











"Bridging the gap between today's use of resources and tomorrow's zero-emissions future"

# Corporate Directory

Directors Glenn Fozard (Chairman)

Barry Richards David Smith

Company secretary Martin Hill

Registered office 388 Punt Rd

South Yarra VIC 3141

Australia

Principal place of business 388 Punt Rd

South Yarra VIC 3141

Australia

Share register Automic Pty Ltd

Level 5 / 126 Philip Street

Sydney NSW 2000

Auditor BDO East Coast Partnership

Tower 4, Level 18 727 Collins Street Melbourne VIC 3008

Bankers National Australia Bank Limited

3/330 Collins Street Melbourne VIC 3000

Stock exchange listing Environmental Clean Technologies Limited

shares are listed on the Australian Securities

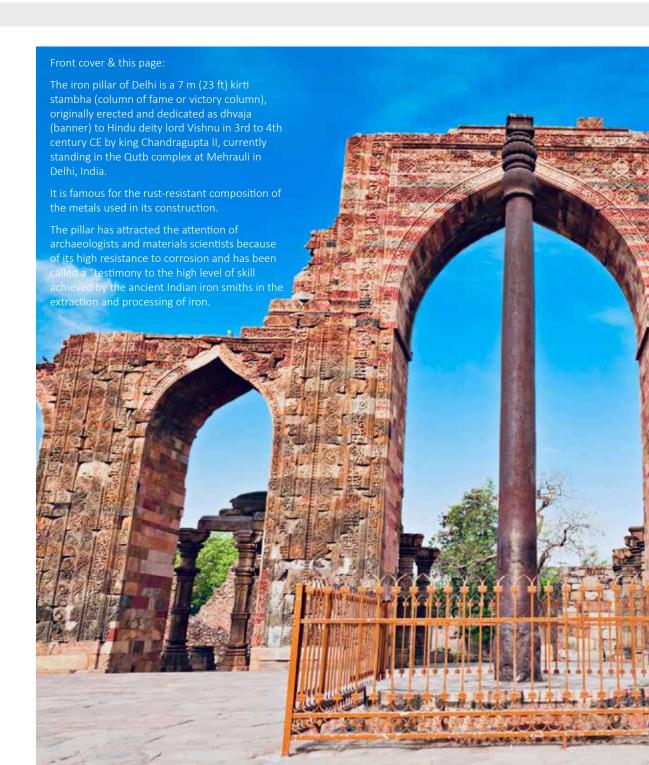
Exchange

(ASX code: Shares - ECT; Options - ECTOC)

Website www.ectltd.com.au

Corporate Governance Statement The Corporate Governance Statement of the Company can be found at http://www.ectltd.com.au/about-us/corporate-governance/

This statement has been approved by the Board and is current as at 30 August 2018.





# Contents

Corporate Directory	
Chairman's Message	
Executive Committee's Message	8
Board	16
Key Executives	1
Key Personnel	18
Coldry Technology	2:
Matmor Technology	28
Commercialisation Strategy	38
Financial Report	39

Purpose

We bridge the gap between today's use of resources and tomorrow's zero-emissions future

Mission

The company commercialises innovative technologies to increase the economic and environmental benefits derived from low grade, low rank and waste resources (targeted resources)

Vision

We are recognised as a leader in the commercialisation of innovative technologies, providing increased economic and environmental benefits from the utilisation of targeted resources

# Chairman's Message

Dear Fellow Shareholder,

I'm pleased to be reporting to you after a significant year of development for our Company.

It's been a long road for the Company and you, our shareholder, however we've made several important advances in the past year which will be touched on here and in the accompanying message from our Executive Committee.

Notably, on 30 May we signed the Project Agreement which set the direction for the largest ever research and development (R&D) collaboration between Australia and India.

And while the past year has entailed additional layers of process to reach 'financial close', shareholders will recognise that to be successful in India requires a high level of on-the-ground engagement and disciplined diplomacy, in addition to patience with polite persistence.

With that in mind, this year's strategic objectives have been guided by the following themes:

- 1. Evidence Adoption Apply our technology to commercial projects
- 2. Secure Value Improve our development and protection of our technology
- 3. Demonstrate Value Reach operational revenues to underpin the economic sustainability of 1 & 2 above



- 1. Commercialisation
  - 1.1. Commercialise the Coldry technology
  - 1.2. Commercialise the Matmor technology
- 2. Innovation and Market Development
  - 2.1. Continual development and leverage of existing technologies
  - 2.2. New and evolving technologies and markets
- 3. Corporate Capacity and Capabilities
  - 3.1. R&D program management & administration
  - 3.2. Capital, finance and resource management
  - 3.3. Communications, marketing and stakeholder engagement
  - 3.4. Governance, risk and compliance

This has manifested in the following key result areas:

- 1. Progressing our Indian project
- 2. Improving large-scale R&D capability and processing efficiency at our Bacchus Marsh facility
- 3. Developing markets with near-term revenues for our products and projects
- 4. Restructuring the organisation and right-sizing roles and responsibilities

These key result areas (KRA's) and the relevant Key Performance Indicators (KPI's) of each staff member, give us the day to day focus as we embark on the challenge of meeting our strategic objectives.



