarily by the growth in electricity demand in emerging nations, will underpin future coal price increases, despite recent short term downward pressures. This makes lower grade coals increasingly attractive, both in terms of price and as an energy security option for existing and new power plants.

While lignite is worthy of this increased attention, it presents the following challenges:

- High moisture content
- Significant risk of spontaneous combustion compared to bituminous coal
- Inefficient transportation cost due to high water content

Further, power plants built to handle bituminous coal typically cannot accept a straight feed of low rank coal. Blending becomes necessary to homogenise the feedstock. This combination of factors means that low rank coal struggles to trade in the export market. Those that do trade are discounted relative to their lower net calorific value. Where low rank coal is used to generate electricity, it emits more  $CO_2/MWh$  than bituminous or higher grade coals, raising issues around the social licence to operate for such investments, as well as the security of those investments with their exposure to future  $CO_2$  pricing.

The practical challenge to low rank coal is that it needs to be dried if it is going to substitute bituminous coal in power plants. To achieve this, low rank coal needs to be dried cost-effectively, while also dealing with the risk of spontaneous combustion, to avoid costly transport safety measures.

This problem is the target of our low rank coal drying solution: Coldry.

The process is also a low-cost solution, due to its use of "free" low-grade waste heat.

#### Techno-economic Evaluation

There are two application subsets for consideration when evaluating Lignite drying projects:

- Export. If the dry coal is headed for export, the margin typically needs to provide a return on investment of 15% or more, and a payback period of between 4 7 years on the capital cost of the plant itself. For the end user, the delivered price then needs to be equal to or less than the cost of alternatives.
- Mine-mouth. If the dry coal is heading straight into mine-mouth power plants, then the cost of production (raw coal cost + cost of beneficiation) needs to be less than the delivered cost of alternative coals or other fuels.

Drying lignite in a manner that also reduces the risk of spontaneous combustion is key to export opportunities. Lignite power plants typically sit on large, captive lignite reserves, though are unable to sell them to the export market due to the issues highlighted above.

Coldry also acts as a 'gateway' technology by producing a suitably dried product that can be used in other downstream applications. This is covered in further detail further below.

Applying Coldry, lignite mines are able to produce and sell more than their mine-mouth power plant consumes, thus generating additional revenues from otherwise limited applications.

#### Technical overview

Coldry is an evaporative drying process based on 'brown coal densification'.

#### Background

'Brown coal densification' research gathered considerable pace during the 1980s with a collaboration between Melbourne University's Department of Organic Chemistry and Conzinc Riotinto of Australia's (CRA) Advanced Technical Development group.

The research identified and explained the physical and chemical transformation of lignite to a dense, dry, hard material when subjected to mechanical shear and evaporative drying at or near ambient conditions.

#### How it works

Essentially lignite is sheared and attritioned, reducing the mean particle size and releasing water naturally held in the porous coal microstructure, forming a 'plastic' mass.

This dispersal of surface and physically trapped moisture lends itself to evaporative removal at or near ambient temperatures.

However, the real benefit to drying using 'brown coal densification' lies in its liberation of the physically trapped moisture within the coal micropores without the need for high temperatures or high pressures.

#### Developing the process

This is where the Coldry process builds upon the early work by the CRA and Melbourne University. The original research proposed air-drying the extruded pellets, but this approach had issues:

- Evaporative drying based on ambient conditions is highly variable. It is therefore almost impossible to integrate within a commercial supply chain.
- A 75 Hectare lay-down area would be needed for evaporation per million tonnes of annual of production.
- Using high-grade energy sources such as gas or steam to facilitate drying would not be cost-effective.

The development of the Coldry process to its current state therefore focused on:

- Primary processing: shear, attrition and extrusion of the coal to form pellets with the necessary microstructure destruction and cross-linking actions that produce a dense, dry, hard pellet.
- Controlled drying: low temperature, cost-effective evaporative drying to overcome the variability of atmospheric drying.

The result is the Coldry process shown below in a simple concept diagram on the next page.

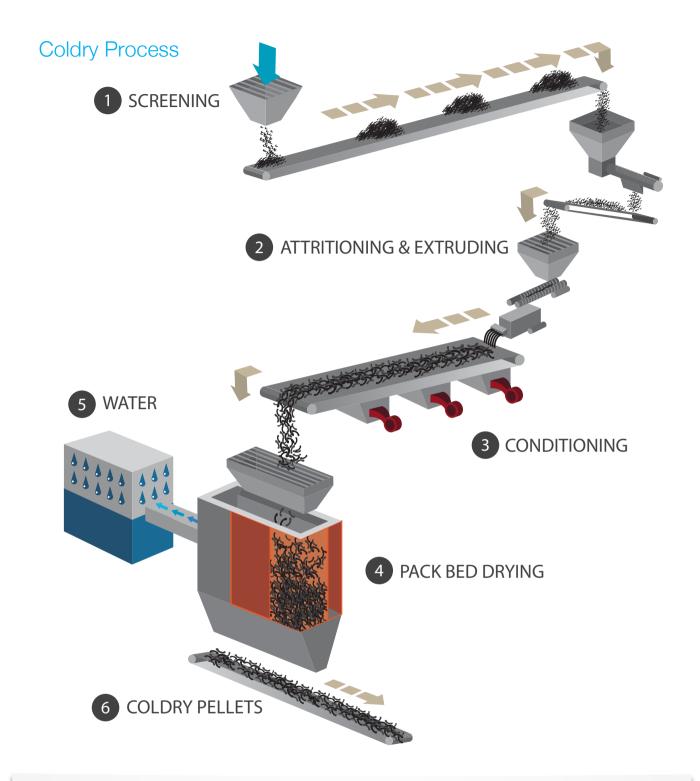
#### Outcome

When applied to appropriate lignite's, the Coldry process produces a feedstock in the form of densified pellets that are of similar calorific value to many bituminous coals, while significantly reducing CO<sub>2</sub> emissions/MWh compared to its original lignite form. Changes in the coal result in a pellet with a similar self-heating profile to commonly traded bituminous coals out of Australia, making it ideal for:

- Export to the thermal coal market.
- Downstream chemical processes
- Feedstock for coal-to-liquid (CTL) and coal-to-gas (CTG) processes, since the process retains the volatile matter that lends itself to coal conversion processes.

The Coldry process has been tested successfully on a wide range of low rank coal samples from Australia, China, Greece, India, Indonesia, Mongolia and Poland.

The single most important distinguishing factor between Coldry and other technologies is its use of low temperature or "cold" drying. The temperature range for drying is as low as 35 - 45°C. This forms the basis for the synergy with existing mine-mouth power plants and avoids the need to incur OPEX by generating process heat or by calling on high-grade heat, from other processes, that may have higher value in other applications.



#### **Process Steps**

- 1. Raw coal is milled and screened to <8mm and a small quantity of water to the raw coal
- 2. The raw coal is subjected to mechanical shear, further reducing the particle size and releasing trapped moisture to form a paste which is then extruded into pellets
- 3. Warm air toughening of the extruded pellets on a conditioning conveyer is performed prior to discharge to the main dryer. This increases the pellet strength and reduces fines generation within the dryer.
- 4. Removal of moisture in a pack bed dryer occurs at low temperature.
- 5. Water can be recovered from the process (Optional).
- 6. Stockpiling of high-energy Coldry pellets ready for use or transport.

#### Integration with supporting power plant

As mentioned, key to the economic performance of the Coldry process is its integration with a co-located power plant(s), providing the following benefits:

- Free, low-grade waste heat to facilitate evaporative drying and minimise energy costs.
- Reduction of evaporative loss of water through power plant cooling towers.
- Ability to capture water extracted from lignite as a result of the Coldry process.
- Potential improvements in overall power plant efficiency via enhanced waste heat utilisation.

#### Net energy footprint

This is extremely important in evaluating the economic performance of any coal drying technology. The "uplift" in net calorific value has to be greater than the purchased energy consumed to dry the coal, otherwise it becomes a negative- sum game.

Depending on operational modes and in the cash of Victorian Lignite being dried to 12-15% final moisture content, the Coldry process uses between 100-150 kWh of electrical energy to run the plant to process 2.2 t of raw coal producing 1 t of Coldry pellets. That electrical energy is derived from around 1.2-1.8 Gj of raw coal energy. Therefore the Coldry process has a net energy uplift, in the case of Victorian lignite, of 4-5 Gj/t.

#### Net CO<sub>2</sub> footprint

The above can be extended to net  $CO_2$  footprint. If a coal drying technology is being considered for adoption in a  $CO_2$  priced market, then its exposure from process emissions needs to be understood.

Depending on the mode of operation, and assuming combustion of the Coldry pellets in a new coal-fired plant with 43% efficiency, ECT has calculated net savings of between 3-6 t of  $CO_2$  /t of  $CO_2$  associated with electricity consumed by Coldry production. This provides a net beneficial  $CO_2$  footprint compared to business-as-usual; i.e. burning the wet coal in an inefficient lignite power plant.

#### Conclusion

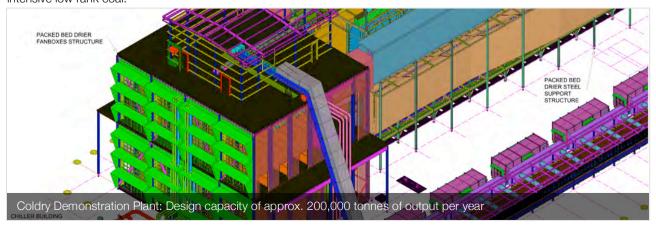
Coldry is ideally suited to drying low rank coals situated adjacent to a mine-mouth power plant. The plant can be deployed as a retrofit to existing power plants or tailored around the deployment of a new power plant, providing increased mutual efficiencies, decreased CO<sub>2</sub> emissions compared to as-mined lignite and increased revenue streams.

Key to achieving cost effective drying is the low purchased energy input courtesy of low-grade waste heat recovery coupled with the process of 'brown coal densification' initiated through the finely tuned, yet mechanically robust primary processing plant.

Rounding off the process is the unique, patented packed bed dryer that provides control over the drying conditions to allow programmed production delivering into a commercial supply chain in addition to fuelling the host power plant.

Economically, the process aims to deliver a cost of production that is competitive with bituminous coal, providing owners of typically stranded lignite assets the opportunity to sell into the growing thermal coal market.

And last, but increasingly more important, Coldry provides emerging nations with an energy security option that strikes a balance between affordable base load power and  $CO_2$  mitigation compared to the alternative of simply burning the wet,  $CO_2$  intensive low rank coal.

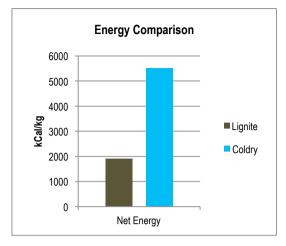


#### Coldry: Product and Application

When applied to lignite, the Coldry process produces a feedstock in the form of dry, densified pellets that are of similar energy value to many black coals, whilst significantly reducing  ${\rm CO_2}$  emissions compared to its original lignite form.

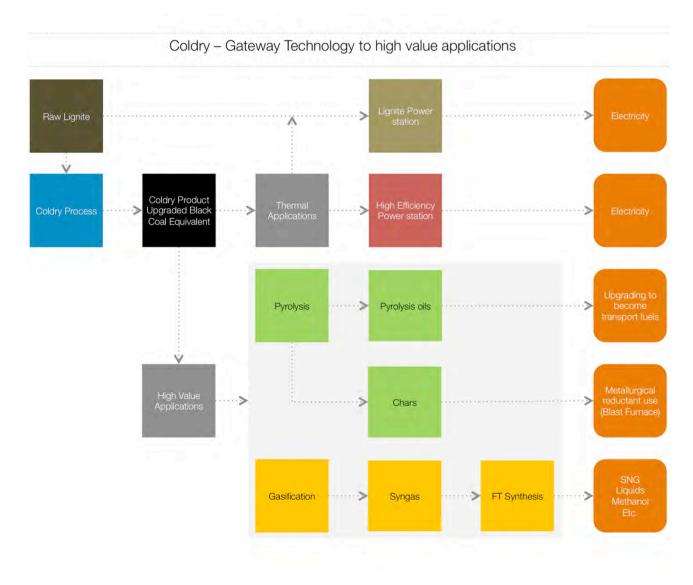
Changes in the coal result in a pellet that does not permanently reabsorb moisture, making it ideal for:

- External sales to other thermal coal users (lower spontaneous combustion/ self heating risk);
- Feedstock for coal-to-gas and coal-to-liquid processes, replacing higher-cost drying methods;
- 'Gateway' process for high value added downstream products such as diesel, naptha, waxes, LPG, DME, Urea, Ethylene, Propylene, Chars - see diagram below



In the case of Victorian lignite, Coldry delivers an 80% reduction in moisture content and an increase of around 280% in net calorific value (wet basis).

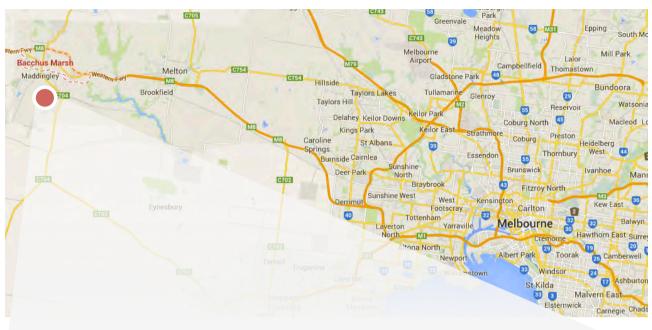
In the case of NLC lignite, Coldry delivers a 77% reduction in moisture content and an increase of around 240% in net calorific value (wet basis).



#### Coldry: Pilot Plant

The Coldry process has been proven to pilot plant scale over several years. Located 50km North West of Melbourne near the Maddingley Coal Mine at Bacchus Marsh, our pilot plant is the centre of R&D for the Coldry process as well as for our Matmor technology.

The Coldry Process has been incrementally developed from lab-scale through to batch-scale and then to a continuous process pilot plant, with over 4,000 operational hours, informing refinement and optimisation of the commercial scale design.





### **Matmor**

- Lignite-based primary iron production
- Resource security and diversity for nations with low rank coal resources
- Creation of value-added opportunities for low rank coal mines
- Revaluation of low-value iron oxide resources

In typical blast furnace operations, careful selection of coals and cokes is required to limit the presence of volatile materials. This is because high volatiles dissolve into the iron at the high temperatures experienced in the process, forming inclusions that degrade the finished product iron or steel. The Matmor process operates at lower temperatures, thus avoiding this issue.

Further, while blast furnaces are most economically run on high-grade lump iron ores (Hematite –  $Fe_2O_3$ ), Matmor technology is capable of reducing both high and low grade, lump or fines, and hematite as well as magnetite.

Additionally, it is able to recover iron content from various waste streams such as millscale (sometimes referred to as 'blue fines') and nickel refinery tailings. In terms of inputs, the following have been successfully tested in various combinations:

Matmor technology features:

- Lignite replaces metallurgical coal significant raw material cost saving
- Eliminates the need for coke and coking ovens significant capital saving and reduced CO<sub>2</sub> exposure
- Works exceptionally well on the harder to reduce magnetite and millscale (Fe<sub>3</sub>O<sub>4</sub>), without sintering, increasing availability and access to lower cost raw materials
- Waste stream process millscale and high-Fe nickel refinery tailings can be processed to recover iron, turning a
  waste liability into a revenue producing product
- Iron ore process high or low grade iron ore can be used, as can lump or fines

Patented furnace – the Matmor retort is designed to utilise the high-volatile content of lignite to produce a high-quality iron product

#### Coals

- India
- Latrobe Valley, Victoria
- Bacchus Marsh, Victoria
- Greece
- Poland
- China, Inner Mongolia
- Indonesia

#### Iron Oxides

- Hematite Ore Fe<sub>2</sub>O<sub>3</sub>
- Magnetite Ore Fe<sub>3</sub>O<sub>4</sub>
- Millscale Fe present as magnetite Fe<sub>3</sub>O<sub>4</sub>

During steady-state production the test plant can produce up to 40kg of liquid iron per hour. Trials across different coals in combination with various iron ores and other iron bearing material such as mill scale and nickel tailings have consistently resulted in recovery of more than 95% of the iron with very low impurities.

Subsequently, iron produced via the Matmor process is an ideal, high quality replacement for scrap steel, pig iron, DRI and HBI. The product is of consistent high quality, in solid, substantial form and provides for operational efficiencies compared to scrap in electric arc steelmaking.



#### Matmor: Status of Development

Matmor is currently developed to 'test plant' scale of around 40kg per hour. The test plant has proven the ability to achieve continuous production. The next stage of development at test plant scale is to implement automation of certain aspects to gather operational data from continuous production over extended periods. This will inform the design of the next stage in scale-up: Pilot Plant.

Fundamental R&D continues to refine the process, with a broader focus on testing and analysing other elements on the periodic table.

#### Value Proposition

At commercial scale, we expect the Matmor process will offer the opportunity to significantly broaden the raw material options of primary iron making, and deliver significant decreases in raw material costs.

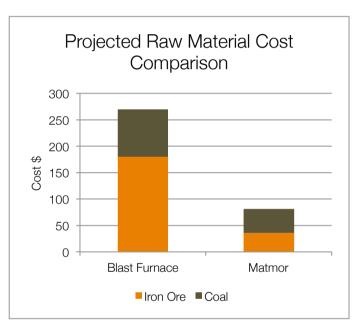
Additionally, since the Matmor process does not require the use of coking coal (or coke), the requirement to have secure supply of this expensive and often difficult to obtain raw material is avoided. Candidate brown coals are widely available, and significantly lower in cost.