#### **India Project**

This world-first collaboration involves the joint development of our Coldry and Matmor technologies via a research and development (R&D) project in India to the value of ~AUD70M.

The objective of the project is to successfully deploy a pilot scale integrated Coldry-Matmor plant as a prelude to broader commercial rollout in India and globally.

Our partners in the project, NLC India Limited (NLCIL) and NMDC Limited (NMDC) are Indian government public sector undertakings (PSU's) with a combined market value of ~\$10 Bn.

NLCIL is India's lignite (brown coal) custodian, with an extensive mining and power generation portfolio.

NMDC is India's largest iron ore miner and the 10th largest iron ore miner in the world, producing over 35 million tonnes in 2017.

NLCIL and NMDC will each contribute 50% of the ~AUD35 million project capital cost in return for a 51% stake in the project entity.

At the time of printing (early November) our India project is poised to proceed through 'financial close' upon signing of the detailed Research Collaboration Agreement (RCA), before the end of November 2018.

Following 'financial close' our partners, NLCIL and NMDC will release funding and the project will commence, ushering in the transition from project development, to project execution.

We all agree that delivering this project has been the most important objective for our Company, and the team has worked diligently to achieve this outcome.



Above (L-R): Ashley Moore, Chairman-Managing Director ECT India; Glenn Fozard, Chairman ECT; Dr Gondane, Indian High Commissioner.

#### **Bacchus March High Volume Test Facility (HVTF)**

Our facility, located 50km northeast of Melbourne on the outskirts of the town of Bacchus Marsh, has been the focus of our fundamental and applied research and development for both Coldry and Matmor since 2006.

Its importance has continued to grow over the past year, with ongoing testing and improvement of our technologies. Our facility not only allows us to generate new knowledge, it also allows us to do so in an environment where we have a high level of control and protection over the test work that leads to new discoveries and future value.

Our Coldry facility has been re-engineered to be productive and efficient enough to provide the closest approximation we can currently achieve at small scale, of a commercial application of Coldry, with the intention that the resultant product from our research and development activities is able to be sold as solid fuel into end-user demonstration projects and other commercial customers.

Progress with the Bacchus Marsh plant and the subsequent delivery of our R&D programs ensure that the intellectual property that we currently have under patent protection will be rigorously tested and continually improved.

Our technology suite features vertical and horizontal integration across our proprietary processes and equipment. This approach is intentional, allowing us to develop further intellectual property within the protective framework of our pre-existing technologies and know-how.

The Bacchus Marsh HVTF provides the essential infrastructure and apparatus to further develop and refine our intellectual property through on-going R&D as well as prepare for, and support, data collection and project specific designs for future demonstration and commercial projects.

Over time, our research has led to the accumulation of a more sophisticated and detailed understanding of underlying processes which has, in turn, led to new intellectual property, particularly around the Packed Bed Dryer (the 2012 Design for Tender program with engineering firm Arup).

More recently, the innovation process has led to new discoveries around the chemical reactions underpinning Matmor, resulting in two new technologies; HydroMOR and COHgen.

HydroMOR is the subject of an international patent application (PCT) lodged last November (2017), while fundamental research activity has commenced on our newest discovery, COHgen, with the aim of lodging a provisional patent in due course.

As we head into 2019, our HVTF continues to provide critical support to our R&D programs that will allow us to continue pursuing IP protection as we develop our technologies.

#### Developing markets for our products and projects

Supported by our ongoing R&D effort, and consistent with our commercialisation strategy, ECT continued a period of establishing operational revenues to underpin the feasibility of our technology suite.

Last year we began developing markets that have near-term potential for generating operational revenues.

Over this period, in tandem with the upgrade programs at the HVTF, we developed a pipeline of sales leads, culminating in our announcement during July of a \$1.3 million five-year deal to provide a turnkey solution for 'steam services' for a Victorian customer.

The deal includes the end-to-end delivery of steam including ongoing operation and maintenance. Importantly, it will run on Coldry solid fuel produced from our HVTF at Bacchus Marsh.

We're currently engaged with several other potential customers to develop a similar solution and anticipate that over the coming year, we will continue to develop local opportunities, improve our operational capabilities and establish contracts for the supply of solid fuel pellets and turnkey boiler and steam solutions.

Building on our endeavours in the local market for utility-scale heat applications, the economic landscape in Victoria has become increasingly conducive to larger scale deployment of our Coldry technology, justifying further exploration of the broader market.

Last year (September 2017) we commenced the early stages of a feasibility study for a commercial scale, zero emissions, solid fuel pellet (Coldry) demonstration plant in the Latrobe Valley. We partnered with the owners of Yallourn mine and power station, Energy Australia, narrowing down the site options and identifying integration requirements. This led to a compelling business case, providing a clear path for increased capacity beyond our HVTF.

Progress on this feasibility study is much anticipated and if the project were to proceed, would become the largest, most environmentally friendly, economical gateway to upgraded brown coal in Australia.

A Coldry plant in the Latrobe Valley would aim to not only improve energy affordability and reliability to businesses threatened by rising electricity and natural gas costs, but also help realise the potential of brown coal in Australia for prospects such as High-Efficiency Low Emissions (HELE) power plants, low emission hydrogen production, fertiliser production and other downstream chemical conversion methods.

As we approach 'financial close' for our India project and advance local market opportunities we look forward to continuing all these efforts through 2019 and on behalf of the board of directors, executive and staff, we thank you, our shareholders for your continued, invaluable support.

Sincerely,

Glenn Fozard Chairman

# Corporate Values



## Bridging the Gap

We are focused on technology as an enabler to a zero-emissions future



## Frugal Innovation:

We strive to deliver innovative outcomes, through reducing complexity, <u>cost conscious execution</u> and fit-for-purpose engineering



#### Collaboration:

We work collaboratively to yield the best possible outcomes



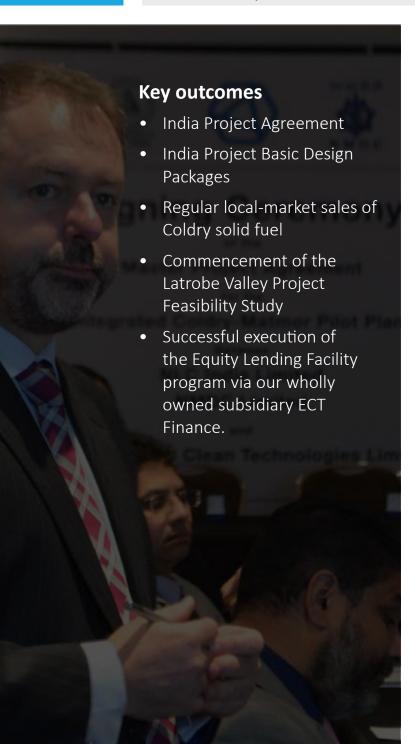
## Integrity:

When we say we will do something, we do it – and we do it responsibly



### Sustainability:

We consider the safety, quality and environmental outcomes of our decisions



# Executive Committee's Message

Dear Shareholder,

The Executive team is very pleased to provide this report on your Company for the 2018 financial year.

In the coming pages, we focus on areas of key interest to shareholders, aligned with important themes from the Director's Report (page 40) and take a look at the year ahead.

The most significant outcomes over this past year were:

- The signing of the India Project Agreement
- Completion of the India Project Basic Design Packages
- Establishment of regular local-market sales of Coldry solid fuel
- Commencement of the Latrobe Valley Project Feasibility Study
- Successful execution of the Equity Lending Facility program via our wholly owned subsidiary ECT Finance.

#### India Focus

On 30 May 2018, we signed the Project Agreement for the largest ever (~AUD35 million) research and development collaboration between Australia and India for the joint development of its two leading technologies - Matmor and Coldry.

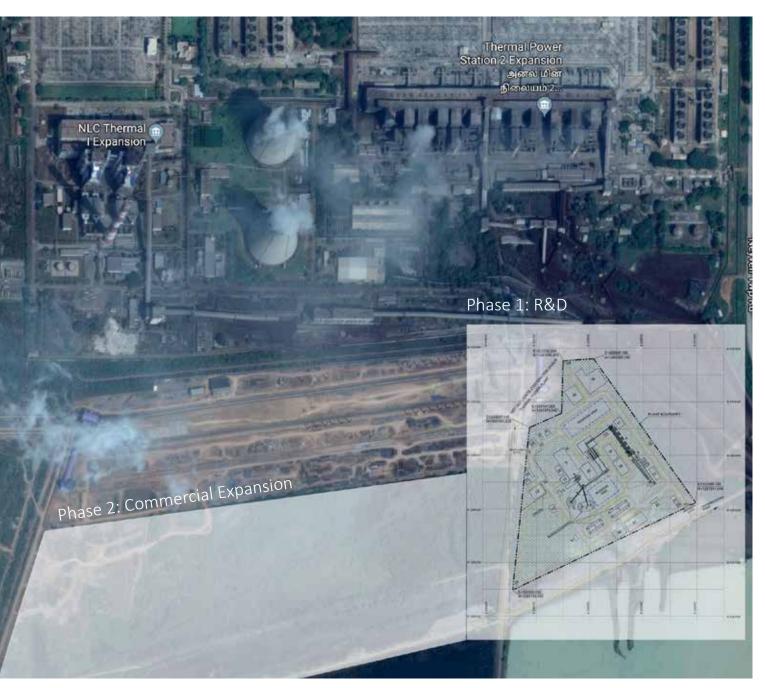
Our partners, NLC India Limited (NLCIL) and NMDC Limited (NMDC), majority Indian government owned enterprises and India's largest lignite (brown coal) and iron ore miners respectively, will fund the project in return for 25.5% each of the equity in the ensuing joint-venture entity.

The first order of business under the project agreement is the finalisation and execution of a set of detailed sub-agreements, collectively termed the Research Collaboration Agreement (RCA), which form a condition precedent to financial close. The partners expect these agreements will be approved by the respective Boards and signed prior to the end of November 2018.

Reflective of the first-of-a-kind nature of the project, the path to agreement has taken longer than the parties anticipated, with 'financial close' initially targeted for 30 June and later being extended to cater for review requirements driven partly by Board changes at NLCIL.

Part of our strategy to manage and mitigate timeframes has been to drive parallel activity where possible, including:

- Completion of the India project Basic Design Package
- Vendor development to support project implementation
- Development of on-ground logistics support for ECT India operations
- Site survey and development activities, and
- Recruitment of key senior project staff.