#### Projected Raw material cost comparison

To produce 1 tonne of crude steel via Blast Furnace operations requires approximately 1.8 tonnes of high grade ore at around \$100 per tonne and 0.75 tonnes of coking coal at around \$120 per tonne, totalling about \$270.

To produce 1 tonne of iron via the Matmor process takes about 1.8 tonnes of Millscale at a nominal cost of \$20 per tonne and, depending on the lignite source, around 1.5 tonnes of Lignite at \$30 per tonne, totalling about \$81.

Use of higher quality iron ore would increase the cost basis should sufficient Millscale or other suitable iron waste streams be unavailable, however Matmor's ability to take unprocessed iron ore fines and slimes is a distinct advantage for asset owners seeking to maximise resource utilisation.



In summary, the drivers for Matmor technology advancement are lower raw material cost, and very importantly, decoupling iron making from coking coal supply security.

At commercial scale, we currently estimate raw material cost per tonne of iron produced by the Matmor process to be less than \$100. These assumptions will be refined through the scale-up process.

#### Matmor Indicative Development Pathway



#### Matmor: Process

Matmor uses the Coldry process as the feed preparation stage. This achieves the multiple aims of:

- Drying the lignite cost effectively and energy efficiently
- Combining the raw materials in the required ratio and delivering it in a pellet form suitable for the Matmor retort
- Achieving a close contact between the raw materials to maximise metallic yield

The 'composite' pellets are fed into the unique, patented Matmor retort (vertical furnace).

The pellets heat up; the volatile matter in the lignite is gassified, providing thermal energy and driving reduction reactions over a broad, low temperature range.

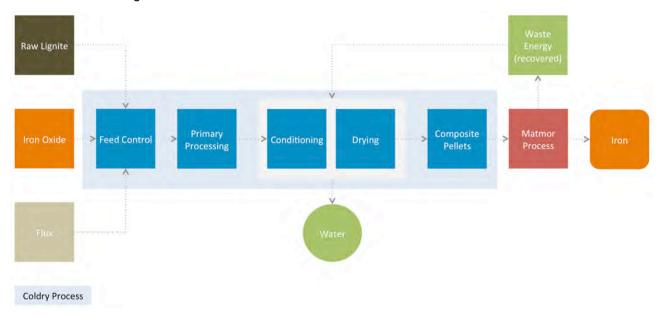
The reduction reactions are largely concluded at temperatures of less than 1000°C.

The resultant pellets consist of ash, some residual carbon and reduced iron.

There are two options to achieve final melt:

- Discharge from the retort to a specialised melting vessel where injection of air or oxygen raises the temperature to over 1500°C, melting the iron. A weir system in the melting vessel allows for separation of slag and hot liquid metal.
- Discharge of the pellets to a molten bath (e.g. induction furnace) where the iron dissolves into the bath and the ash forms a slag on top

#### Matmor Process Diagram



#### Key Differences compared to Blast Furnace

It is important to note that Matmor is a hydrocarbon reduction process as opposed to the brute-force CO based approach of a Blast Furnace.

In typical Blast Furnace operations, careful selection of coals and cokes is required to limit the presence of volatile materials. This is due to the fact that, at the high temperatures experienced in the BF process, these volatiles dissolve into the iron, forming inclusions that degrade the finished product iron or steel. The Matmor process operates at lower temperatures, thus avoiding this issue.

Further, while Blast Furnaces are most economically run on high-grade lump iron ores (Hematite –  $Fe_2O_3$ ), Matmor technology is capable of reducing both high and low grade Hematite as well as Magnetite, without sintering. Additionally, it is able to recover the iron content of various waste streams such as Millscale and Nickel refinery tailings.

When used on ores such as limonite (iron-nickel-chrome), the Matmor process produces an alloy that can be used as a premium-melting base for various steel grades, as it reduces the nickel and chrome in addition to the iron, reducing the need for the end user to add nickel and chrome when producing various steel grades.

#### **Development Pathway**

The development of Coldry Process has taken precedence over the Matmor Process due to the fact that Matmor requires Coldry to be commercially available as the frontend raw material preparation stage.

As such, ECT's focus in recent years has been on completing the scale-up engineering for Coldry ahead of constructing a commercial-scale demonstration plant.

While the focus on Coldry development over recent years has meant the temporary suspension of scale-up activities for Matmor, fundamental raw material testing has continued, yielding further confirmation that Matmor can reduce a broad range of metallic oxides.

Recent engagement with the National Mineral Development Corporation of India has highlighted potential opportunities for collaboration, which may see increased testing activity in the short term, that if successful may lead to pilot plant development activity in tandem with Coldry development.

Following Coldry demonstration, its role as the feed preparation stage of the Matmor Process will be significantly de-risked, allowing focused scale-up activity to advance.

ECT has previously engaged furnace-engineering experts HATCH to deliver a detailed 'Status of Development' report that assisted the company in developing a robust development pathway based on HATCH's extensive experience in this area.

The development pathway provides plans for amending the current Test Plant ahead of developing and deploying a Pilot Plant, with a target capacity of ~6,000 tonnes per year (~700kg/h hot liquid metal) as the next step in commercialisation.

After success at Pilot scale, scale up to a commercial demonstration size plant will follow. Capacity and scale-up factors will be determined based on process performance data and operational experience gained at Pilot scale.

Following Demonstration scale, deployment to commercial applications will likely consist of further scale up, as well as installation of multiple retort units.

## India Strategy

#### Outline of the India Market Opportunity

In 2010–11 India was Australia's third largest export market for energy and non-energy mineral commodities, principal export market for gold, second-largest export market for metallurgical coal, and third largest export market for non-energy minerals. In 2010–11, India was Australia's fourth largest resources and energy trading partner with resources and energy exports valued at around AUD\$14.6 billion.

The International Energy Agency (IEA) reports:

"A combination of rapidly increasing energy demand and fuel imports plus growing concern about economic and environmental consequences is generating growing calls for effective and thorough energy governance in India. Numerous policy reforms over the past 20 years have shifted the country's energy sector from a state-dominated system towards one that is based on market principles. However, with the reform process left unfinished, India now finds itself trapped halfway along the transition to an open and well-performing energy sector.

India suffered from the largest power outage ever in late July 2012, affecting nearly half of the population. While this incident highlights the importance of modern and smart energy systems, it indicates that the country is increasingly unable to deliver a secure supply of energy to its population, a quarter of which still lacks access to electricity."

In short, India is a net energy importer today, facing a range of issues in the face of projected growth in energy demand as it aims to bring affordable electricity to that 25% of its population currently without access and its rapidly growing industrial base.

India currently faces the following issues;

- Insufficient fuel supply
- Pricing distortions
- Infrastructure limitations
- Investment risk

Given the above factors and that power generation capacity is forecast to grow by almost 400% through to 2035, the impetus to upgrade and leverage existing domestic lignite resources has gained momentum.

In the context of ECT, it has a two-fold implication;

- 1) Thermal power generation black coal power stations
- 2) Value added applications;
  - Coal to liquid fuels
  - Coal to gas
  - Metallurgical coal substitute
  - Fertilisers

#### Market

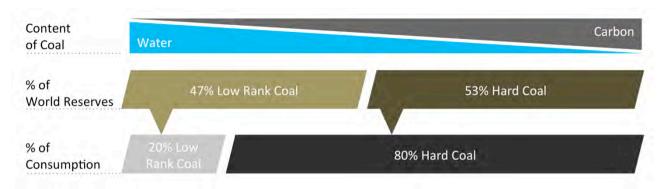
India has a population of around 1.25 billion. Some 300 million don't have access to electricity (IEA World Energy Outlook 2013). Energy shortages plague the rest, with India's Central Electricity Authority (CEA) recently identifying (29 Sept 2014) more than half of its coal-fired plants (56) reporting critically low fuel stocks of less than 7 days, with 33 having less than 4 days stockpile and 11 with nil coal.

And while we all support the sensible, affordable deployment of renewables in the energy mix, the International Energy Agency forecasts India will be come the largest coal importer by 2020, driven by demand for electricity.

Coal will remain the dominant electricity source in India for decades to come. It makes sense to upgrade domestic lignite resources via Coldry to displace imports where possible, and to enhance efficiencies of domestic generation utilising lignite.

Globally, around one fifth of the population, or 1.3 billion, lack access to electricity and around 2.7 billion rely on wood, charcoal or dung for cooking fuel. The World Health Organisation estimates that 'millions' die every year from air pollution caused by the use of pre-modern energy sources in people's homes.

At present, the high-level coal resource-consumption picture look like this:



Low rank coal, which includes Lignite, makes up nearly half the remaining recoverable reserves but only accounts for 20% of consumption.

As demand grows in coming decades, consumers will increasingly seek alternatives to back coal, increasing Lignite use.

Demand growth won't just be limited to consumers seeking to make electricity. In fact Lignite is much more valuable as a feedstock for value added outputs such as gas, liquids, chemicals and iron making via the Matmor process.

## ECT and a Carbon Constrained Economy

#### Economics and environment

It's important to understand how the environment and the global economic picture, fit together over time. The link between economic growth and environmental improvement is clear when we look at how the developed world has progressively cleaned up its air and water.

According to the World Bank, the economies of OECD countries have grown by over 80 per cent since 1970. In that time, nearly universal access to clean water supplies, sanitation, and waste disposal has been achieved.

Air quality has improved dramatically, characterised by a 60 per cent reduction in particulate emissions and 38 per cent decline in sulphur dioxide emissions.

Pollution from large shipping accidents and oil spills has declined, and nearly all countries have increased the amount of forestlands.

Improved environmental quality in all of these areas is generally associated with higher income.

Discretionary wealth means citizens are more willing to spend appropriately to safeguard high environmental standards whereas poverty is a significant cause of environmental degradation.

Poorer people are more likely to exploit environmental commons in search of fuel-wood and other basic necessities, causing overhunting, overfishing, and stress to water resources. Lacking significant employment opportunities and productive land, the poor in developing nations often rely on marginal lands for food production, attempting to farm in deserts or tropical forests. The result is environmental degradation in the form of soil erosion, desertification, and deforestation.

Rarely do societies achieve a 'sudden' step change in any field of endeavour. Transitions occur.

Coal is forecast to remain the basis for electricity production globally for the next several decades. Coldry is a transition technology capable of mitigating the environmental impact, while supporting the economic growth that increases real incomes needed to afford the cost of increased renewables in the energy mix.

#### The 'Clean Coal' Myth

There is no such thing as 'clean' coal, however there is 'cleaner' coal and the Coldry process is an appropriate, cost effective and immediately deployable energy solution that is synergistic with the demands of a carbon constrained economy.

This is because lignite treated via the patented Coldry drying process is transformed into a 'black coal equivalent' (BCE) feedstock. This means CO<sub>2</sub> emissions from the resulting product fall in line with black coal, which substantially reduces the environmental impact of traditional, as-mined lignite.

While we acknowledge the Coldry process is not a zero-emission solution for power generation, it is a viable, cost effective energy technology with the capability to reduce  $\rm CO_2$  emissions by around 30%, at a cost per tonne estimated to be substantially lower than other lignite-focused emission reduction solutions, including carbon capture and storage (CCS).

As an example, by applying Coldry technology to Victorian lignite, the net energy content of the mined lignite is increased by up around 285%. This alone results

in substantial efficiency gains and CO<sub>2</sub> reductions. The improved energy value of Coldry pellets is greater than the purchased energy required to make them.

In addition, the Coldry process uses free, low-grade waste heat from a co-located power station to facilitate the drying process and minimise purchased energy input. Coldry pellets can be used in local black coal fired power stations and transported over long distances to black coal fired power plants.

Ultimately, if a coal drying technology is being considered for adoption in a  ${\rm CO}_2$  priced market, then its exposure from process emissions needs to be understood.

Depending on the mode of operation, ECT has calculated net savings of between 3-6 t of CO<sub>2</sub>/t of CO<sub>2</sub> associated with electricity consumed by Coldry production. This provides a net beneficial CO<sub>2</sub> footprint compared to business-as-usual, which is burning wet coal in an inefficient lignite power plant.

# Financial Report

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## **Directors Report**

The directors present their report, together with the financial statements, on the consolidated entity (referred to hereafter as the 'consolidated entity') consisting of Environmental Clean Technologies Limited (referred to hereafter as the 'company' or 'parent entity') and the entities it controlled at the end of, or during, the year ended 30 June 2014.

#### **Directors**

The following persons were directors of Environmental Clean Technologies Limited during the whole of the financial year and up to the date of this report, unless otherwise stated:

- Glenn Fozard Chairman (appointed as a Director on 17 July 2013 and Chairman on 26 November 2013)
- Ashley Moore Managing Director
- Stephen Carter
- lain McEwin
- Lloyd Thomson (appointed on 22 August 2013 and retired on 24 April 2014)
- Michael Davies (resigned on 20 August 2013)

#### Principal activities

During the financial year the principal continuing activities of the consolidated entity consisted of:

- demonstrating the Coldry Process design at commercial scale;
- developing the Matmor Process; and
- managing the development and extracting value from Intellectual Property.

#### Coldry Process

The Coldry process is the consolidated entity's first technology proven to be commercially viable as an economic method of dewatering brown coal to produce a black coal equivalent. Once applied, the mechanically simple Coldry process produces pellets that are stable, easily stored, can be transported and are of equal or higher energy value than black coal. Essentially, the Coldry process works through the destruction of internal porous structures, allowing the expulsion of water from lignite and sub-bituminous coals. The Coldry process delivers a 'Gateway technology' that enables an ideal front-end feedstock solution for numerous new technology applications.

#### **Matmor Process**

Matmor is a clean, low-emission, one-step process for producing high-grade primary iron using brown coal to displace the need for coking coals as used in the incumbent blast furnace process.

The Matmor process is positioned to fundamentally change primary iron making, creating a high-grade iron product from brown coal and ferrous media such as iron ore, mill scale or other iron bearing wastes or tailings. The core change lies in the design of our simple, low cost, low emission, patented Matmor retort using lower cost, alternative raw materials. Essentially the process involves blending brown coal (lignite) with iron ore or other ferrous metal bearing media to form a paste that is dewatered using the Coldry process. The pellets are then fed into a simple low cost, low emission patented Matmor retort where the remaining moisture is removed, the coal volatiles are driven off and the iron oxides are reduced to metal.

#### Intellectual Property

The Coldry intellectual property was acquired from the Calleja Group in 2009. The Calleja Group remains the owner of the Matmor technology but the consolidated entity has an exclusive right with the Calleja Group, under a Participation Agreement to licence the Matmor technology and ultimately purchase that intellectual property as well. The Coldry process is covered by patents, or pending patents in all major markets with significant brown coal deposits. The sole remaining patent of interest for Coldry yet to be granted is India. This is progressing through the Indian national system.

#### Dividends

There were no dividends paid, recommended or declared during the current or previous financial year.

#### Review of operations

The loss for the consolidated entity after providing for income tax amounted to \$2,548,113 (30 June 2013: \$5,444,185).

This represents an improvement of 53% from the prior year result.

#### Operational Highlights

- Total expenses were reduced by 38% to \$4.193m from \$6.759m in the prior year.
- Core cash expenses (total expenses excluding noncash items depreciation and amortisation, movement in earn-out provision, finance costs and the unique activity of engineering costs) have decreased from \$2.510m to \$2.042m (\$488k, or a 19% decrease), driven by organisational structure and priority changes (employee and sales and marketing expense):
  - Employee costs were \$332k lower in 2014 resulting from organisational changes
     Sales and marketing expense was \$205k lower than 2013 due the company's focus on progressing the Coldry demonstration project ahead of other business development
  - Engineering expense was \$2.412m lower versus 2013 due to the detailed engineering works for the Coldry Demonstration Plant concluding in August 2013 compared to running the whole of the prior year
  - Research and development rebate was \$341k greater at \$1.633 million than in 2013 due to the higher spend on qualifying research and development activity completed during the prior financial year

#### Corporate

Organisational changes were carried out through the year resulting in decreased employee, consulting and sales and marketing expenses. The execution of these changes included:

- Organisational change to better align with the objectives of the company
- Increased organisational focus on fewer corporate objectives
- Implementation of activity-based cost control systems and management reporting
- Expanding in-sourcing of support activity where appropriate

 Identification and adoption of cost effective strategies around delivery of accounting, audit and legal services to the company

These have been successful, and underpinned the cost decreases noted above.

#### Coldry

The 'Design for Tender' program, begun in November 2011, was concluded in August of the 2013/14 fiscal year. Key deliverables included:

- Detailed design of the core process
- Baseline cost estimates for an Australian facility
- An ability to engage globally with core design package information

The completion of this significant program has delivered a valuable and tangible outcome – the ability for an experienced constructor to deliver the Coldry Demonstration Plant.

Providing a somewhat frustrating backdrop to the otherwise positive engineering development activities was the combined Victorian State and Federal Government Advanced Lignite Demonstration Program (ALDP). While our participation under the ALDP did not change the underlying engineering activities, the significant delays within the program generated significant frustration for our shareholders.