### **India Project - Basic Engineering Design Package**

One of the key project outcomes has been the completion of the Integrated Basic Engineering Design program, commissioned by ECT, and led by leading Indian engineering design firm MN Dastur.

The following provides a summary of one of the key outcomes of the program, namely an overview of the location and plant design.

Image (left): The plant will be located on the south side of NLCIL's Thermal Power Station Expansion 1 and the soon to be decommissioned Thermal Station 1. The below diagram shows the placement of the R&D facility and subsequent area for the expansion to the proposed 500,000 tonnes per annum (steel output) Matmor plant and beyond.

To quote and paraphrase Ms. Aditi Tarafdar, the Technical Director of metals engineering consultancy firm MN Dastur as she spoke recently to the SteelVia Global Steel Innovation Forum, "Unique challenges in India favour DRI Ironmaking. With Natural gas not available, and good quality coking and non-coking coal not available, an alternative reductant must be developed. That is Lignite. Matmor is poised to contribute strongly to the (Indian) DRI sector's growth". For context, the Indian national growth target is the addition of nearly 200 million tonnes per annum of steel production over the coming decade. Our potential for significant market penetration and adoption is quite exciting.

#### Australia Focus

Our Australian activity has focused on a range of R&D test programs at our HVTF in addition to local market development of sales opportunities for our Coldry solid fuel product.

#### **Solid Fuel Market**

The Victorian industrial energy market is defined by the price and availability of appropriate energy sources. Until 2014, brown coal briquettes dominated the local market, followed by gas and biomass. The closure of the Morwell brown coal briquette plant in 2014 saw many businesses switch to gas and biomass. The price of gas has since doubled or tripled for many businesses. Availability of biomass is variable, reducing the reliability of supply. Biomass typically has a lower energy density, and its ash contains elements that foul boiler systems, resulting in lower efficiency and increased downtime for maintenance.

Coldry solid fuel is an ideal fuel for businesses requiring large volumes of process heat.

Further, Coldry doesn't conflict with the Victorian government's renewable energy target, as neither wind nor solar are suitable for generating reliable, affordable utility-scale heat for such industries.

In this respect, we're competing directly with the availability and price of natural gas and biomass alternatives, which given the current supply-demand profile, looks like remaining high and possibly escalating, well into the future.

Beyond supplying energy-intensive industries such as agribusiness, we see the potential to grow our Coldry capacity in Victoria over time to support a number of potentially high-value applications, including:

- High-efficiency, low-emission (HELE) power generation to deliver reliable, affordable electricity
- Hydrogen production
- Upgraded coal products such as activated carbon, PCI (pulverised coal injection) coal, fertilisers (e.g. urea) and hydrocarbon liquids and gases.

These high-value applications have the significant potential to generate jobs and improve productivity while bringing down the emissions intensity of Victoria's world-class brown coal resource.

#### **Local Market Potential**

Given the level of interest received to date, we're confident a sustainable local market exists for a solid fuel to supply energy-intensive industries impacted by rising energy costs.

In parallel to the activity at the HVTF, we continue to develop our feasibility study for the establishment of a large-scale Coldry demonstration plant in Victoria's Latrobe Valley.

Importantly, the proposed large-scale Coldry demonstration plant will leverage existing resources and infrastructure, with site selection at Yallourn power station announced on 15 November 2017.

It is envisaged that the Victorian demonstration plant will be designed to an output capacity of ~170,000 tonnes per annum and will feature a zero CO2 footprint, having no direct emissions.

In support of ongoing R&D for the India project and future projects like the Victorian demonstration plant, the HVTF is targeting an output capacity of up to 35,000 tonnes per annum.

The HVTF is solely an R&D facility and continuous production up to 35,000 tonnes per annum will continue to add to the testing of key features of both Coldry and Matmor in areas such as:

- Pellet integrity and product specification profiles
- Blended additives
- Drying temperature profiling and optimisation
- Airflow and temperature management through the packed bed dryer
- Process improvements and equipment re-design

All product sold will be done so under the "Feedstock Rules" of the R&D tax incentive legislation.

#### **High Volume Test Facility (HVTF)**

The HVTF at Bacchus Marsh is a core strategic asset, and during FY2018 continued to provide the basis for the implementation of all research and development program activities across each of the three key technologies, namely Coldry, Matmor / HydroMOR, and COHgen.



### Coldry local sales strategy delivers first contract

In August, we announced the signing of a binding contract for the sale of Coldry solid fuel in the Victorian market via the provision of a turnkey solution for steam services.

#### **Key points:**

- 5-year supply contract for Coldry solid fuel to support delivery of process steam via an existing solid fuel boiler system.
- Provision of operating and maintenance service package in partnership with Australia's leading 'process steam' system operator. Mecrus.
- Prime example of one of ECT's core pillars of its long-term revenue model.