The company was informed on 2 January 2014 that it had not been successful in attracting a grant, despite being viewed as a vastly superior drying technology in many aspects. Our reliance on yet to be developed rail and port export infrastructure for future commercial production volumes was seen as a gap. The company also holds the view that the program had an apparent bias toward attracting foreign investment via subsidising established, relatively  ${\rm CO_2}$  intensive technologies as opposed to the stated intent of supporting demonstration of pre-commercial technologies.

Running parallel to our efforts under the ALDP program were business development activities focused on opportunities in India.

The company's plans for India, outlined for shareholders during the EGM in August 2013, involved a three way 'fit' with Coldry and Matmor serving key strategic needs of the Indian economy's growth, and both technologies gaining from access to the very competitive nature of Indian engineering and fabrication services.

Coldry advancement is focussed on, but not limited to, the first demonstration plant being built at Neyveli Lignite Corporation's (NLC) site in Tamil Nadu, India. This has continued to advance through the year, with the key milestones being the appointment of Thermax as dedicated EPC contractor for Coldry deployment in India,

and most recently the completion of the Feasibility Study for Coldry at NLC.

The appointment of Thermax followed a disciplined process of engagement with a number of well-respected EPC firms in India. Interest, capability, and cost competitiveness were among the assessments made. Thermax stood out on a number of fronts, and in particular their expertise in heat exchange systems, waste heat recovery, and all aspects of power station design were very important to the integration requirements of Coldry.

The Feasibility Study report, requested by NLC, addresses a range of deployment aspects at commercial scale on the Neyveli site. These include:

- The Coldry technology (having already passed through NLC's earlier evaluation process)
- The Coldry product
- Potential markets within India
- Energy balance and energy harvesting from the NLC power station
- Process integration considerations with the host power station
- Fabrication and capital expenditure considerations
- Funding options
- Financial performance of the Commercial Demonstration Plant (CDP) as a standalone venture
- Strategic opportunities for NLC following successful demonstration

Supporting ECT in achieving these Coldry objectives are Greenard Willing India and YES Bank.

Through this process the company identified capital cost savings of up to 65% for the construction of the Coldry demonstration plant, when compared to the cost to deploy the same size plant under the ALDP proposal.

As the fiscal year draws to a close, the company is focused intently on its primary objective of demonstrating Coldry.

#### Matmor

The Matmor process remains a key development objective into the future.

Matmor is dependent on Coldry for its feedstock preparation, and as such Coldry needs to be demonstrated at commercial scale to de-risk Matmor development.

Fundamental R&D has continued throughout the fiscal year, with extensive bench testing of a broad scope of Indian iron ore and Indian lignite. These have been, in

every instance, successful at producing a high quality metal. Commercial discussions with substantial parties relating to potential collaboration on Matmor development continue.

In addition, ECT has continued to explore the basic footprint of Matmor with respect to non-ferrous metals, including nickel, titanium and manganese ores, with promising results. Further testing is required to generate the necessary data to develop these applications into the future.

Matmor, being a high temperature (up to 1000°C) pyro metallurgical process, will entail a greater level of engineering and scale up development than Coldry. The next phase of development is to scale up from our 40kg/hr test plant to a 700kg/hr (around 6,000 tonnes per year) Pilot plant. To this end the company will seek suitably qualified partners in various markets to collaborate.

#### Coal Asset Development

While ECT has discontinued its efforts to develop Victorian Lignite assets associated with EL5119 due to the strategic focus on Coldry Demonstration in the short to medium term, the company sees value in pursuing resource access in support of the commercialisation activities of our technology suite. The company is in discussion with a number of resource developers with the view of establishing reciprocal agreements to co-own and/or develop resources in tandem with the application and deployment of ECT's technologies.

## Significant changes in the state of affairs

The following significant changes in the state of the affairs of the consolidated entity occurred during the financial year:

- On 20 August 2013, the consolidated entity announced that it had concluded its nearly twoyear engineering efforts, resulting in a detailed design for Coldry technology deployment thus enabling the consolidated entity to proceed to construction in Victoria and more importantly, develop Indian project opportunities and access lower cost equipment in India itself
- The consolidated entity entered a strategic relationship with YES Bank, India's 4th largest private sector bank to provide in-country corporate advisory services in support of the consolidated entity's strategy to develop the Coldry project and leverage the cost effective fabrication capabilities available in India's manufacturing and engineering sectors

- On 3 January 2014, the consolidated entity announced that it had not attracted a grant under the Advanced Lignite Demonstration Program (ALDP)
- On 19 May 2014, the company announced that it had signed a Heads of Agreement with Indian power station builder and energy engineering firm, Thermax (BSE: 500411 and NSE: Thermax)

#### Arup Bond

- In relation to the Arup Bond, on 5 July 2013, the company and Arup agreed to extend the maximum amount of the Arup Bond from \$2.5 million by another \$1.4 million to \$3.9 million. Terms of the extension were interest free and convertible into the company's shares at a price of 90% of the lowest volume-weighted average price ('VWAP') of the preceding 5 days trade
- During the year, debt with a face value of \$2.125 million was converted to 359,307,142 ordinary shares in the company

#### **Options**

- At a general meeting of the company held on 30 May 2014, shareholders approved the issue of two series of listed options consisting of New Options (ESIOA) to raise approximately \$1.4 million of capital and New Bonus Options (ESIOB) issued at nil consideration. ESIOA and ESIOB options have an exercise price of 0.9 cents and 1.5 cents respectively and expire on 31 July 2017. The prospectus for this capital raising was lodged on 30 June 2014.
- Subsequent to the end of the fiscal year, the Offer was fully subscribed
- The company's pre-existing 871,885,303 quoted options (ESIO) exercisable at 2.0 cents each, expired on 16 January 2014

#### Financing

On 31 October 2013, the company issued a shareholder update on capital management advising a further round of funding had been delivered via the 'FAST Finance' model.

Term: 12 months:

Repayment: Cash in full;

Interest Rate: 12.5% per annum payable upfront

There were no other significant changes in the state of affairs of the consolidated entity during the financial year.

# Matters subsequent to the end of the financial year

The following significant events occurred after the reporting date:

#### Mecrus JV agreement

On 25 July 2014, the company advised it has executed a binding Heads of Agreement to form a Joint Venture (JV) company with Australia's leading brown coal plant operator, Mecrus.

#### Issue of options

On 30 July 2014, the company advised it had concluded its New Options Offer, fully subscribed with gross proceeds of \$1,396,172. The company further advised that it would issue 1,396,172,364 ESIOA options to eligible participants under the Program, representing a take up of 100% of the Program approved at the company's EGM on 30 May 2014. This included precommitments received prior to the Offer opening, valid applications received, and the underwritten amount, in addition to valid shortfall applications received prior to the announcement

#### Arup bond conclusion

On 14 August 2014, the consolidated entity advised that the Strategic Deliverable Bond (SDB), established to fund the delivery of Coldry engineering outcomes, had been extinguished through the receipt of a final conversion notice for the balance of the bond

No other matter or circumstance has arisen since 30 June 2014 that has significantly affected, or may significantly affect the consolidated entity's operations, the results of those operations, or the consolidated entity's state of affairs in future financial years.

#### Likely developments and expected results of operations

#### Coldry

Delivery of the Coldry CDP is the consolidated entity's number one objective. To that end the consolidated entity has developed its India strategy to develop low-cost engineering capability for plant and equipment as well as advancing project opportunities for demonstration.

#### Matmor

The company is focused on advancing Coldry as its lead technology, which is a necessary sequencing given that the Coldry process is required to deliver the feedstock for Matmor.

Matmor is positioned to commence the next steps in scale-up on the commercialisation pathway:

- pre-feasibility and expanded testing works at the Test Plant to prepare the design briefing to support commencement of pilot plant design;
- pilot plant design program; and
- pilot plant construction and operations

The search for the most appropriate technical and financial partner for Matmor continues.

#### Environmental regulation

With respect to current activities, the company is not the subject of environmental regulations. However, as the company considers commencement of operations through the Coldry CDP, this status will change. Appropriate planning is in place to manage this transition.

#### Information on directors

Glenn Fozard Name: Title: Chairman Qualifications: BBus (Int. Trade), BA (Psvch) Glenn has a strong commercial background and extensive experience in Experience and expertise: finance and capital markets at both board and executive level. With a deep understanding of tailored financial solutions for SMEs in the Cleantech and Agricultural sectors, he supports the company with valuable guidance in the technology development, risk management and capital raising areas. Glen is the founding partner of Greenard Willing, a specialist financial advisory firm. Glen has held an advisory position with the company for over five years and has contributed significantly towards the capital raising for the company during that time. Other current directorships: None Former directorships (last 3 years): None Special responsibilities: Member of Remuneration, Nomination and Governance Committee; Member of Audit and Risk Committee Interests in shares: Nil Interests in options: Nil Name: Ashley Moore Title: Managing Director Qualifications: BEng (Chem), MIEAust, CPEng, MAICD Experience and expertise: Ashley is a Chartered Professional Engineer, with extensive experience in all facets of manufacturing, plant operations, supply chain management, sales and marketing and major project delivery from more than 25 years in the industry. Ashley joined the company in October 2009 as Business Manager, Coldry. Ashley was appointed to the role of Chief Operating Officer of the company in August 2011, and then to Managing Director in 2013. Other current directorships: None Former directorships (last 3 years): None Special responsibilities: Member of the Finance Committee Interests in shares: 2,916,668 ordinary shares Interests in options: Nil Name: Stephen Carter Title: Non-Executive Director

Qualifications: MBA, Dip Co. Dir., Dip App. Sc., FAICD

Stephen has extensive experience in delivering strategic projects including the commissioning of Crown Casino, the commercial preparation for the integration of Ansett/Air New Zealand, delivery of a multi-million dollar funding

package for the redevelopment of the Melbourne Showgrounds, the review and transformation of Air New Zealand's engineering division and the

commercial repositioning of Spotlight Pty Ltd.

Other current directorships: None

Experience and expertise:

Former directorships (last 3 years): None

Special responsibilities: Chair of Remuneration, Nomination and Governance Committee; Chair of

Audit and Risk Committee; Chair of Finance Committee

Interests in shares: Nil
Interests in options: Nil

Name: lain McEwin

Title: Non-Executive Director

Experience and expertise: lain has considerable business experience in the ownership and operation of

his own business as a supplier to the building and construction industry. lain

is a key shareholder in the company.

Other current directorships: None
Former directorships (last 3 years): None

Special responsibilities: Member of the Finance Committee

Interests in shares: 53,108,581 ordinary shares

Interests in options:

Name: Lloyd Thomson

(appointed on 22 August 2013 and resigned on 24 April 2014)

Title: Former Non-Executive Director

Experience and expertise: Lloyd has extensive business management experience, with comprehensive

knowledge of finance and capital markets, as well as new business

development and risk management.

Other current directorships: None
Former directorships (last 3 years): None

Special responsibilities:

Not applicable, as no longer a director

Interests in shares:

Not applicable, as no longer a director

Interests in options:

Not applicable, as no longer a director

Name: Michael Davies (retired 20 August 2013)

Title: Former Managing Director and Chairman

Qualifications: Dip Civil (Eng), Grad Macquarie University Adv Mgt Program

Experience and expertise: Michael is an experienced senior manager having spent 14 years in General

Manager and CEO/Managing Director roles. Michael's career included time with Caterpillar Inc., Caterpillar dealers including Hastings Deering Limited, Gough Group (NZ) Ltd and Joy Mining Machinery Australia Limited before

commencing his consulting business.

Other current directorships: None
Former directorships (last 3 years): None

Special responsibilities:

Not applicable, as no longer a director

Interests in shares:

Not applicable, as no longer a director

Interests in options:

Not applicable, as no longer a director

'Other current directorships' quoted above are current directorships for listed entities only and excludes directorships of all other types of entities, unless otherwise stated.

'Former directorships (in the last 3 years)' quoted above are directorships held in the last 3 years for listed entities only and excludes directorships of all other types of entities, unless otherwise stated.

#### Company secretary

Adam Giles has over 20 years business and management experience across both private and public sectors. His long-term involvement with the development of the Coldry and Matmor technologies provides valuable background, helping inform strategic direction. Key responsibility areas include Operations, Investor and Media Relations and Corporate Governance.

#### Meetings of directors

The number of meetings of the company's Board of Directors ('the Board') and of each Board committee held during the year ended 30 June 2014, and the number of meetings attended by each director were:

	Full Board		Remuneration, Nomination and Governance Committee		Audit and Risk Committee		Finance Committee	
	Attended	Held	Attended	Held	Attended	Held	Attended	Held
Glenn Fozard	13	13	2	2	2	2	-	-
Ashley Moore	13	13	-	-	-	-	2	2
Stephen Carter	13	13	2	2	2	2	-	-
lain McEwin	12	13	-	-	-	-	2	2
Lloyd Thomson	9	10	-	-	2	2	2	2
Michael Davies	1	1	-	-	-	-	-	-

Held: represents the number of meetings held during the time the director held office or was a member of the relevant committee.

#### Retirement, election and continuation in office of directors

In accordance with the Constitution of the company, at each Annual General Meeting ('AGM') one-third (or a number nearest to one-third and rounded up) of the number of directors (excluding a director appointed to either fill a casual vacancy or as an addition to the existing directors) must retire by rotation as well as any other director who has held office for three years or more since last being elected and any other director appointed to fill a casual vacancy or as an addition to the existing directors. Such directors can offer themselves for re-election.

Accordingly, at the 2013 AGM, Stephen Carter and lain McEwin retired as directors by rotation and, being eligible, offered themselves for re-election and were subsequently re-elected. Lloyd Thomson who was elected by directors on 22 August 2013 retired and was also re-elected at the AGM. He subsequently retired on 24 April 2014. Glenn Fozard was elected a director of the company on 17 July 2013. Michael Davies resigned on 20 August 2013.

#### Remuneration report (audited)

The remuneration report, which has been audited, outlines the Key Management Personnel ('KMP') remuneration arrangements for the consolidated entity, in accordance with the requirements of the Corporations Act 2001 and its Regulations.

KMP are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the group, directly or indirectly.

The remuneration report is set out under the following main headings:

- Principles used to determine the nature and amount of remuneration
- Details of remuneration

- Service agreements
- Share-based compensation
- Additional information
- Additional disclosures relating to key management personnel

#### Principles used to determine the nature and amount of remuneration

The Board's remuneration policy is to ensure the remuneration package properly reflects the KMP's duties and responsibilities and that the remuneration is competitive in attracting, retaining and motivating people of the highest quality. KMP' remuneration is arrived at after consideration of the level of expertise each director and executive brings to the company, the time and commitment required to efficiently and effectively perform the required tasks and after reference to payments made to KMP's in similar positions in other companies.

The Board through the Remuneration, Nomination and Governance Committee is responsible for making recommendations on remuneration packages and policies applicable to the Board members and senior executives of the company. The company has in the past provided equity based short term and long-term incentives based upon achievement of predetermined performance criteria.

At the 2012 Annual General Meeting ('AGM'), shareholders approved an Executive and Director Incentive Plan (the 'Plan') to facilitate the provision of equity based remuneration to KMP. The approval of this plan expires 13 November 2014. In respect of the year ended 30 June 2014, the directors have elected not to take their entitlement under the Plan.

In accordance with best practice corporate governance, the structure of non-executive directors and executive remunerations are separate.

#### Non-executive directors remuneration

The aggregate non-executive director remuneration is determined by a general meeting. The most recent determination was at the AGM held on 10 September 2008 where the shareholders approved an aggregate remuneration of \$250,000 for the work undertaken by non-executive directors in their capacity as non-executive directors.

Effective 1 July 2012, the base fee payable to non-executive directors for discharging their duties as directors is capped at \$75,000 per annum each, being \$50,000 in cash and \$25,000 in shares, for which shareholders provided approval at the 2012 AGM. With recent changes in Board structure and numbers, Director remuneration has been adjusted as follows:

- Non-executive Director \$50,000 base
- Chairman \$25,000 p.a. additional
- Committee Chairs \$10,000 p.a. additional

Pursuant to a General Meeting held on 23 August 2013, the following Non-Executive Directors' Remuneration Policy with respect to remunerating non-executive directors of the company for providing extra services on behalf of the company or its business was approved:

- any remuneration paid to a non-executive director must be reasonable given the circumstances of the company and the non-executive director (including responsibilities involved in the performance of the additional services);
- wherever practicable, the company will obtain an independent quotation or estimate from an appropriate independent party in respect of those additional services;
- if the non-executive director is an appropriate person to perform those additional services, the remuneration must be benchmarked against any such quotation or estimate obtained by the company;
- the Managing Director or designate, in the absence of the Managing Director, must report to the Board on the budgetary impact to the company of the proposed engagement of the non-executive director. Any engagement of a non-executive director to provide those additional services must be unanimously approved by all directors (other than the non-executive director providing services);
- the non-executive director must report in writing to the Board at the completion of the additional services in such form as the Board may reasonably require;
- all amounts paid to non-executive directors in respect of providing those additional services will be disclosed in the annual financial statements of the company; and
- the above policy also applies to entities associated with a director, where the additional services of the non-executive director are provided through that entity.

#### Executive remuneration

The Remuneration, Nomination and Governance Committee is responsible for determining remuneration and nomination policies in respect of KMP. In establishing such policies the Committee is guided by external remuneration surveys and industry practices, commensurate with the scale and size of the company's operations. The remuneration levels are reviewed regularly to ensure the company remains competitive as an employer.