#### **Key Terms:**

• Value: \$1.3 million

Term: 5 years

Fuel: Coldry solid fuel

**Services**: Operate & maintain boiler system to deliver operational steam requirements

The contract details the agreement between the parties to deliver steam required by the customer's operations and will be followed by a three-month construction and services commissioning phase which aims to establish the baseline steam demand, assess the efficiency gains from planned upgrades and maintain and monitor the subsequent steady state of operations. At the time of writing (early November 2018) the project had passed the 'hot' commissioning stage and is progressing to steady state operations.

The driver behind the client's adoption of Coldry lies in our close engagement and development of a packaged, turnkey solution to deliver steam. We've taken the time to understand and quantify the current operational profile of their boiler system, against which we were able to test and benchmark our Coldry solid fuel test product.

The cost-effectiveness of Coldry solid fuel coupled with our turnkey approach to the provision of equipment, operations and maintenance, fuel and finance, where needed, presents a compelling business case.

Lead-in analysis indicates we may be able to deliver potential savings of 15% per annum for our client.

This packaged, turnkey approach is also designed to help mitigate further energy price shocks by locking in a stable monthly fee over five years.

We're currently working with several other potential customers on a similar basis and look forward to establishing further sales in due course.

This local market business model, entailing the provision of packaged solutions has a two-fold benefit. From the customer's point of view, it solves one of their significant operational 'pain points' via a holistic service offering. From our point of view, vertical integration allows us to maximise operational efficiency and control costs.

#### **Expert Partnerships**

ECT has partnered with Mecrus, Australia's leading provider of steam package solutions for boiler applications and is also engaged with boiler manufacturers (including John Thompson boilers). These strategic partnerships allow us to offer compelling steam and boiler packages. ECT non-executive director Barry Richards is the Managing Director of Mecrus.

Building Solid Foundations for ECT's long-term revenue model

This contract gives shareholders an understanding of one of the core pillars of our long-term revenue model.

Following many months of engagement with a range of potential customers, it is apparent that the market for utility-scale steam and hot water is in desperate need of a solution that can deliver capital upgrades and fuel solutions that are reliable and economical. At present, no other companies are offering fully integrated steam and boiler solutions to Victorian and Tasmanian customers.

Over the coming year, we aim to establish further contracts of this type while developing key relationships to improve the quality and pace of outcomes, including:

- 1. Plant & equipment: Boiler manufacturers able to design boiler packages bespoke to Coldry as the primary fuel source
- 2. Finance: Partners able to support a zero-capital outlay solution for new boiler system upgrades
- 3. Operations & maintenance: Staff with the essential skills to support boiler construction, operations and maintenance

Local businesses reliant on steam generation have been suffering terribly from skyrocketing gas prices and a shortage of reliable alternative fuels, resulting in an energy affordability and reliability crisis. This uncertainty is impacting the viability of many businesses. It also means ageing infrastructure is not being replaced as companies are reluctant to outlay capital on new equipment without viable fuel alternatives. We solve the problem of price volatility, fuel reliability and capital outlay and allows these companies to focus on their core business while we take care of their utility energy needs.

#### **Next Steps for HVTF Upgrades**

This increasing demand provides an important context for our planned Stage 3 & 4 upgrades, as we head into 2019.

We continue to drive R&D programs through improving capability and testing at scale. However, we remain mindful of the operational challenges we face as we transition from a research-focused model to a commercial model, with revenue opportunities driving the pace of our facility upgrades.

The timing of Stages 3 & 4 reflects this approach, as well as our desire to link the Bacchus Marsh facility into the emerging potential Latrobe Valley commercialisation project.

#### **Latrobe Valley Feasibility Program**

Running parallel to our continued R&D programs to support the India project, FY18 saw the re-emergence of project development opportunities in the Latrobe Valley, with a feasibility study for the proposed establishment of a large-scale Coldry demonstration plant of ~170,000 tonnes per annum capacity commencing in July 2017.

The feasibility study scope entails:

- Phase 1: Scoping study and selection phase;
- Phase 2: Pre- feasibility study;
- Phase 3: Feasibility study and funding assessment.

Phase 1 was completed and announced (15 November 2017), highlighting our partnership with Energy Australia for potential site location and coal supply.

Our focus on advancing the India project has taken priority since the conclusion of Phase 1, resulting in a pause in activity around the Latrobe Valley project in recent months.

The initial scoping and site selection provided a solid foundation to proceed to pre-feasibility and we look forward to progressing this program in coming months.

The full feasibility study will aim to establish the business case for the construction of a large-scale Coldry demonstration plant in the Latrobe Valley.

This proposed project holds significant short-term interest in providing increased energy security and affordability through diversification of Victoria's energy solutions and longer-term interest as a gateway enabler to the deployment of High-Efficiency, Low Emissions (HELE) electricity production and low emission chemical production, including hydrogen, from Victoria's world-class lignite assets. HELE power stations, hydrogen production and fertiliser production are all industries of the future for the Latrobe Valley and they all share the common need to reduce moisture content of brown coal. Following successful scale up, Coldry has the potential to deliver this outcome economically and with zero-emissions when integrated with a waste heat source.

#### **HydroMOR Patent Development**

Our Matmor process has been the subject of much activity over the past several years including:

- The purchase of the Matmor test plant assets at the Bacchus Marsh facility
- Acquisition of the Matmor intellectual property from the original owners
- Subsequent development work related to the India project opportunity with partners, NLCIL and NMDC

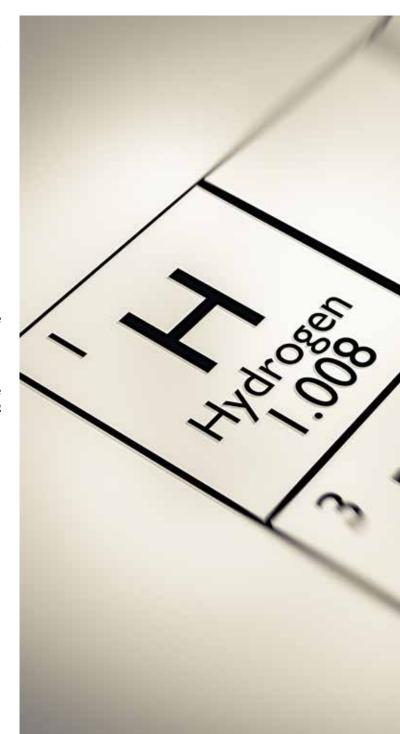
Most recently, a period of operational activity in support of Pilot Plant design works.

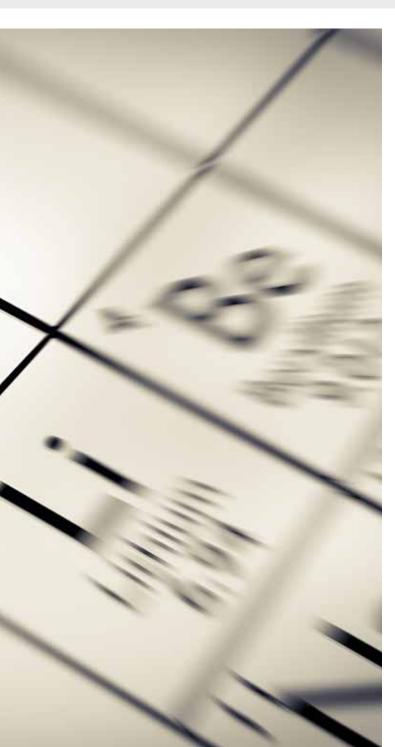
Our new process, HydroMOR, is an improvement over the existing Matmor process, deriving further advantage from its unique raw material base, specifically the hydrocarbon-rich low-rank coals used in the role of reductant.

The process derives its name from the utilisation of hydrogen as the primary driver of the reduction process used to create metals from ore; Hydrogen Metal Oxide Reduction.

The benefits we see in the application of the HydroMOR process include further reductions in capital cost due to its ability to achieve the required metal reduction at a lower temperature, and operating savings in terms of raw material efficiency improvements, as well as decreased CO2 intensity. With the capital cost savings being applied to carbon offsets, this brings closer the potential of carbon emissions neutral steel production.

We have filed the international PCT application for HydroMOR and have commenced the next step, being the conversion into the various national and regional applications in the target jurisdictions, inclusive of India.





### **COHgen fundamental research**

Research and Development often result in serendipitous discoveries.

COHgen, or Catalytic Organic Hydrogen generation is just such a potential discovery stemming from our Matmor and HydroMOR work.

We can't provide any detail yet, as we need to step through the fundamental research and patent application process to secure the intellectual property.

Suffice to say, if our hypotheses are confirmed, and the process is scalable, we may have a new low-emission hydrogen production process.

We have previously informed shareholders of our R&D activities aimed at identifying certain fundamental breakthroughs that have led to what appears to be a new and unique, low temperature approach to hydrogen generation. These breakthroughs are driving further R&D focused on improved capability around liberation of hydrogen from lignite in what may be a new benchmark in hydrogen generation efficiency.

We are in discussions with government authorities, universities and research funding organisations for the development of an 'R&D centre of excellence', in either the Latrobe Valley or Bacchus Marsh, to support increased research on the efficient and low emission use of brown coal. The Company continues to research the role hydrogen plays in certain chemical reactions involving brown coal which stems from our deeper understanding of the Matmor process and our progression through to HydroMOR and COHGen.

#### **Capital Management**

#### **Finance**

A loan agreement was signed in May 2018 for a new research and development rebate loan facility with our existing debt provider, New York-based Innovation Structured Finance Co. LLC (Brevet) for the financial year ended 30 June 2018.

The loan facility allows for the provision of funding of up to \$4 million secured via our research and development tax incentive rebate.

Importantly, the conditions contained within the agreement are typical of those that may be expected for a facility of this type, providing a competitive solution for our funding needs.

In August 2018, we signed a new Secured Loan Agreement with Brevet for the 2018/19 financial year for \$4 million on the same terms and conditions as the previous facility.

#### **R&D Tax Incentive**

On 17 January 2018, we received the full amount of the research and development tax incentive receivable recognised in the financial statements at 30 June 2017 amounting to  $^{\sim}$ \$2M. This was partially used to fully repay borrowings in respect of the 2017 loan facility from Brevet.

On 8 October 2018, we received the full amount of the research and development tax incentive receivable recognised in the financial statements at 30 June 2018 amounting to  $^{\circ}$ \$1.67M. This was used to fully repay borrowings in respect of the 2018 loan facility from Brevet, with the surplus available for working capital requirements.