#### Executive and Director Incentive Plan

The Board considers it important that a component of executive and director remuneration be by way of the issue of company securities, to help align their interests to the success of the company. The Plan permits the grant of bonuses in the form of shares, options or rights on an annual basis to KMP (including executive directors) as an incentive component of their remuneration, to reward performance against benchmarks agreed by the Board and to reduce the cash expenditure of the company. The Plan does not contemplate the issue of securities to non-executive directors.

The Board may at its discretion impose one or more vesting conditions, including time or performance conditions, at the time of grant of rights to share or options under the Plan. Any issue of shares, grant of options and rights to share or options will not confer any right or interest in shares, nor have any entitlement to dividends until any vesting conditions have been met. Any options or rights to shares or options which have not been exercised will expire and cease to exist in accordance with the terms and conditions specified at the time of grant. The Plan permits the Board to enforce forfeiture of unvested shares, grant of options and rights to share or options under defined circumstances. If a change of control of the company occurs, the Board may at its discretion resolve that the vesting conditions applicable to unvested options or unvested rights to share or options be waived.

In respect of the Managing Director the issue of shares, options or performance rights under the Plan will be applied to the provision of bonuses and / or part of his base remuneration.

Any securities issued under the Plan is not counted against the 15% limit on placements without shareholders approval as required under the ASX Listing Rules. No bonuses were achieved in the fiscal year ended 30 June 2014.

#### Executive remuneration and reward framework

The executive remuneration and reward framework has four components:

- base pay and non-monetary benefits
- consulting fees
- share-based payments
- other remuneration such as superannuation and long service leave

The combination of these comprises the executive's total remuneration.

Fixed remuneration, consisting of base salary, superannuation and non-monetary benefits, are reviewed annually by the Remuneration, Nomination and Governance Committee, based on individual and business unit performance, the overall performance of the consolidated entity and comparable market remunerations.

Executives may receive their fixed remuneration in the form of cash or other fringe benefits (for example motor vehicle benefits) where it does not create any additional costs to the consolidated entity and provides additional value to the executive.

The short-term incentives ('STI') program is designed to align the targets of the business units with the targets of those executives in charge of meeting those targets. STI payments are granted to executives based on specific annual targets and key performance indicators ('KPI's') being achieved. KPI's include profit contribution, customer satisfaction, leadership contribution and product management.

The long-term incentives ('LTI') include long service leave and shares or options under the Plan.

## Consolidated entity performance and link to remuneration

Remuneration for certain individuals is directly linked to performance of the consolidated entity. A portion of bonus and incentive payments are dependent on defined earnings per share targets being met. The remaining portion of the bonus and incentive payments are at the discretion of the Remuneration, Nomination and Governance Committee. Refer to the 'Additional information' section of the remuneration report for details of the last five years earnings and total shareholders return.

#### Details of remuneration

#### Amounts of remuneration

Details of the remuneration of the KMP of the consolidated entity are set out in the following tables:

The KMP of the consolidated entity during the current financial year consisted of the following:

- Glenn Fozard Chairman and Non-Executive Director
- Ashley Moore Managing Director
- Stephen Carter Non-Executive Director
- lain McEwin Non-Executive Director
- Lloyd Thomson Former Non-Executive Director (appointed on 22 August 2013 and resigned on 24 April 2014)
- Michael Davies Former Managing Director and Chairman (retired 20 August 2013)
- Adam Giles Company Secretary

		Short-term bene	fits	Post- employment benefits	Long- term benefits	Share- based payments	
	Cash salary and fees	Consultancy fees	Non- monetary	Super- annuation	Long service leave	Equity- settled	Total
2014	\$	\$	\$	\$	\$	\$	\$
Non-Executive Direc	ctors:						
Glenn Fozard	58,856	-	-	5,444	-	-	64,300
Stephen Carter	87,886	-	-	-	-	-	87,886
lain McEwin	55,263	-	-	-	-	-	55,263
Lloyd Thomson	10,497	-	-	-	-	-	10,497
Executive Director:		4	<u> </u>	*	O		
Ashley Moore	232,225	-	-	17,775	-	-	250,000
Other Key Managen	nent Personn	el:	<u> </u>	6	0	·	I
Adam Giles	139,100	_	-	12,866	_	_	151,966
Total	583,827	-	-	36,085	-	-	619,912

<sup>\*</sup>Michael Davies did not receive remuneration during the year.

	Short-term benefits			Post- employment benefits	Long- term benefits	Share- based payments	
	Cash salary and fees	Consulting fees	Non- monetary	Super- annuation	Long service leave	Equity- settled	Total
2013	\$	\$	\$	\$	\$	\$	\$
Non-Executive Dire	ectors:						
Stephen Carter	50,000	154,000	-	-	_	-	204,000
lain McEwin	50,000	-	-	-	-	-	50,000
Executive Directors	5.	•			3	Out 1.1 100 100 100 100 100 100 100 100 100	
Michael Davies	283,286	-	-	13,725	-	_	297,011
Ashley Moore	206,922	-	-	16,632	-	-	223,554
Other Key Manage	ment Personne	l:					
Adam Giles	139,100	-	-	12,519	-	_	151,619
John Osborne	-	43,288	-	-	-	-	43,288
Total	729,308	197,288	-	42,876	-	-	969,472

In addition to discharging his responsibility as non-executive director, Stephen Carter was engaged by the consolidated entity to provide special services on a consultancy basis, primarily in the area of capital raising management.

The proportion of remuneration linked to performance and the fixed proportion are as follows:

Nama	Fixed rem	uneration	At risk - STI		At risk - LTI	
Name	2014	2013	2014	2013	2014	2013
Non-Executive Directors:						
Stephen Carter	100%	100%	-%	-%	-%	-%
lain McEwin	100%	100%	-%	-%	-%	-%
Lloyd Thomson	100%	-%	-%	-%	-%	-%
Executive Directors:						
Glenn Fozard	100%	-%	-%	-%	-%	-%
Ashley Moore	100%	100%	-%	-%	-%	-%
Michael Davies	100%	100%	-%	-%	-%	-%
Other Key Management Personnel:						
Adam Giles	100%	100%	-%	-%	-%	-%
John Osborne	-%	100%	-%	-%	-%	-%

## Service agreements

The company has employment agreements with all executives. These contracts are capable of termination in accordance with standard employment terms. The terms of the contract are open ended although the company retains the right to terminate a contract immediately by making payment equal to the period in lieu of notice.

Each director has a written agreement governing his service as a director of the company and separate agreements, where appropriate, for the discharge of executive responsibilities or the provision of other services. There are no closed term contracts in place or termination benefits payable to directors or executives.

Ashley Moore's employment may be terminated by either party by providing three (employee) or six (company) month's written notice of termination. All other contracts are capable of termination in accordance with standard employment terms. The company retains the right to terminate a contract immediately by making payment equal to the period in lieu of notice.

### Share-based compensation

#### Issue of shares

There were no shares issued to directors and other KMP as part of compensation during the year ended 30 June 2014.

#### **Options**

There were no options over ordinary shares issued to directors and other KMP as part of compensation that were outstanding as at 30 June 2014.

There were no options over ordinary shares granted to or vested by directors and other KMP as part of compensation during the year ended 30 June 2014.

#### Additional information

The earnings of the consolidated entity for the five years to 30 June 2014 are summarised below:

	2014	2013	2012	2011	2010
	\$	\$	\$	\$	\$
Revenue	1,644,631	1,314,914	686,266	274,987	884,085
EBITDA	(1,679,297)	(4,938,052)	(4,910,789)	(2,502,282)	(2,764,054)
EBIT	(2,198,840)	(5,477,784)	(5,491,142)	(3,073,761)	(3,358,560)
Loss after income tax	(2,548,113)	(5,444,185)	(5,549,700)	(3,121,709)	(3,728,403)

The factors that are considered to affect total shareholders return ('TSR') are summarised below:

	2014	2013	2012	2011	2010
Share price at financial year end (\$)	0.002	0.007	0.019	0.010	0.032
Basic earnings per share (cents per share)	(0.122)	(0.326)	(0.430)	(0.380)	(0.540)

The company's remuneration policy seeks to reward staff members for their contribution to achieving significant milestones but there is no direct link between remuneration paid and growth in the company's share price or financial performance.

## Additional disclosures relating to key management personnel

In accordance with ASIC Class Order 14/632 which clarifies 'Key management personnel equity instruments disclosures', the following disclosures relates only to equity instruments in the company or its subsidiaries:

#### Shareholding

The number of shares in the company held during the financial year by each director and other members of key management personnel of the consolidated entity, including their personally related parties, is set out below:

	Balance at the start of the year	Received as part of remuneration	Additions	Disposals/ other	Balance at the end of the year
Ordinary shares					
Ashley Moore	2,916,668	-	-	-	2,916,668
lain McEwin	53,108,581	-	-	-	53,108,581
Adam Giles	13,138,609	-	-	-	13,138,609
Total	69,163,858	-	-	-	69,163,858

#### Option holding

The number of options over ordinary shares in the company held during the financial year by each director and other members of key management personnel of the consolidated entity, including their personally related parties, is set out below:

	Balance at the start of the year	Granted	Exercised	Expired/ forfeited/ other	Balance at the end of the year
Options over ordinary shares					
Ashley Moore	583,335	-	-	-583,335	-
lain McEwin	38,412,637	-	-	-38,412,637	-
Adam Giles	3,896,977	-	-	-3,896,977	-
	42,892,949	-	-	-42,892,949	-

This concludes the remuneration report, which has been audited.

## Shares under option

Unissued ordinary shares of Environmental Clean Technologies Limited under option at the date of this report are as follows:

Description	Expiry date	Exercise price	Number under option
Unlisted ordinary options	14-Dec-14	5.0¢	20,000,000
Listed ordinary options (ESIOA)	31-Jul-17	0.9¢	1,396,172,364
Listed ordinary options (ESIOB)	31-Jul-17	1.5¢	728,900,091
			2,145,072,455

No person entitled to exercise the options had or has any right by virtue of the option to participate in any share issue of the company or of any other body corporate.

### Shares issued on the exercise of options

The following ordinary shares of Environmental Clean Technologies Limited were issued during the year ended 30 June 2014 and up to the date of this report on the exercise of options granted:

Date options granted	Exercise price	Number of shares issued
15-Jan-14	2.0¢	75,000

### Indemnity and insurance of officers

The company has indemnified the directors and executives of the company for costs incurred, in their capacity as a director or executive, for which they may be held personally liable, except where there is a lack of good faith.

During the financial year, the company paid a premium in respect of a contract to insure the directors and executives of the company against a liability to the extent permitted by the Corporations Act 2001. The contract of insurance prohibits disclosure of the nature of liability and the amount of the premium.

### Indemnity and insurance of auditor

The company has not, during or since the financial year, indemnified or agreed to indemnify the auditor of the company or any related entity against a liability incurred by the auditor.

During the financial year, the company has not paid a premium in respect of a contract to insure the auditor of the company or any related entity.

### Proceedings on behalf of the company

No person has applied to the Court under section 237 of the Corporations Act 2001 for leave to bring proceedings on behalf of the company, or to intervene in any proceedings to which the company is a party for the purpose of taking responsibility on behalf of the company for all or part of those proceedings.

#### Non-audit services

There were no non-audit services provided during the financial year by the auditor.

### Officers of the company who are former audit partners of BDO East Coast Partnership

There are no officers of the company who are former audit partners of BDO East Coast Partnership.

## Auditor's independence declaration

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 follows this Directors' report.

## Auditor

BDO East Coast Partnership continues in office in accordance with section 327 of the Corporations Act 2001.

This report is made in accordance with a resolution of directors, pursuant to section 298(2)(a) of the Corporations Act 2001.

On behalf of the directors

Ashley Moore Managing Director

26 August 2014 Melbourne



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## DECLARATION OF INDEPENDENCE BY ALEX SWANSSON TO THE DIRECTORS OF ENVIRONMENTAL CLEAN TECHNOLOGIES LIMITED

As lead auditor of Environmental Clean Technologies Limited for the year ended 30 June 2014, I declare that, to the best of my knowledge and belief, there have been:

- 1. No contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- 2. No contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Environmental Clean Technologies Limited and the entities it controlled during the period.

Alex Swansson

Partner

**BDO East Coast Partnership** 

Melbourne, 26 August 2014

BDO East Coast Partnership ABH 83 236 985 726 is a member of a national association of independent entities which are all members of BDO (Australia) Ltd ABN 77 050 110 275, an Australian company limited by guarantee. BDO East Coast Partnership and BDO (Australia) Ltd are members of BDO International Ltd, a UK company limited by guarantee, and form part of the international BDO network of independent member firms. Liability limited by a scheme approved under Professional Standards Legislation (other than for the acts or omissions of financial services licensees) in each State or Territory other than Tasmania.

## Corporate Governance Statement

The Board of Directors (the 'Board') of Environmental Clean Technologies Limited ('ECT' or 'company') is committed to protecting shareholders' interests and keeping investors fully informed about the performance of the company's business. The directors have undertaken to perform their duties with honesty, integrity, care and diligence, according to the law and in a manner that reflects the highest standards of governance. The company's corporate governance benchmark and that of the Board is the ASX Corporate Governance Council's 'Revised Principles of Good Corporate Governance and Recommendations (2<sup>--</sup> edition)' ('ASX Corporate Governance Guidelines') and the company's conformity or otherwise is reported in the following Corporate Statement and, where appropriate, Governance elsewhere in the company's annual report. Further information regarding our corporate governance and board practices can be found at the company's website, www.ectltd.com.au.

The Board provides strategic direction, guidance and oversight of management, facilitates accountability to the company's shareholders through defined roles and responsibilities for the Board and executive management, and ensures that there is a balance of power and appropriate authorisations to avoid any individual having sole authority. The specific responsibilities of the Board are as follows:

- appointment of the Managing Director or Chief Executive;
- assessment of ECT's management performance, measured against clearly identified objectives;
- preservation of the integrity and credibility of ECT's businesses;
- prudent management of shareholders' funds;
- evaluation of opportunities for value-creating growth;
- involvement in the planning and review of the company's strategic direction;
- approval of short and long term business plans;
- ensuring that there are effective environmental, health and safety procedures in place; and
- approval of half-year and annual reports.

The Board delegates many of its responsibilities to the Managing Director who is responsible to the Board for the day-to-day management of the company. The relationship between the Board and management is a partnership that is crucial to the company's long-term success. The separation of responsibilities between the

Board and management is clearly understood and respected. Importantly for ensuring the integrity of the financial statements the Managing Director provides a management representation letter to the Board that certifies that the company's financial statements present a true and fair view of the results and the financial position of the company and are in accordance with relevant accounting standards.

In addition, the Board has received a statement from the Managing Director that the declaration provided in accordance with section 295A of the Corporations Act 2001 is founded on a sound system of risk management and internal control and that the system is operating efficiently in all material aspects in relation to financial reporting risks.

The following statement outlines the principal corporate governance practices followed throughout the financial year.

### Shareholders

The shareholders of the company elect directors at the Annual General Meeting ('AGM') in accordance with the constitution. All directors are subject to re-election by rotation within three years, other than the Managing Director.

AGMs are held in Melbourne. Shareholders have the opportunity to express their views, ask questions about company business and vote on other items of business for resolution by shareholders at the AGM. It is proposed to hold the 2014 AGM in November 2014 on a date to be announced. The time and venue will be advised with the Notice of AGM. At the 2014 AGM, director rotation, election and re-election will be managed pursuant to the company's constitution.

### Communication with shareholders

ECT is committed to complying with the continuous disclosure obligations of the Corporations Act and the Australian Securities Exchange ('ASX') Listing Rules. The Board recognises the significance of relevant and timely disclosure and has developed a Continuous Disclosure Policy that is available from the Corporate Governance section of the company's website.

ECT keeps the market informed through its annual report, half yearly report, and periodic update reports and by disclosing material developments to the ASX and the media as they occur. From time to time, briefings and site visits are arranged to give those who advise shareholders

and interested stakeholders a better understanding of the company's operating facilities. In conducting briefings, ECT takes care to ensure that any price sensitive information released is made available to all shareholders and the market at the same time. These announcements are lodged with the ASX and then posted on the company's website.

## Composition of the Board

The Board is structured to deliver tangible results in the commercialisation of the Coldry and Matmor technologies. The directors review the Board's performance and structure on an on-going basis to ensure that the Board has the appropriate mix of expertise and experience.

As at 30 June 2014 the Board comprised a Managing Director and three independent non-executive directors. The independent directors have no relationship with management or the company that would interfere with the exercise of their independent judgment and are free from any interest or other relationship, which could materially interfere with their ability to act in the best interests of the company. The independent non-executive directors have, at times, provided consulting services to the company to assist in the capital raising and other important activities, but these services are quite separate from their role as directors and are not seen by the Board as compromising their independence. At the present stage of the company's development it is considered appropriate to have a Board that is hands on and integrally involved in the operations of the company.

The Board as currently constituted has the range of skills, knowledge and experience necessary to govern the company and understand the economic sectors in which the company operates. As noted above, the company is continuously evaluating the mix of expertise of the directors.

### **Board Committees**

To assist in the execution of its responsibilities, the Board has three committees. The Remuneration, Nomination and Governance Committee and the Audit and Risk Committee comprise two non-executive directors. The Finance Committee comprises a non-executive director and the Managing Director. The Company Secretary provides secretariat services for each of the committees and the Board.

#### Audit and Risk Committee

Independent director, Stephen Carter currently chairs the Audit and Risk Committee with Iain McEwin and Mike Davies (now retired) also served as a member until his date of retirement. The Managing Director is responsible for the preparation of financial reporting packages for the Board with accounting support services drawn upon as

needed. External accounting firms are called upon to provide services as and when required. The committee meets with the company's auditors, BDO East Coast Partnership, who attends meetings on at least a bi-annual basis prior to finalising the half year and year-end financial statements.

The charter of the Audit and Risk Committee is shown in the Corporate Governance Policy on the company's website and its responsibilities include assisting the Board to fulfil its fiduciary responsibilities by:

- considering the effectiveness of the accounting and internal control systems and management reporting, which are designed to safeguard company assets;
- serving as an independent and objective party to review the financial information;
- reviewing the accounting policies adopted by ECT;
- reviewing the quality of the external audit function; and
- establishing and maintaining a risk identification process, effective risk management and reporting.

## Remuneration, Nomination and Governance Committee

The Remuneration, Nomination and Governance Committee was chaired by lain McEwin and is now chaired by independent director Stephen Carter with Glenn Fozard serving as the other member. This committee has the responsibility of advising the Board on matters pertaining to executive remuneration and incentive programs and overseeing Board and executive performance via evaluation against key performance indicators, considering the on-going requirements of the Board and the appointment of new directors if considered appropriate.

### Finance Committee

Following the retirement of Lloyd Thomson, independent director Stephen Carter assumed the role as chair of the Finance Committee. This committee is responsible for consideration of capital funding options available to the finance the development company to commercialisation of the Coldry and Matmor technologies, meet ongoing working capital requirements and manage financial risk exposure.

#### Independent professional advice

All directors have the right of access to relevant company information and the company's executives, and subject to prior consultation with the Chairman, may, at the company's expense, seek independent professional

advice regarding their responsibilities. During the year the Board did avail itself to external legal advice.

### Internal controls and management of risks

The management of risk is important in the creation of shareholder value and is a priority for the Board and management. The company has a framework in place to safeguard the company's assets and interests and ensure that business risks are identified and properly managed. This includes procedures and limits to manage financial risk associated with exposures to foreign currencies and financial instruments. To assist in discharging this responsibility the Board has in place a control framework, which includes the following:

- an annual business plan, approved by the directors, incorporating financial and nonfinancial key performance indicators;
- regular reporting to the Board on a number of key areas including safety, health, insurance and legal matters;
- adoption of clearly defined guidelines for capital expenditure including annual budgets, detailed appraisal and review procedures, levels of authority and due diligence requirements where businesses are being acquired or divested; and
- a comprehensive insurance program, including risk assessment analysis and plans to mitigate identifiable or foreseeable risks.

#### Ethical standards and diversity

The company has established procedures and guidelines to ensure that the highest ethical standards, corporate behaviour and accountability are maintained. The Board has a Code of Conduct for directors, which establishes guidelines for their conduct in matters such as ethical standards and conflicts of interests.

The Code is based on that developed by the Australian Institute of Company Directors and is published in the

Corporate Governance section of the Environmental Clean Technologies Limited website.

The directors note the ASX Corporate Governance Council Recommendation for companies to establish a policy concerning diversity. The company does not comply with this recommendation nor does it expect to in the near term. The establishment of policies regarding the structure and make-up of the company's workforce prior to establishing the commerciality of the company's technology is considered by the directors to be premature. The company does not, at this stage, have any female staff or directors.

## Directors' share dealings

The company has a Securities Trading Policy, which establishes rules for directors and senior management in dealing in the company's securities consistent with the requirements of the ASX Listing Rules and Guidance Notes.

The Directors' Securities Trading Policy includes the following:

- directors must consult with the Chairman of the Board before dealing in shares or other securities of the company;
- dealings (whether purchases or sales) in the company's shares or other securities by related persons may not be carried out other than the period commencing two days and ending 30 days following the date of announcement of the company's annual or half yearly results or a major announcement leading, in the opinion of the Board, to a fully informed market; and
- a copy of the Environmental Clean Technologies Limited Securities Trading Policy is available from the About ECT – Corporate Governance section of the company's website.

## Financial Report

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## General information

The financial statements cover Environmental Clean Technologies Limited as a consolidated entity consisting of Environmental Clean Technologies Limited and its subsidiaries. The financial statements are presented in Australian dollars, which is Environmental Clean Technologies Limited's functional and presentation currency.

Environmental Clean Technologies Limited is a listed public company limited by shares, incorporated and domiciled in Australia. Its registered office and principal place of business is:

Suite 712, 530 Little Collins St Melbourne VIC 3000

A description of the nature of the consolidated entity's operations and its principal activities are included in the directors' report, which is not part of the financial statements.

The financial statements were authorised for issue, in accordance with a resolution of directors, on 26 August 2014. The directors have the power to amend and reissue the financial statements.

# Statement of profit or loss and other comprehensive income for the year ended 30 June 2014

		Conso	lidated
	Note	2014	2013
		\$	\$
Revenue	4	1,644,631	1,314,914
Expenses			
Corporate costs		(454,786)	(355,802)
Legal costs		(120,659)	(101,838)
Employee benefits expense		(1,079,708)	(1,411,267)
Sales and marketing		(97,437)	(302,466)
Depreciation and amortisation expense	5	(519,543)	(539,732)
Engineering costs		(551,496)	(2,963,502)
Occupancy expense		(160,391)	(163,107)
Travel and accommodation		(60,271)	(100,598)
Movement in earn out provision		(173,079)	72,403
Other expenses		(69,037)	(75,057)
Finance costs	5	(906,337)	(818,133)
Loss before income tax expense		(2,548,113)	(5,444,185)
Income tax expense	6	-	-
Loss after income tax expense for the year attributable to the owners of Environmental Clean Technologies Limited	20	(2,548,113)	(5,444,185)
Other comprehensive income for the year, net of tax			-
Total comprehensive income for the year attributable to the owners of Environmental Clean Technologies Limited		(2,548,113)	(5,444,185)
		Conto	Conto
Racio carringe per chara	33	Cents (0.122)	Cents
Basic earnings per share		(0.122)	(0.326)
Diluted earnings per share	33	(0.122)	(0.326)

## Statement of Financial Position as at 30 June 2014

		Consolidated		
	Note	2014	2013	
Assets		\$	\$	
Current assets				
Cash and cash equivalents	7	215,120	627,115	
Trade and other receivables	8	35,849	150,228	
Other	9	46,857	99,233	
Total current assets		297,826	876,576	
	_			
Non-current assets				
Investments accounted for using the equity method	10	2	2	
Property, plant and equipment	11	52,280	120,328	
Intangibles	12	7,200,000	7,680,000	
Total non-current assets	_	7,252,282	7,800,330	
Total assets	_	7,550,108	8,676,906	
Liabilities				
Current liabilities				
Trade and other payables	13	283,441	1,044,425	
Borrowings	14	1,793,333	2,754,612	
Provisions	15	87,915	62,602	
Other	16	173,416	-	
Total current liabilities	_	2,338,105	3,861,639	
Non-current liabilities	_	<u> </u>	<u> </u>	
Provisions	17	616,183	431,788	
Total non-current liabilities	_	616,183	431,788	
	_			
Total liabilities		2,954,288	4,293,427	
Net assets	=	4,595,820	4,383,479	
Equity				
Issued capital	18	54,837,275	52,076,821	
Accumulated losses	20	-50,241,455	-47,693,342	
, local latated location	_	00,2 11,400	11,000,042	
Total equity		4,595,820	4,383,479	
	_			

## Statement of Changes in Equity for the year ended 30 June 2014

	Issued capital	Reserves	Accumulated losses	Total equity
Consolidated	\$	\$	\$	\$
Balance at 1 July 2012	49,518,412	-	(42,249,157)	7,269,255
Loss after income tax expense for the year	-	-	(5,444,185)	(5,444,185)
Other comprehensive income for the year, net of tax		-	-	
Total comprehensive income for the year	-	-	(5,444,185)	(5,444,185)
Transactions with owners in their capacity as owners:				
Contributions of equity, net of transaction costs (note 18)	2,558,409	-	-	2,558,409
Balance at 30 June 2013	52,076,821	-	(47,693,342)	4,383,479
	Issued capital	Reserves	Accumulated losses	Total equity
Consolidated	\$	\$	\$	\$
Balance at 1 July 2013	52,076,821	-	(47,693,342)	4,383,479
Loss after income tax expense for the year				
	-	-	(2,548,113)	(2,548,113)
Other comprehensive income for the year, net of tax		-	(2,548,113)	(2,548,113)
Other comprehensive income for the year, net of tax  Total comprehensive income for the year	-	- -	(2,548,113)	(2,548,113)
	-	- -	-	
Total comprehensive income for the year	2,760,454	- - -	-	

## Statement of Cashflows for the Year Ended 30 June 2014

		dated	
	Note	2014	2013
		\$	\$
Cash flows from operating activities			
Research and development offset and sundry receipts		1,633,027	1,292,083
Payments to suppliers and employees (inclusive of GST)		(3,051,282)	(5,216,866)
		(1,418,255)	(3,924,783)
Interest received		11,604	22,831
Interest and other finance costs paid		(260,384)	-
Net cash used in operating activities	31	(1,667,035)	(3,901,952)
Cash flows from investing activities			
Payments for property, plant and equipment		-	(2,635)
Proceeds from loan repayments		1,402	-
Net cash from/(used in) investing activities		1,402	(2,635)
Cash flows from financing activities			
Proceeds from issue of shares and options		1,500	-
Proceeds from borrowings		2,899,000	4,211,955
Share issue transaction costs		-	223,227
Repayment of borrowings		(1,820,278)	(189,352)
Prepaid options premiums		173,416	
Net cash from financing activities		1,253,638	4,245,830
Net increase/(decrease) in cash and cash equivalents		(411,995)	341,243
Cash and cash equivalents at the beginning of the financial year		627,115	285,872
Cash and cash equivalents at the end of the financial year	7	215,120	627,115

## Notes to the Financial Statements

#### Note 1. Significant accounting policies

The principal accounting policies adopted in the preparation of the financial statements are set out below.

These policies have been consistently applied to all the years presented, unless otherwise stated.

#### New, revised or amending Accounting Standards and Interpretations adopted

The consolidated entity has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') that are mandatory for the current reporting period.

Any new, revised or amending Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

Any significant impact on the accounting policies of the consolidated entity from the adoption of these Accounting Standards and Interpretations are disclosed below. The adoption of these Accounting Standards and Interpretations did not have any significant impact on the financial performance or position of the consolidated entity.

The following Accounting Standards and Interpretations are most relevant to the consolidated entity:

#### AASB 10 Consolidated Financial Statements

The consolidated entity has applied AASB 10 from 1 July 2013, which has a new definition of 'control'. Control exists when the reporting entity is exposed, or has the rights, to variable returns from its involvement with another entity and has the ability to affect those returns through its 'power' over that other entity. A reporting entity has power when it has rights that give it the current ability to direct the activities that significantly affect the investee's returns. The consolidated entity not only has to consider its holdings and rights but also the holdings and rights of other shareholders in order to determine whether it has the necessary power for consolidation purposes.

#### AASB 11 Joint Arrangements

The consolidated entity has applied AASB 11 from 1 July 2013. The standard defines which entities qualify as joint arrangements and removes the option to account for joint ventures using proportional consolidation. Joint ventures, where the parties to the agreement have the rights to the net assets are accounted for using the equity method. Joint operations, where the parties to the agreements have the rights to the assets and obligations for the liabilities, will account for its share of the assets, liabilities, revenues and expenses separately under the appropriate classifications.

#### AASB 12 Disclosure of Interests in Other Entities

The consolidated entity has applied AASB 12 from 1 July 2013. The standard contains the entire disclosure requirement associated with other entities, being subsidiaries, associates, joint arrangements (joint operations and joint ventures) and unconsolidated structured entities. The disclosure requirements have been significantly enhanced when compared to the disclosures previously located in AASB 127 'Consolidated and Separate Financial Statements', AASB 128 'Investments in Associates', AASB 131 'Interests in Joint Ventures' and Interpretation 112 'Consolidation - Special Purpose Entities'.

AASB 13 Fair Value Measurement and AASB 2011-8 Amendments to Australian Accounting Standards arising from AASB 13

The consolidated entity has applied AASB 13 and its consequential amendments from 1 July 2013. The standard provides a single robust measurement framework, with clear measurement objectives, for measuring fair value using the 'exit price' and provides guidance on measuring fair value when a market becomes less active. The 'highest and best use' approach is used to measure non-financial assets whereas liabilities are based on transfer value. The standard requires increased disclosures where fair value is used.

AASB 119 Employee Benefits (September 2011) and AASB 2011-10 Amendments to Australian Accounting Standards arising from AASB 119 (September 2011)

The consolidated entity has applied AASB 119 and its consequential amendments from 1 July 2013. The standard eliminates the corridor approach for the deferral of gains and losses; streamlines the presentation of changes in assets and liabilities arising from defined benefit plans, including requiring re-measurements to be presented in other comprehensive income; and enhances the disclosure requirements for defined benefit plans. The standard also changed the definition of short-term employee benefits, from 'due to' to 'expected to' be settled within 12 months. Annual leave that is not expected

to be wholly settled within 12 months is now discounted allowing for expected salary levels in the future period when the leave is expected to be taken.

AASB 127 Separate Financial Statements (Revised), AASB 128 Investments in Associates and Joint Ventures (Reissued) and AASB 2011-7 Amendments to Australian Accounting Standards arising from the Consolidation and Joint Arrangements Standards

The consolidated entity has applied AASB 127, AASB 128 and AASB 2011-7 from 1 July 2013. AASB 127 and AASB 128 have been modified to remove specific guidance that is now contained in AASB 10, AASB 11 and AASB 12 and AASB 2011-7 makes numerous consequential changes to a range of Australian Accounting Standards and Interpretations. AASB 128 has also been amended to include the application of the equity method to investments in joint ventures.

AASB 2012-2 Amendments to Australian Accounting Standards - Disclosures - Offsetting Financial Assets and Financial Liabilities

The consolidated entity has applied AASB 2012-2 from 1 July 2013. The amendments enhance AASB 7 'Financial Instruments: Disclosures' and requires disclosure of information about rights of set-off and related arrangements, such as collateral agreements. The amendments apply to recognised financial instruments that are subject to an enforceable master netting arrangement or similar agreement.

AASB 2012-5 Amendments to Australian Accounting Standards arising from Annual Improvements 2009-2011 Cycle

The consolidated entity has applied AASB 2012-5 from 1 July 2013. The amendments affect five Australian Accounting Standards as follows: Confirmation that repeat application of AASB 1 'First-time Adoption of Australian Accounting Standards' is permitted; Clarification of borrowing cost exemption in AASB 1; Clarification of the comparative information requirements when an entity provides an optional third column or is required to present a third statement of financial position in accordance with AASB 101 'Presentation of Financial Statements'; Clarification that servicing of equipment is covered by AASB 116 'Property, Plant and Equipment', if such equipment is used for more than one period; clarification that the tax effect of distributions to holders of equity instruments and equity transaction costs in AASB 132 'Financial Instruments: Presentation' should be accounted for in accordance with AASB 112 'Income Taxes'; and clarification of the financial reporting requirements in AASB 134 'Interim Financial Reporting' and the disclosure requirements of segment assets and liabilities.

AASB 2012-10 Amendments to Australian Accounting Standards - Transition Guidance and Other Amendments

The consolidated entity has applied AASB 2012-10 amendments from 1 July 2013, which amends AASB 10 and related standards for the transition guidance relevant to the initial application of those standards. The amendments clarify the circumstances in which adjustments to an entity's previous accounting for its involvement with other entities are required and the timing of such adjustments.

#### Going concern

For the year ended 30 June 2014 the consolidated entity had an operating loss before tax of \$2,548,113, negative cash flow from operating activities of \$1,667,035, and net current liabilities of \$2,040,279. As the consolidated entity is currently in the process of commercialising its primary Coldry technology, it continues to be reliant upon the research and development rebate as well as debt and equity capital injections for its liquidity needs in meeting operating costs. Such conditions can indicate a material uncertainty that may cast significant doubt about the consolidated entity's ability to continue as a going concern.

The ability of the consolidated entity to continue as a going concern is therefore dependent upon a number of factors, one being the continuation and availability of funds. Subsequent to year-end, the consolidated entity successfully completed an options issue, which raised approximately \$1.4m in capital. Having regard to the 2014 operating cash outflows, these receipts, in addition to capital management activities, are expected to be sufficient to cover 2015 operating requirements. This, combined with an ongoing relationship with our funding partners, provides the directors with comfort that the consolidated entity is well positioned to continue its pursuit of developing and commercialising its technology.

The financial statements have therefore been prepared on the basis that the consolidated entity is a going concern, which contemplates the continuity of normal business activity, and the realisation of assets and settlement of liabilities in the normal course of business.

Should the consolidated entity be unable to continue as a going concern, it may be required to realise its assets and extinguish its liabilities other than in the ordinary course of business, and its amounts that differ from those stated in the financial statements. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or to the amounts and classification of liabilities that might necessarily incurred should the consolidated entity continue as a going concern.

#### Basis of preparation

These general-purpose financial statements have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') and the Corporations Act 2001, as appropriate for for-profit oriented entities. These financial statements also comply with International Financial Reporting Standards as issued by the International Accounting Standards Board ('IASB').

#### Historical cost convention

The financial statements have been prepared under the historical cost convention.

#### Critical accounting estimates

The preparation of the financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the consolidated entity's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in note 2.