#### **Matmor Overseas Ruling Application**

The Matmor 'Advanced Finding and Overseas Ruling' application is currently in progress following submission to AusIndustry ahead of the 30 June 2017 deadline for previous financial year overseas expenditure to be included.

Engagement continues with AusIndustry, and further updates will be provided in due course.

#### **ECT Finance Ltd**

ECT Finance Ltd (ECTF) was established to provide support to ECT Group's capital management and financing initiatives and in doing so, was able to offer an equity lending facility (ELF) to all ESIOA and ESIOB option holders to finance the conversion of their options into fully paid shares.

The successful program established over \$14 million in loans in addition to the  $\sim$ \$4.05 million in cash received during July and August 2017 from standard options exercise.

The ELF was structured with all stakeholders' interests in mind. ECT Finance created an offering which aimed to protect the existing entitlements of shareholders while also balancing the interests of those shareholders who were willing to contribute cash to the Company ahead of the ELF.

Due to the success of the ELF for the ESIOA and ESIOB option series, ECTF has received a number of enquiries from other companies to provide an ELF program structure for their capital raising initiatives.

ECTF is planning for the market roll-out of the ELF structure, using the expertise and software that ECTF now has in place, and will update shareholders as outcomes progress.

#### FY19 - The path ahead

Delivery of the Integrated Coldry Demonstration and Matmor Pilot Plant is our primary objective. To that end we've developed our India strategy to establish a partnership with two leading Indian government public sector undertakings (PSU's), NLCIL and NMDC, for the largest ever research and development collaboration between Australia and India.

Commencing with a ~AUD35 million investment by our partners in to the initial research and development phase, the project aims to scale up our Matmor and Coldry technologies to deliver an integrated Coldry demonstration and Matmor pilot plant to validate their technical and economic feasibility at a capacity suitable to provide the technical basis for further scale up to commercial demonstration stage.

Following successful phase one research and development outcomes, the project agreement provides the framework to proceed with a commercial-scale integrated steelmaking facility. The partners have previously contemplated the potential scope for the commercial phase via the techno-economic feasibility study completed in July 2016, which includes a nominal capacity of 500,000 tonnes per annum steel output and an estimated AUD300 million capital investment. The site for the research and development plant at NLCIL has been chosen to allow room for expansion into a commercial-scale facility as required.

In addition to driving our primary objective in India, we continue to evaluate and consider the prospects and merits of a commercial scale Coldry demonstration plant in Victoria to further scale up the technology, as well as support growing domestic demand for solid fuel products and turnkey steam services to support the utility heating requirements of a range of industries in Victoria and Tasmania.

Given the significant amount of work involved over the past year in delivering the Project Agreement, and the expectation that we will sign the Research Collaboration Agreement during November, we anticipate and look forward to moving to a new and exciting stage in the development of our Company in the coming year.

Yours sincerely,

Ashley Moore CMD

CMD Director ECT India ECT Finance

**Glenn Fozard** 

Jim Blackburn COO

ECT Limited

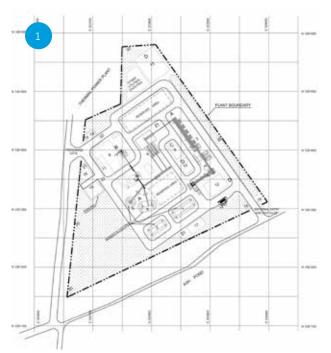
Martin Hill CFO

**ECT Limited** 

## India Project

R&D Stage

- 1) Plan layout of the R&D phase
- 2) 3D plant view from the south
- 3) 3D plant view from the east







## Board



Glenn Fozard
Executive Chairman

Glenn has a strong commercial background and over 16 years' experience in finance and capital markets at both board and executive level.

With a deep understanding of tailored financial solutions for SMEs in the R&D, Cleantech and Agricultural sectors, he supports the company with valuable guidance in the technology development, risk management and capital raising areas.

Glenn commenced working with ECT in 2011 and continues to support the business in the executive role of Business Development and Corporate Finance.



David Smith
Non-executive Director

David has a strong legal and commercial background, having practised commercial law for over 25 years including nearly 20 years as a partner in national firms.

He is currently a partner in the intellectual property and technology group at Gadens Lawyers. He has assisted many companies with protecting their intellectual property, IP commercialisation agreements, collaborative research agreements and international negotiations.

David chairs the Company's Audit and Risk
Committee. Best Lawyers named David as 2018
Lawyer of the year — Privacy and Data Security
Law for Melbourne, Australia. He is also currently
listed as a "Best Lawyer" for Intellectual Property
Law, Information Technology Law and Gaming Law.
Doyle's Guide lists David as a recommended noncontentious intellectual property lawyer for 2018.

David is the immediate past President of Bicycle Network and is a graduate of the Australian Institute of Company Directors (AICD).



Barry Richards Non-executive Director

Barry has a strong industry and commercial background of over 30 years including his role as Managing Director of Mecrus Pty Ltd since its formation over 18 years ago, contract and business development roles with Siemens / Silcar, and operations and maintenance management experience with the State Electricity Commission of Victoria (SECV).

He provides extensive experience in business management, major project development and delivery, coal plant operations and maintenance and has a broad understanding of technology and process development.