#### Parent entity information

In accordance with the Corporations Act 2001, these financial statements present the results of the consolidated entity only. Supplementary information about the parent entity is disclosed in note 28.

#### Principles of consolidation

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Environmental Clean Technologies Limited ('company' or 'parent entity') as at 30 June 2014 and the results of all subsidiaries for the year then ended. Environmental Clean Technologies Limited and its subsidiaries together are referred to in these financial statements as the 'consolidated entity'.

Subsidiaries are all those entities over which the consolidated entity has control. The consolidated entity controls an entity when the consolidated entity is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the consolidated entity. They are de-consolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between entities in the consolidated entity are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting

policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the consolidated entity.

The acquisition of subsidiaries is accounted for using the acquisition method of accounting. A change in ownership interest, without the loss of control, is accounted for as an equity transaction, where the difference between the consideration transferred and the book value of the share of the non-controlling interest acquired is recognised directly in equity attributable to the parent.

Where the consolidated entity loses control over a subsidiary, it derecognises the assets including goodwill, liabilities and non-controlling interest in the subsidiary together with any cumulative translation differences recognised in equity. The consolidated entity recognises the fair value of the consideration received and the fair value of any investment retained together with any gain or loss in profit or loss.

#### Operating segments

Operating segments are presented using the 'management approach', where the information presented is on the same basis as the internal reports provided to the Chief Operating Decision Makers ('CODM'). The CODM is responsible for the allocation of resources to operating segments and assessing their performance.

#### Revenue recognition

Revenue is recognised when it is probable that the economic benefit will flow to the consolidated entity and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable.

#### Research and development tax refund

The research and development tax refund is not recognised until there is a reasonable assurance that the consolidated entity will comply with the conditions attaching to the refund and that the refund will be received.

#### Interest

Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

#### Other revenue

Other revenue is recognised when it is received or when the right to receive payment is established.

#### Research and development expenditure

Expenditure in respect of research and development is charged to profit or loss as incurred. An intangible asset arising from development expenditure on an internal project is recognised only when the consolidated entity can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the development and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

#### Income tax

The income tax expense or benefit for the period is the tax payable on that period's taxable income based on the applicable income tax rate for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences, unused tax losses and the adjustment recognised for prior periods, where applicable.

Deferred tax assets and liabilities are recognised for temporary differences at the tax rates expected to apply when the assets are recovered or liabilities are settled, based on those tax rates that are enacted or substantively enacted, except for:

- When the deferred income tax asset or liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and that, at the time of the transaction, affects neither the accounting nor taxable profits; or
- When the taxable temporary difference is associated with interests in subsidiaries, associates or joint ventures, and the timing of the reversal can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

The carrying amount of recognised and unrecognised deferred tax assets are reviewed each reporting date. Deferred tax assets recognised are reduced to the extent that it is no longer probable that future taxable profits will be available for the carrying amount to be recovered. Previously unrecognised deferred tax assets are recognised to the extent that it is probable that there are future taxable profits available to recover the asset.

Deferred tax assets and liabilities are offset only where there is a legally enforceable right to offset current tax assets against current tax liabilities and deferred tax assets against deferred tax liabilities; and they relate to the same taxable authority on either the same taxable entity or different taxable entities which intend to settle simultaneously.

Environmental Clean Technologies Limited (the 'head entity') and its wholly-owned Australian subsidiaries have formed an income tax consolidated group under the tax consolidation regime. The head entity and each subsidiary in the tax consolidated group continue to account for their own current and deferred tax amounts. The tax consolidated group has applied the 'stand-alone taxpayer' approach in determining the appropriate amount of taxes to allocate to members of the tax consolidated group.

In addition to its own current and deferred tax amounts, the head entity also recognises the current tax liabilities (or assets) and the deferred tax assets arising from unused tax losses and unused tax credits assumed from each subsidiary in the tax consolidated group.

Assets or liabilities arising under tax funding agreements with the tax consolidated entities are recognised as amounts receivable from or payable to other entities in the tax consolidated group. The tax funding arrangement ensures that the intercompany charge equals the current tax liability or benefit of each tax consolidated group member, resulting in neither a contribution by the head entity to the subsidiaries or a distribution by the subsidiaries to the head entity.

#### Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is current when: it is expected to be realised or intended to be sold or consumed in normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is current when: it is expected to be settled in normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Deferred tax assets and liabilities are always classified as non-current.

#### Cash and cash equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

#### Trade and other receivables

Other receivables are recognised at amortised cost, less any provision for impairment.

#### **Associates**

Associates are entities over which the consolidated entity has significant influence but not control or joint control. Investments in associates are accounted for using the equity method. Under the equity method, the share of the profits or losses of the associate is recognised in profit or loss and the share of the movements in equity is recognised in other comprehensive income. Investments in associates are carried in the statement of financial position at cost plus post-acquisition changes in the consolidated entity's share of net assets of the associate. Goodwill relating to the associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. Dividends received or receivable from associates reduce the carrying amount of the investment.

When the consolidated entity's share of losses in an associate equals or exceeds its interest in the associate, including any unsecured long-term receivables, the consolidated entity does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

The consolidated entity discontinues the use of the equity method upon the loss of significant influence over the associate and recognises any retained investment at its fair value. Any difference between the associate's carrying amount, fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

#### Investments and other financial assets

Investments and other financial assets are initially measured at fair value. Transaction costs are included as part of the initial measurement, except for financial assets at fair value through profit or loss. They are subsequently measured at either amortised cost or fair value depending on their classification. Classification is determined based on the purpose of the acquisition and subsequent reclassification to other categories is restricted.

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the consolidated entity has transferred substantially all the risks and rewards of ownership.

#### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are carried at amortised cost using the effective interest rate method. Gains and losses are recognised in profit or loss when the asset is derecognised or impaired.

#### Impairment of financial assets

The consolidated entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. Objective evidence includes significant financial difficulty of the issuer or obligor; a breach of contract such as default or delinquency in payments; the lender granting to a borrower concessions due to economic or legal reasons that the lender would not otherwise do; it becomes probable that the borrower will enter bankruptcy or other financial reorganisation; the disappearance of an active market for the financial asset; or observable data indicating that there is a measurable decrease in estimated future cash flows.

The amount of the impairment allowance for loans and receivables carried at amortised cost is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. If there is a reversal of impairment, the reversal cannot exceed the amortised cost that would have been recognised had the impairment not been made and is reversed to profit or loss.

#### Property, plant and equipment

Plant and equipment is stated at historical cost less accumulated depreciation and impairment. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Depreciation is calculated on a straight-line basis to write off the net cost of each item of property, plant and equipment over their expected useful lives as follows:

Plant and equipment 15 years
Furniture and fittings 10 years
Office equipment 3 years

The residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each reporting date.

An item of property, plant and equipment is derecognised upon disposal or when there is no future economic benefit to the consolidated entity. Gains and losses between the carrying amount and the disposal proceeds are taken to profit or loss.

#### Intangible assets

Intangible assets acquired as part of a business combination, other than goodwill, are initially measured at their fair value at the date of the acquisition. Intangible assets acquired separately are initially recognised at cost. Indefinite life intangible assets are not amortised and are subsequently measured at cost less any impairment. Finite life intangible assets are subsequently measured at cost less amortisation and any impairment. The gains or losses recognised in profit or loss arising from the derecognition of intangible assets are measured as the difference between net disposal proceeds and the carrying amount of the intangible asset. The method and useful lives of finite life intangible assets are reviewed annually. Changes in the expected pattern of consumption or useful life are accounted for prospectively by changing the amortisation method or period.

#### Intellectual property

Significant costs associated with intellectual property are deferred and amortised on a straight-line basis over the period of their expected benefit, being their finite useful life of 20 years.

#### Impairment of non-financial assets

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

Recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use. The value-in-use is the present value of the estimated future cash flows relating to the asset using a pre-tax discount rate specific to the asset or cash-generating unit to which the asset belongs. Assets that do not have independent cash flows are grouped together to form a cash-generating unit.

#### Trade and other payables

These amounts represent liabilities for goods and services provided to the consolidated entity prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

#### Borrowings

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method. Bonds issued represent debt as they are convertible into a variable number of ordinary shares of the company. The difference between the fair value of equity issued and the carrying value of the bonds at the time of conversion represents a financing cost that is recognised in the income statement.

#### Finance costs

Finance costs attributable to qualifying assets are capitalised as part of the asset. All other finance costs are expensed in the period in which they are incurred, including interest on short-term and long-term borrowings.

#### **Provisions**

Provisions are recognised when the consolidated entity has a present (legal or constructive) obligation as a result of a past event, it is probable the consolidated entity will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. If the time value of money is material, provisions are discounted using a current pre-tax rate specific to the liability. The increase in the provision resulting from the passage of time is recognised as a finance cost.

#### **Employee benefits**

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled within 12 months of the reporting date are recognised in current liabilities in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled.

#### Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date is measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

#### Fair value measurement

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either: in the principal market; or in the absence of a principal market, in the most advantageous market.

Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interest. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, are used, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

#### Issued capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

#### **Business combinations**

The acquisition method of accounting is used to account for business combinations regardless of whether equity instruments or other assets are acquired.

The consideration transferred is the sum of the acquisition-date fair values of the assets transferred, equity instruments issued or liabilities incurred by the acquirer to former owners of the acquiree and the amount of any non-controlling interest in the acquiree. For each business combination, the non-controlling interest in the acquiree is measured at either fair value or at the proportionate share of the acquiree's identifiable net assets. All acquisition costs are expensed as incurred to profit or loss.

On the acquisition of a business, the consolidated entity assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic conditions, the consolidated entity's operating or accounting policies and other pertinent conditions in existence at the acquisition-date.

Where the business combination is achieved in stages, the consolidated entity remeasures its previously held equity interest in the acquiree at the acquisition-date fair value and the difference between the fair value and the previous carrying amount is recognised in profit or loss.

Contingent consideration to be transferred by the acquirer is recognised at the acquisition-date fair value. Subsequent changes in the fair value of contingent consideration classified as an asset or liability is recognised in profit or loss. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity.

The difference between the acquisition-date fair value of assets acquired, liabilities assumed and any non-controlling interest in the acquiree and the fair value of the consideration transferred and the fair value of any pre-existing investment in the acquiree is recognised as goodwill. If the consideration transferred and the pre-existing fair value is less than the fair value of the identifiable net assets acquired, being a bargain purchase to the acquirer, the difference is recognised as a gain directly in profit or loss by the acquirer on the acquisition-date, but only after a reassessment of the identification and measurement of the net assets acquired, the non-controlling interest in the acquiree, if any, the consideration transferred and the acquirer's previously held equity interest in the acquirer.

Business combinations are initially accounted for on a provisional basis. The acquirer retrospectively adjusts the provisional amounts recognised and also recognises additional assets or liabilities during the measurement period, based on new information obtained about the facts and circumstances that existed at the acquisition-date. The measurement period ends on either the earlier of (i) 12 months from the date of the acquisition or (ii) when the acquirer receives all the information possible to determine fair value.

#### Earnings per share

Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to the owners of Environmental Clean Technologies Limited, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the financial year.

#### Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

## Goods and Services Tax ('GST') and other similar taxes

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the tax authority. In this case it is recognised as part of the cost of the acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the tax authority is included in other receivables or other payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the tax authority, are presented as operating cash flows.

Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the tax authority.

## New Accounting Standards and Interpretations not yet mandatory or early adopted

Australian Accounting Standards and Interpretations that have recently been issued or amended but are not yet mandatory, have not been early adopted by the consolidated entity for the annual reporting period ended 30 June 2014. The consolidated entity's assessment of the impact of these new or amended Accounting Standards and Interpretations, most relevant to the consolidated entity, are set out below.

## AASB 9 Financial Instruments and its consequential amendments

This standard and its consequential amendments are applicable to annual reporting periods beginning on or after 1 January 2018 and completes phases I and III of the IASB's project to replace IAS 39 (AASB 139) 'Financial Instruments: Recognition and Measurement'. This standard introduces new classification and measurement models for financial assets, using a single approach to determine whether a financial asset is measured at amortised cost or fair value. The accounting for financial liabilities continues to be classified and measured in accordance with AASB 139, with one exception, being that the portion of a change of fair value relating to the entity's own credit risk is to be presented in other

comprehensive income unless it would create an accounting mismatch. Chapter 6 'Hedge Accounting' supersedes the general hedge accounting requirements in AASB 139 and provides a new simpler approach to hedge accounting that is intended to more closely align with risk management activities undertaken by entities when hedging financial and non-financial risks. The consolidated entity will adopt this standard and the amendments from 1 July 2018 but the impact of its adoption is yet to be assessed by the consolidated entity.

AASB 2012-3 Amendments to Australian Accounting Standards - Offsetting Financial Assets and Financial Liabilities

The amendments are applicable to annual reporting periods beginning on or after 1 January 2014. The amendments add application guidance to address inconsistencies in the application of the offsetting criteria in AASB 132 'Financial Instruments: Presentation', by clarifying the meaning of 'currently has a legally enforceable right of set-off'; and clarifies that some gross settlement systems may be considered to be equivalent to net settlement. The adoption of the amendments from 1 July 2014 will not have a material impact on the consolidated entity.

AASB 2013-3 Amendments to AASB 136 - Recoverable Amount Disclosures for Non-Financial Assets

These amendments are applicable to annual reporting periods beginning on or after 1 January 2014. The disclosure requirements of AASB 136 'Impairment of Assets' have been enhanced to require additional information about the fair value measurement when the recoverable amount of impaired assets is based on fair value less costs of disposals. Additionally, if measured using a present value technique, the discount rate is required to be disclosed. The adoption of these amendments from 1 July 2014 may increase the disclosures by the consolidated entity.

## AASB 2014-1 Amendments to Australian Accounting Standards

These amendments are in several parts. Part A makes various amendments to Australian Accounting Standards arising from the issuance of IASB's 'Annual Improvements to IFRSs 2010-2012 Cycle' and 'Annual Improvements to IFRSs 2011-2013 Cycle' (see below for description of these improvements). Part B makes amendments to AASB 119 'Employee in relation to the requirements for contributions from employees or third parties that are linked to service which arise from the issuance of IASB's 'Defined Benefit Plans - Employee Contributions (Amendments to IAS 19)'. Part C makes amendments to particular Australian Accounting Standards to delete their references to AASB 1031 'Materiality'. Part D makes consequential amendments arising from the issuance of AASB 14 'Regulatory Deferral Accounts'. Part E makes consequential amendments to numerous other Standards as a consequence of the introduction of hedge accounting requirements into AASB 9 'Financial Instruments' in December 2013. Amendments Part A to D are applicable to annual reporting periods beginning on or after 1 July 2014 or as specified in each Part. Amendments Part E are applicable to annual reporting periods beginning on or after 1 January 2015 or as specified in Part E. The adoption of such amendments is not expected to have a material impact on the consolidated entity.

#### Annual Improvements to IFRSs 2010-2012 Cycle

These amendments affect several Accounting Standards as follows: Amends the definition of 'vesting conditions' 'market condition' and adds definitions for 'performance condition' and 'service condition' in AASB 2 'Share-based Payment': Amends AASB 3 'Business Combinations' to clarify that contingent consideration that is classified as an asset or liability shall be measured at fair value at each reporting date; Amends AASB 8 'Operating Segments' to require entities to disclose the judgements made by management in applying the aggregation criteria; Clarifies that AASB 8 only requires a reconciliation of the total reportable segments assets to the entity's assets, if the segment assets are reported regularly; Clarifies that the issuance of AASB 13 'Fair Value Measurement' and the amending of AASB 139 'Financial Instruments: Recognition and Measurement' and AASB 9 'Financial Instruments' did not remove the ability to measure shortterm receivables and payables with no stated interest rate at their invoice amount, if the effect of discounting is immaterial; Clarifies that in AASB 116 'Property, Plant and Equipment' and AASB 138 'Intangible Assets', when an asset is revalued the gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount (i.e. proportional restatement of accumulated amortisation); and Amends AASB 124 'Related Party Disclosures' to clarify that an entity providing key management personnel services to the reporting entity or to the parent of the reporting entity is a 'related party' of the reporting entity.

#### Annual Improvements to IFRSs 2011-2013 Cycle

These amendments affect four Accounting Standards as follows: Clarifies the 'meaning of effective IFRSs' in AASB 1 'First-time Adoption of Australian Accounting Standards'; Clarifies that AASB 3 'Business Combination' excludes from its scope the accounting for the formation of a joint arrangement in the financial statements of the joint arrangement itself; Clarifies that the scope of the portfolio exemption in AASB 13 'Fair Value Measurement' includes all contracts accounted for within the scope of AASB 139 'Financial Instruments: Recognition and Measurement' or AASB 9 'Financial Instruments', regardless of whether they meet the definitions of financial assets or financial liabilities as defined in AASB 132 'Financial Instruments: Presentation'; and Clarifies that determining whether a specific transaction meets the

definition of both a business combination as defined in AASB 3 'Business Combinations' and investment property as defined in AASB 140 'Investment Property' requires the separate application of both standards independently of each other.

#### Interpretation 21 Levies

This interpretation is applicable to annual reporting periods beginning on or after 1 January 2014. The Interpretation clarifies the circumstances under which a liability to pay a levy imposed by a government should be recognised, and whether that liability should be recognised in full at a specific date or progressively over a period of time. The adoption of the interpretation from 1 July 2014 will not have a material impact on the consolidated entity.

#### IFRS 15 Revenue from Contracts with Customers

This standard is expected to be applicable to annual reporting periods beginning on or after 1 January 2017. The standard provides a single standard for revenue recognition. The core principle of the standard is that an entity will recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard will require: contracts (either written, verbal or implied) to be identified, together with the separate performance obligations within the contract; determine the transaction price, adjusted for the time value of money excluding credit risk; allocation of the transaction price to the separate performance obligations on a basis of relative stand-alone selling price of each distinct good or service. or estimation approach if no distinct observable prices exist; and recognition of revenue when each performance obligation is satisfied. Credit risk will be presented separately as an expense rather than adjusted to revenue. For goods, the performance obligation would be satisfied when the customer obtains control of the goods. For services, the performance obligation is satisfied when the service has been provided, typically for promises to transfer services to customers. For performance obligations satisfied over time, an entity would select an appropriate measure of progress to determine how much revenue should be recognised as the performance obligation is satisfied. Contracts with customers will be presented in an entity's statement of financial position as a contract liability, a contract asset, or a receivable, depending on the relationship between the entity's performance and the customer's payment. Sufficient quantitative and qualitative disclosure is required to enable users to understand the contracts with customers; the significant judgements made in applying the guidance to those contracts; and any assets recognised from the costs to obtain or fulfil a contract with a customer. The consolidated entity will adopt this standard and the amendments from 1 July 2017 but the impact of its adoption is yet to be assessed by the consolidated entity.

#### Note 2. Critical accounting judgements, estimates and assumptions

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities (refer to the respective notes) within the next financial year are discussed below.

#### Estimation of useful lives of assets

The consolidated entity estimates the effective life of patents and intellectual property to be 20 years and amortises these assets on a straight-line basis. Where the resulting effective life differs from that recognised, the impact will be recorded in profit or loss in the period such determinations are made.

#### Impairment of non-financial assets

The consolidated entity assesses impairment of non-financial assets at each reporting date by evaluating conditions specific to the consolidated entity and to the particular asset that may lead to impairment. If an impairment trigger exists, the recoverable amount of the asset is determined. This involves fair value less costs of disposal or value-in-use calculations, which incorporate a number of key estimates and assumptions.

#### Income tax

The consolidated entity is subject to income taxes in Australia. The consolidated entity estimates its tax liabilities based on the understanding of the tax laws and advice from tax experts. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income tax assets and liabilities in the period such determinations are made.

In addition, the consolidated entity has recognised deferred tax assets relating to carried forward tax losses to the extent there are sufficient taxable temporary differences (deferred tax liabilities) relating to the same taxation authority and the same subsidiary against which the unused tax losses can be utilised.

#### Earn-out provision

The earn-out provision is recognised and measured at the present value of the estimated future cash flows to be made in respect of the reporting date using a discount rate of 41.5%. In determining the present value of the liability, estimates of expected timing and quantities of production are taken into consideration.

#### Note 3. Operating segments

#### Identification of reportable operating segments

The consolidated entity's operating segment is based on the internal reports that are reviewed and used by the Board of Directors (being the Chief Operating Decision Makers ('CODM')) in assessing performance and in determining the allocation of resources. The consolidated entity operates predominantly in the environmental and energy industry, and a single geographic segment being Australia.

The CODM reviews operating performance of the consolidated entity based on management reports that are prepared. At regular intervals, the CODM is provided management information at a consolidated entity level for the consolidated entity's cash position, the carrying values of intangible assets and a consolidated entity cash forecast for the next 12 months of operation. On this basis, no segment information is included in these financial statements.

## Note 4. Revenue

	Consolidated	
	2014	2013
	\$	\$
Interest	11,604	22,831
Research and development tax refund	1,632,606	1,292,083
Other revenue	421	-
Revenue	1,644,631	1,314,914
Note 5. Expenses		
	Consoli	dated
	2014	2013
	\$	\$
Loss before income tax includes the following specific expenses:		
Depreciation		
Plant and equipment	34,451	52,996
Fixtures and fittings	835	1,158
Office equipment	4,257	5,578
Total depreciation	39,543	59,732
Amortisation		
Intellectual property	480,000	480,000
	<u> </u>	<u> </u>
Total depreciation and amortisation	519,543	539,732
Finance costs		
Interest and finance charges paid/payable	21,338	12,220
Fast Finance interest cost	327,935	527,451
Arup Bond finance costs	557,064	278,462
Finance costs expensed	906,337	818,133
Note 6. Income Tax Expense		
	Consolidated	
	2014	2013
	\$	\$
Numerical reconciliation of income tax expense and tax at the statutory rate		
Loss before income tax expense	(2,548,113)	(5,444,185)

Tax at the statutory tax rate of 30% (2013: 30%)	(764,434)	(1,633,256)
Tax effect amounts which are not deductible/(taxable) in calculating taxable income:		
Amortisation of intangibles	144,000	144,000
Finance cost	167,119	80,866
Research and development	(489,782)	(387,625)
Deferred tax movement not recognised	942,430	1,795,220
Sundry items	667	795
Income tax expense	-	-
Tax losses not recognised		
Unused tax losses for which no deferred tax asset has been recognised	18,445,363	15,358,977
Potential tax benefit at 30%	5,533,609	4,607,693
	-,-,-,-,-	, ,

The above potential tax benefit for tax losses has not been recognised in the statement of financial position. These tax losses can only be utilised in the future if the continuity of ownership test is passed, or failing that, the same business test is passed.

## Note 7. Current Assets

	Cons	Consolidated	
	2014	014 2013	
	\$	\$	
Cash at bank	215,120	627,115	

### Note 8. Current Assets - trade and other receivables

	Consolidated	
	2014	2013
	\$	\$
Other receivables	20,196	133,173
Loan – Coldry East Kalimantan	15,653	17,055
	35,849	150,228

#### Note 9. Current Assets - other

	Consoli	Consolidated	
	2014	2013	
	\$	\$	
Prepayments	33,711	86,087	
Other deposits	13,146	13,146	
	46,857	99,233	

## Note 10. Non-current assets - investments accounted for using the equity method

	Consolidated	
	2014	2013
	\$	\$
Victoria Coldry Pty Ltd - 50% interest	1	1
Coldry East Kalimantan Pty Ltd - 50% interest	1	1
	2	2

## Note 11. Non-current assets - property, plant and equipment

	Consolidated	
	2014	2013
	\$	\$
Plant and equipment - at cost	652,405	765,251
Less: Accumulated depreciation	(604,787)	(654,677)
	47,618	110,574
Figure and fittings at each	5.074	5.074
Fixtures and fittings - at cost	5,971	5,971
Less: Accumulated depreciation	(4,305)	(3,470)
	1,666	2,501
	50.745	50,000
Office equipment - at cost	53,715	56,236
Less: Accumulated depreciation	(50,719)	(48,983)
	2,996	7,253
	52,280	120,328

## Reconciliations

Reconciliations of the written down values at the beginning and end of the current and previous financial year are set out below:

	Plant and equipment	Fixtures and fittings	Office equipment	Total
Consolidated	\$	\$	\$	\$
Balance at 1 July 2012	163,570	2,023	11,832	177,425
Additions	-	1,636	999	2,635
Depreciation expense	(52,996)	(1,158)	(5,578)	(59,732)
Balance at 30 June 2013	110,574	2,501	7,253	120,328
Write off of assets	(28,505)	-	-	(28,505)
Depreciation expense	(34,451)	(835)	(4,257)	(39,543)
Balance at 30 June 2014	47,618	1,666	2,996	52,280

## Note 12. Non-current assets - intangibles

	Consc	Consolidated		
	2014	2013		
	\$	\$		
Intellectual property - at cost	9,600,000	9,600,000		
Less: Accumulated amortisation	(2,400,000)	(1,920,000)		
	7,200,000	7,680,000		

### Reconciliations

Reconciliations of the written down values at the beginning and end of the current and previous financial year are set out below:

	Intellectual property	Total
Consolidated	\$	\$
Balance at 1 July 2012	8,160,000	8,160,000
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2013	7,680,000	7,680,000
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2014	7,200,000	7,200,000

#### Note 13. Current liabilities - trade and other payables

	Consoli	Consolidated	
	2014	2013	
	\$	\$	
Trade payables	90,209	882,145	
Other payables	193,232	162,280	
	283,441	1,044,425	
Refer to note 22 for further information on financial instruments.			
Note 14. Current liabilities - borrowings			
	Consolidated		
	2014	2013	

	Consolidated	
	2014	2013
	\$	\$
Fast Finance Loan	1,155,555	1,587,945
Arup Bond	637,778	1,166,667
	1,793,333	2,754,612

Refer to note 22 for further information on financial instruments.

#### Fast Finance Loan

The Fast Finance loans were renewed during the period and expire on 31 October 2014. They are repayable in cash from the R&D tax rebate refund with an interest rate of 12.5% p.a.

#### Arup Bond

The Arup Bond is a tripartite arrangement between the company, Arup Pty Ltd ('Arup'), and a broking house. The company issues the bond to the broking house upon advancement of funding to support operational requirements or when the broking house settles Arup invoices on behalf of the company. Under the terms of the bond, the broking house provides a guarantee to Arup with respect to payments for Arup services provided to the company, and provides such guarantee through assignment of the bond to Arup. As Arup receives cash for services, the bond is reassigned to the broking house. At any time, bonds may be held by either or both Arup and the broking house.

The bond converts to shares in the company issued at a 10% discount to the lowest daily volume-weighted-average-price of the last 5 trading days. There is no interest charge associated with the bond. The term of the arrangement between the parties was extended to 31 December 2014. Since balance date, the Bond has now been concluded.

Note 15. Current liabilities - provisions

	Consolid	dated
	2014	2013
	\$	\$
Annual leave	87,915	62,602
Note 16. Current liabilities - other		
	Consoli	dated
	2014	2013
	\$	\$
Other current liabilities	173,416	-
Other current liabilities is represented by premiums received for options not yet allocated		

Other current liabilities is represented by premiums received for options not yet allocated.

## Note 17. Non-current liabilities - provisions

	Consolid	dated
	2014 2013	2013
	\$	\$
Long service leave	26,046	14,730
Earn-out provision	590,137	417,058
	616,183	431,788

## Earn-out provision

The earn-out provision represents deferred consideration related to the acquisition of the Coldry intellectual property from the Maddingley Group. The consideration payable is based on fifty cents per projected processed tonne of coal feedstock between 2017 and 2021. The consideration, payable in 2021, is capped at \$3m.

### Movements in provisions

Movements in each class of provision during the current financial year, other than employee benefits, are set out below:

Consolidated - 2014	Earn-out provision \$
Carrying amount at the start of the year Unwinding of discount	417,058 173,079
Carrying amount at the end of the year	590,137
Note 18. Equity - issued capital	

Note 18. Equity - issued capital				
		Consolida	ted	
	2014	2013	2014	2013
	Shares	Shares	\$	\$
Ordinary shares - fully paid	2,186,700,273	1,824,318,131	54,837,275	52,076,821

### Movements in ordinary share capital

Details	Date	Shares Issued	\$
Balance	1-Jul-12	1,571,593,752	49,518,412
Monash placement	26-Jul-12	37,500,000	500,000
FAST Financing interest and fees	9-Oct-12	2,625,000	31,500
Fees payable on Arup Bond	21-Nov-12	5,555,556	75,000
Conversion of Fast Finance Loan	6-Feb-13	29,198,543	264,539
Placement	6-Feb-13	12,911,362	125,000
FAST Financing interest and fees	6-Feb-13	13,796,909	116,977
Arup Bond conversion	19-Feb-13	83,453,878	750,000
Arup Bond conversion	22-May-13	19,072,018	150,000
Arup Bond conversion	7-Jun-13	27,777,778	200,000
Arup Bond conversion	26-Jun-13	20,833,335	150,000
Adjustment for Arup Bond finance cost			195,393

Balance	30-Jun-13	1,824,318,131	52,076,821
Bond conversion	11-Jul-13	13,888,889	111,111
Bond conversion	17-Jul-13	21,681,186	173,449
Issuance of shares	17-Jul-13	3,000,000	24,000
Bond conversion	22-Jul-13	21,681,186	195,132
Bond conversion	16-Aug-13	24,554,967	171,885
Bond conversion	20-Aug-13	47,470,000	427,230
Bond conversion	21-Aug-13	51,209,267	410,178
Bond conversion	12-Sep-13	62,500,000	625,000
Bond conversion	28-Oct-13	42,247,571	380,228
Issuance of shares	15-Jan-14	75,000	1,500
Bond conversion	26-Mar-14	18,518,519	37,037
Bond conversion	8-Apr-14	37,037,038	148,148
Bond conversion	2-Jun-14	18,518,519	55,556
Balance	30-Jun-14	2,186,700,273	54,837,275

#### Ordinary shares

Ordinary shares entitle the holder to participate in dividends and the proceeds on the winding up of the company in proportion to the number of and amounts paid on the shares held. The fully paid ordinary shares have no par value and the company does not have a limited amount of authorised capital.

On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.

#### Share buy-back

There is no current on-market share buy-back.

#### Capital risk management

The consolidated entity's objectives when managing capital are to safeguard its ability to continue as a going concern, so that it can provide returns for shareholders and benefits for other stakeholders and to maintain an optimum capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the consolidated entity may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt. The consolidated entity monitors capital by reference to cash flow forecasts in relation the operating revenue and expenditure. The consolidated entity also monitors its capital expenditure requirements to identify any additional capital required.

The consolidated entity would look to raise capital when an opportunity to invest in a business or company was seen as value adding relative to the current parent entity's share price at the time of the investment. The consolidated entity is not actively pursuing additional investments in the short term as it continues to integrate and grow its existing businesses in order to maximise synergies.

The consolidated entity is subject to certain financing arrangements covenants and meeting these is given priority in all capital risk management decisions. There have been no events of default on the financing arrangements during the financial year.

#### Note 19. Equity - reserves

#### Options reserve

This reserve is used to recognise the value of the options issued.

## Note 20. Equity - accumulated losses

	Consolidated		
	2014	2013	
	\$	\$	
Accumulated losses at the beginning of the financial year	(47,693,342)	(42,249,157)	
Loss after income tax expense for the year	(2,548,113)	(5,444,185)	
		_	
Accumulated losses at the end of the financial year	(50,241,455)	(47,693,342)	

#### Note 21. Equity - dividends

There were no dividends paid, recommended or declared during the current or previous financial year.

#### Note 22. Financial instruments

#### Financial risk management objectives

The consolidated entity's activities expose it to a variety of financial risks: market risk (including foreign currency risk, price risk and interest rate risk), credit risk and liquidity risk.

Risk management is carried out by senior finance executives ('finance') under policies approved by the Board of Directors ('the Board'). These policies include identification and analysis of the risk exposure of the consolidated entity and appropriate procedures, controls and risk limits. Finance identifies, evaluates and hedges financial risks within the consolidated entity's operating units. Finance reports to the Board on a monthly basis.

#### Market risk

#### Foreign currency risk

The consolidated entity's operations are currently solely within Australia, and therefore are not exposed to any significant foreign exchange risk.

#### Price risk

The consolidated entity is not exposed to any significant price risk.

#### Interest rate risk

The consolidated entity has minimal exposure to interest rate risk.

Fluctuations in interest rates will not have any material risk exposure to the cash held in bank deposits at variable rates.

#### Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the consolidated entity. Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as exposures to customers, including outstanding receivables. For banks and financial institutions, only major Australian banking institutions are used. For customers, individual risk limits are set based on internal or external ratings in accordance with limits set by the Board. The maximum exposure to credit risk at the reporting date to recognised financial assets is the carrying amount, net of any provisions for impairment of those assets, as disclosed in the statement of financial position and notes to the financial statements. The consolidated entity does not have any material credit risk exposure to any single debtor or group of debtors under financial instruments entered into by the company.

#### Liquidity risk

Vigilant liquidity risk management requires the consolidated entity to maintain sufficient liquid assets (mainly cash and cash equivalents) and available borrowing facilities to be able to pay debts as and when they become due and payable.

The consolidated entity manages liquidity risk by maintaining adequate cash reserves and available borrowing facilities by continuously monitoring actual and forecast cash flows and matching the maturity profiles of financial assets and liabilities. The consolidated entity aims at maintaining flexibility in funding by keeping committed funding options available to meet the consolidated entity's needs.

#### Remaining contractual maturities

The following tables detail the consolidated entity's remaining contractual maturity for its financial instrument liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the financial liabilities are required to be paid. The tables include both interest and principal cash flows disclosed as remaining contractual maturities and therefore these totals may differ from their carrying amount in the statement of financial position.

	Weighted average interest rate	1 year or less	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Remaining contractual maturities
Consolidated - 2014	%	\$	\$	\$	\$	\$
Non-derivatives						
Non-interest bearing						
Trade payables	-%	90,209	-	-	-	90,209
Other payables	-%	110,576	-	-	-	110,576
Arup Bond	-%	637,778	-	-	-	637,778
Interest-bearing - variable						
Fast Finance Loan	12.50%	1,200,000	_	_	_	1,200,000
Total non-derivatives	12.0070	2,038,563				2,038,563
TOTAL HOLL-GEHVALIVES	•	2,000,000				2,030,003
	Weighted average interest rate	1 year or less	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Remaining contractual maturities
Consolidated - 2013	average interest	-	1 and 2	2 and 5		contractual
Consolidated - 2013  Non-derivatives  Non-interest bearing	average interest rate	less	1 and 2 years	2 and 5 years	years	contractual maturities
Non-derivatives	average interest rate	less	1 and 2 years	2 and 5 years	years	contractual maturities
Non-derivatives Non-interest bearing	average interest rate %	less \$	1 and 2 years	2 and 5 years	years	contractual maturities \$
Non-derivatives Non-interest bearing Trade payables	average interest rate %	less \$ 882,145	1 and 2 years	2 and 5 years	years	contractual maturities \$ 882,145
Non-derivatives Non-interest bearing Trade payables Other payables Arup Bond Interest-bearing - variable	average interest rate %  -% -% -%	\$ 882,145 162,280 1,166,667	1 and 2 years	2 and 5 years	years \$ - -	s 882,145 162,280 1,166,667
Non-derivatives  Non-interest bearing  Trade payables  Other payables  Arup Bond	average interest rate %	less \$ 882,145 162,280	1 and 2 years	2 and 5 years	years	contractual maturities \$ 882,145 162,280

The cash flows in the maturity analysis above are not expected to occur significantly earlier than contractually disclosed above.

#### Fair value of financial instruments

The fair value of financial assets and financial liabilities must be estimated for recognition, measurement and disclosure purposes. The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values due to their short term nature. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the consolidated entity for similar financial instruments.

Unless otherwise stated, the carrying amounts of financial instruments reflect their fair value.

#### Note 23. Key management personnel disclosures

#### Compensation

The aggregate compensation made to directors and other members of key management personnel of the consolidated entity is set out below:

	Consolidated	
	2014 2013	2014 2013
	\$	\$
Short-term employee benefits	583,827	926,596
Post-employment benefits	36,085	42,876
	619,912	969,472

#### Note 24. Remuneration of auditors

During the financial year the following fees were paid or payable for services provided by BDO East Coast Partnership, the auditor of the company:

		Consolidated
	20-	14 2013
	\$	\$
Audit services - BDO East Coast Partnership		
Audit or review of the financial statements		45,000 67,145

#### Note 25. Contingent liabilities

The Maddingley agreement and subsequent deeds of variation state that should the agreement be terminated for any reason other than breach or default on the part of Maddingley Associates, the subsidiary Asia Pacific Coal and Steel Pty Limited ('APCS') will grant to Maddingley Associates an option to buy the following for \$1:

- the benefits of all contracts, licences and sublicense's entered into in relation to the Licenced Technology;
- all right, title and interest of APCS relating to the Matmor Licensed Technology;
- all right, title and interest of APCS in any improvements at JBD Industrial Park including any modifications or upgrades to the Coldry Pilot Plant; and all the leasehold or other interest of APCS to JBD Industrial Park or any part thereof.

As part of the fulfilment of the agreement is dependent on the completion of future events noted above there is a potential loss to the consolidated entity if it fails to meet the obligations and Maddingley Associates exercise the option to purchase the Coldry Pilot Plant upgrades for \$1. At 30 June 2014 the upgrades had a net book value of \$47,618 (2013: \$110,574).

#### Note 26. Commitments

	Consolidated	
	2014	2013
	\$	\$
Lease commitments - operating		
Committed at the reporting date but not recognised as liabilities, payable:		
Within one year	52,000	
Patent licence		
Committed at the reporting date but not recognised as liabilities, payable:		
Within one year	19,000	-

#### Note 27. Related party transactions

#### Parent entity

Environmental Clean Technologies Limited is the parent entity.

#### Subsidiaries

Interests in subsidiaries are set out in note 29.

#### Key management personnel

Disclosures relating to key management personnel are set out in note 23 and the remuneration report in the directors' report.

#### Transactions with related parties

There were no transactions with related parties during the current and previous financial year.

#### Receivable from and payable to related parties

There were no trade receivables from or trade payables to related parties at the current and previous reporting date.

#### Loans to/from related parties

There were no loans to or from related parties at the current and previous reporting date.

#### Note 28. Parent entity information

Set out below is the supplementary information about the parent entity.

#### Statement of profit or loss and other comprehensive income

	Parent	
	2014 20	2013
	\$	\$
Loss after income tax	-2,068,114	-4,964,186
Total comprehensive income	-2,068,114	-4,964,186
Total current assets	297,826	876,576
Total assets	9,950,107	10,596,905
Total current liabilities	2,338,107	3,861,639
Total liabilities	2,954,290	4,293,427
Equity		
Issued capital	58,129,200	55,368,747
Accumulated losses	-51,133,383	-49,065,269
Total equity	6,995,817	6,303,478

#### Guarantees entered into by the parent entity in relation to the debts of its subsidiaries

The parent entity had no guarantees in relation to the debts of its subsidiaries as at 30 June 2014 and 30 June 2013.

#### Contingent liabilities

The parent entity had no contingent liabilities as at 30 June 2014 and 30 June 2013.

#### Capital and other commitments

The parent entity has operating lease commitments payable within one year amounting to \$52,000. Patent licence commitments payable within one year amount to \$19,000.

#### Significant accounting policies

The accounting policies of the parent entity are consistent with those of the consolidated entity, as disclosed in note 1, except for the following:

- Investments in subsidiaries are accounted for at cost, less any impairment, in the parent entity.
- Investments in associates are accounted for at cost, less any impairment, in the parent entity.
- Dividends received from subsidiaries and income from associates are recognised as other income by the parent entity and its receipt may be an indicator of an impairment of the investment.

#### Note 29. Interests in subsidiaries

The consolidated financial statements incorporate the assets, liabilities and results of the following subsidiaries in accordance with the accounting policy described in note 1:

	Principal place of business/ Country of incorporation	Ownership interest	
Name		2014	2013
		%	%
Asia Pacific Coal and Steel Pty Limited	Australia	100.00%	100.00%
Enermode Pty Limited	Australia	100.00%	100.00%
Maddingley Coldry Unit Trust	Australia	100.00%	100.00%
ECT Coldry Pty Ltd	Australia	100.00%	100.00%
A.C.N. 109 941 175 Pty Limited	Australia	100.00%	100.00%
ECT Fuels Pty Limited	Australia	100.00%	100.00%
ECT China Limited	Hong Kong	100.00%	100.00%
Coldry Demonstration Plant Pty Limited	Australia	100.00%	100.00%
Coldry Master License Pty Limited	Australia	100.00%	100.00%

#### Note 30. Events after the reporting period

The following significant events occurred after the reporting date:

#### Mecrus JV agreement

On 25 July 2014, the company advised it has executed a binding Heads of Agreement to form a Joint Venture (JV) company with Australia's leading brown coal plant operator, Mecrus.

#### Issue of options

On 30 July 2014, the company advised it had concluded its New Options Offer, fully subscribed with gross proceeds of \$1,396,172. The company further advised that it would issue 1,396,172,364 ESIOA options to eligible participants under the Program, representing a take up of 100% of the Program approved at the company's EGM on 30 May 2014. This included pre-commitments received prior to the Offer opening, valid applications received, and the underwritten amount, in addition to valid shortfall applications received prior to the announcement

#### Arup bond conclusion

On 14 August 2014, the consolidated entity advised that the Strategic Deliverable Bond (SDB), established to fund the delivery of Coldry engineering outcomes, had been extinguished through the receipt of a final conversion notice for the balance of the bond

No other matter or circumstance has arisen since 30 June 2014 that has significantly affected, or may significantly affect the consolidated entity's operations, the results of those operations, or the consolidated entity's state of affairs in future financial years.

Note 31. Reconciliation of loss after income tax to net cash used in operating activities

	Consolidated	
	2014	2013
	\$	\$
Loss after income tax expense for the year	(2,548,113)	(5,444,185)
Adjustments for:		
Depreciation and amortisation	519,543	539,732
Write off of non-current assets	28,505	-
Unwinding of the discount on provisions	173,079	(72,403)
Fincance cost on convertible notes	557,064	312,061
Share-based payments (non-employee)	73,000	-
Accrued interest charges (Fast Finance)	88,889	-
Change in operating assets and liabilities:		
Decrease/(increase) in trade and other receivables	112,977	(9,107)
Decrease in prepayments	52,376	-
Increase/(decrease) in trade and other payables	(760,984)	775,402
Increase/(decrease) in employee benefits	36,629	(3,452)
Net cash used in operating activities	(1,667,035)	(3,901,952)
		<u> </u>
Note 32. Non-cash investing and financing activities		
	Consol	idated
	2014	2013
	\$	\$
Shares issued on conversion of Arup Bond	2,734,953	1,250,000
·		
Note 33. Earnings per share		
	Consolidated	
	2014 2013	
	\$	\$
Loss after income tax attributable to the owners of Environmental Clean Technologies Limited	(2,548,113)	(5,444,185)
	Number	Number
Weighted average number of ordinary shares used in calculating basic earnings per share	2,082,472,758	1,668,668,127
Weighted average number of ordinary shares used in calculating diluted earnings per share	2,082,472,758	1,668,668,127
	Cents	Cents
Basic earnings per share		
	(N 122)	(D.326)
Diluted earnings per share	(0.122) (0.122)	(0.326) (0.326)

At 30 June 2014, there were 20,000,000 unlisted ordinary options. These options were considered anti-dilutive and excluded from the calculation above.

#### **Directors Declaration**

In the directors' opinion:

- the attached financial statements and notes thereto comply with the Corporations Act 2001, the Accounting Standards, the Corporations Regulations 2001 and other mandatory professional reporting requirements;
- the attached financial statements and notes thereto comply with International Financial Reporting Standards as issued by the International Accounting Standards Board as described in note 1 to the financial statements;
- the attached financial statements and notes thereto give a true and fair view of the consolidated entity's financial position as at 30 June 2014 and of its performance for the financial year ended on that date; and
- there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

The directors have been given the declarations required by section 295A of the Corporations Act 2001.

Signed in accordance with a resolution of directors made pursuant to section 295(5)(a) of the Corporations Act 2001.

On behalf of the directors

Ashley Moore

Managing Director

26 August 2014 Melbourne



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#### INDEPENDENT AUDITOR'S REPORT

To the members of Environmental Clean Technologies Limited

#### Report on the Financial Report

We have audited the accompanying financial report of Environmental Clean Technologies Limited, which comprises the consolidated statement of financial position as at 30 June 2014, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the year's end or from time to time during the financial year.

#### Directors' Responsibility for the Financial Report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001 and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error. In Note 1, the directors also state, in accordance with Accounting Standard AASB 101 Presentation of Financial Statements, that the financial statements comply with International Financial Reporting Standards.

#### Auditor's Responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. Those standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation of the financial report that gives a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Independence

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Environmental Clean Technologies Limited, would be in the same terms if given to the directors as at the time of this auditor's report.

BDO East Coast Partnership ABN 83 236 985 726 is a member of a national association of independent entities which are all members of BDO (Australia) Ltd ABN 77 050 110 275, an Australian company limited by guarantee. BDO East Coast Partnership and BDO (Australia) Ltd are members of BDO International Ltd, a UK company limited by guarantee, and form part of the international BDO network of independent member firms. Liability limited by a scheme approved under Professional Standards Legislation (other than for the acts or omissions of financial services licensees) in each State or Territory other than Tasmania.



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#### INDEPENDENT AUDITOR'S REPORT

To the members of Environmental Clean Technologies Limited

#### Report on the Financial Report

We have audited the accompanying financial report of Environmental Clean Technologies Limited, which comprises the consolidated statement of financial position as at 30 June 2014, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the year's end or from time to time during the financial year.

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## Shareholder Information

The shareholder information set out below was applicable as at 24 October 2014.

## Distribution of equitable securities

Analysis of number of equitable security holders by size of holding:

	Number of holders of ordinary shares	Number of holders of ESIOA options over ordinary shares	Number of holders of ESIOB options over ordinary shares
1 to 1,000	160	4	241
1,001 to 5,000	160	2	249
5,001 to 10,000	125	2	293
10,001 to 100,000	1,281	49	1,602
100,001 and over	1,629	273	849
	3,355	330	3,234
Holding less than a marketable parcel	1,232	41	2,340

#### Substantial holders

There are no substantial holders in the company.

### Voting rights

The voting rights attached to ordinary shares are set out below:

#### Ordinary shares

On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.

## Equity security holders

Twenty largest quoted equity security holders (ESI)

The names of the twenty largest security holders of quoted equity securities are listed below:

ESI Ordinary shares

	Number held	% of total shares issued
LJ & K Thomson Pty Ltd	89,500,000	3.71%
Elgar Park Pty Ltd	86,929,158	3.61%
Menzies Super Pty Ltd	77,251,554	3.21%
Mr Danny Segal & Mrs Jennifer Ruth Segal	63,013,980	2.62%
Marbrijen Pty Ltd	61,890,233	2.57%
Mr Iain Robert McEwin & Ms Dianne Church	36,441,914	1.51%
L J Thomson Pty Ltd	30,500,000	1.27%
Challenge Roofing Pty Ltd	28,090,002	1.17%
P A Shakespeare Investing Pty	27,134,008	1.13%
Mr Gregory Milts	26,041,489	1.08%
Mr Emilio Mosca & Mrs Anna Mosca	25,050,000	1.04%
Mr Larry Owen Hanley	24,011,905	1.00%
Mr Rafael Jason Zakelj	20,500,000	0.85%
Mr Mark Andrew Hastwell & Mrs Kirst Lou-Anne Hastwell	19,000,000	0.79%
M Whitney Pty Ltd	17,160,000	0.71%
Mr Joseph Barakat & Mrs Marie Barakat	17,109,647	0.71%
Superior Coatings (Aust)	16,666,667	0.69%
Mr Larry Owen Hanley	16,534,545	0.69%
Mr George McDougall & Ms Geraldine Frances Elmes	16,000,000	0.66%
JBD Industrial Park Pty Ltd*	15,800,000	0.66%
JBD Industrial Park Pty Ltd*	15,800,000	0.66%
JBD Industrial Park Pty Ltd*	15,800,000	0.66%
	746,225,102	30.97%

<sup>\*</sup>Equal 20<sup>th</sup> rank

The names of the twenty largest security holders of quoted equity securities are listed below:

**ESIOA** 

Options over Ordinary Shares

	umber held	% of total options issued
Mr Peter Andrew Proksa 129	9,000,000	9.24%
Superior Coatings (Aust) 80	0,000,000	5.73%
Brian Menzies Pty Ltd 79	9,910,000	5.72%
A & K Moore Nominees Pty Ltd 78	3,296,174	5.61%
Mr Patrick Giles & Mr Adam Giles 58	3,603,030	4.20%
Mr Iain Robert McEwin & Ms Dianne Church 55	5,000,000	3.94%
Mr Stephen Carter 50	0,000,000	3.58%
Challenge Bricks & Roofing Pty Ltd 50	0,000,000	3.58%
Fozard Investments Pty Ltd 50	0,000,000	3.58%
Mr Gregory Milts 44	4,750,000	3.21%
Mr Danny Segal & Mrs Jennifer Ruth Segal 40	0,000,000	2.86%
Mr David Fagan 38	3,190,667	2.74%
Mr Joseph Barakat & Mrs Marie Barakat 30	0,000,000	2.15%
Mr Phillip Beale	6,000,000	1.86%
Mrs Lily Yuchun Thomson 25	5,000,000	1.79%
Mr Emilio Mosca & Mrs Anna Mosca	7,500,010	1.25%
Mr Iain Robert Mcewin 15	5,000,000	1.07%
Mr Leslie Smith	5,000,000	1.07%
Challenge Roofing Pty Ltd 12	4,263,010	1.02%
Corbeaux Investments Pty Ltd 14	1,213,767	1.02%
910	0,726,658	65.23%

Twenty largest quoted option security holders (ESIOB)

The names of the twenty largest security holders of quoted equity securities are listed below:

ESIOB		Options over Ordinary Shares	
	Number held	% of total options issued	
LJ & K Thomson Pty Ltd	30,000,000	4.14%	
Mr Danny Segal & Mrs Jennifer Ruth Segal	21,004,660	2.90%	
Mrs Yanhua Li and Miss Janice Hughes	17,218,729	2.38%	
Mr Emilio Mosca & Mrs Anna Mosca	14,000,000	1.93%	
Mr Iain Robert McEwin & Ms Dianne Church	12,147,305	1.68%	
Mr Dragoslav Jevtic and Mrs Nicole Jevtic	12,000,000	1.66%	
L J Thomson Pty Ltd	12,000,000	1.66%	
Challenge Roofing Pty Ltd	9,363,334	1.29%	
Mr Gregory Milts	8,680,496	1.20%	
Mr Hanley Larry Owen	8,003,968	1.10%	
Mr Mark Andrew Hastwell & Mrs Kirst Lou-Anne Hastwell	7,666,666	1.06%	
Mr Rafael Jason Zakelj	6,833,333	0.94%	
Jacobson Holdings	6,500,000	0.90%	
Mr Santis Constantinos	6,405,074	0.88%	
Martin Jacqueline	6,000,000	0.83%	
M Whitney Pty Ltd	5,720,000	0.79%	
Mr Joseph Barakat & Mrs Marie Barakat	5,703,216	0.79%	
Superior Coatings Aust Pl	5,555,556	0.77%	
Mr Hanley Larry Owen	5,511,515	0.76%	
Mr George McDougall & Ms Geraldine Frances Elmes	5,333,333	0.74%	
	205,647,185	28	
Unquoted equity securities			
	Number on issue	Number of holders	
Options over ordinary shares issued	20,000,000	1	