# Key Executives



James Blackburn
Chief Operating Officer
ECT Limited

James has a strong executive background as a corporate development practitioner with over 18 years' experience in governance, operational, and technical roles across research, investment and corporate services disciplines.

James joined ECT in 2017 assuming core responsibility for ECT Corporate Services and plays a key role in directing and adminstering the Company's commercialisation programs.



Ashley Moore
Chairman-Managing Director
ECT India

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 30 years in 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, Managing Director in 2013 and then Chairman-Managing Director of ECT India in 2017.



Martin Hill
Chief Financial Officer &
Company Secretary
FCT Limited

Martin Hill was appointed to the position of Company Secretary on 15 December 2017 and has extensive experience in the areas of general management and accounting across a range of industries including manufacturing, finance and service providers.

Martin also acts as the Company's Chief Financial Officer and is a member of the Execuitve Committee and the Audit and Risk Committee.

His role encompasses the key responsibility areas of finance, accounting and governance with a focus on managing these functions across multiple jurisdictions.

# **Key Personnel**



Warrick Boyle
Chief Engineer - Coldry

Warrick is a manufacturing and chemical engineer with 20 years' experience across diverse manufacturing roles in medical, chemical, industrial, pharmaceutical and consumer goods.

Warrick's core responsibility is the fundamental and applied process development of the Coldry technology and the operations of the High Volume Test Facility.

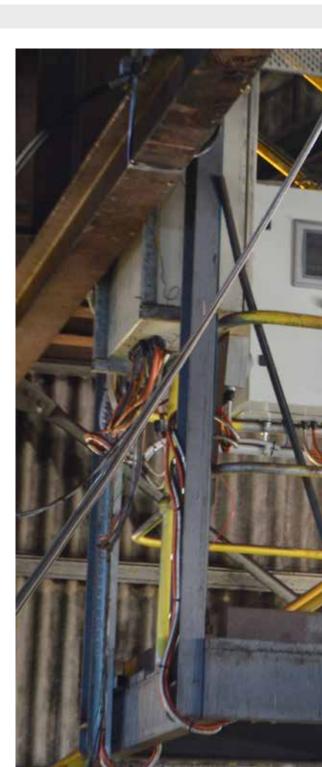


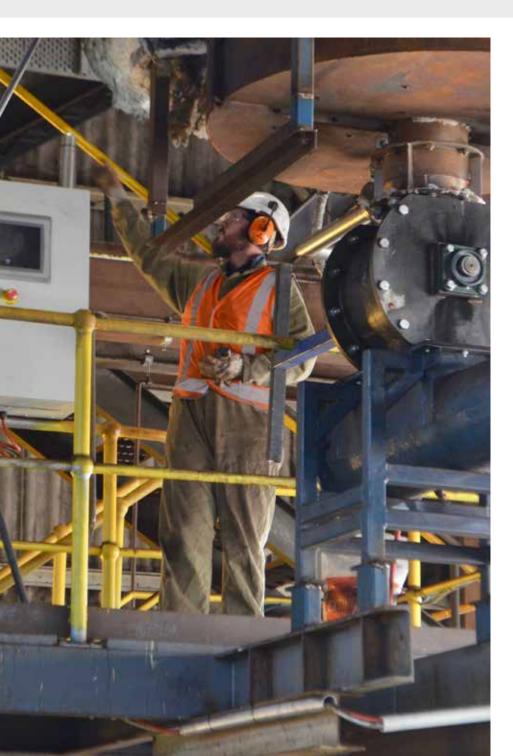
Lachlan Bartsch Chief Engineer - Matmor

Lachlan is a project manager with strong operational background and engineering design experience with a focus on metallurgical applications and design consulting.

Lachlan's experience with the multidisciplinary management of feasibility and prefeasibility studies as a Project Engineer and Area Manager, combined with his metallurgical, operational and commissioning experience provides an ideal skillset to drive the Matmor development and commercialisation program.

Lachlan is co-patent holder for the Hydromor process.





# Key Personnel



Keith Henley-Smith
Chief Engineer
COHgen

Keith is a chemical engineer, metallurgist and inventor with over 40 years' experience.

Mr Henley-Smith leads the fundamental research and development efforts for Matmor, HydroMOR and COHgen.

Prior to his work with ECT, Keith invented the first and only non-magnetic stainless steel, PAK450.

Since 1998, Keith has been an adviser to the European fusion program (Euratom), providing assistance on material selection for the Joint European Torus (JET) in relation to first wall neutron absorption materials.

 $\label{thm:copatent} \mbox{Keith is co-patent holder for the Hydromor process.}$ 



Adam Giles
Marketing &
Communications Manager

Adam has over 25 years' business and management experience across both private and public sectors.

His long-term involvement with the development of the Coldry and Matmor technologies and as a founding shareholder of the Company provides valuable background, helping inform strategic direction, having held the roles of Company Secretary, Operations Manager, Product Development Manager and Project Manager.

Key responsibility areas include Marketing, Communications and Stakeholder engagement and Governance.

Adam is co-patent holder for the Hydromor process.

# Our Technologies

## Coldry - Unique low rank coal drying technology

- IP owned 100% by ECT and protected in all major markets
- World's most efficient pre-drying process for high moisture content coals
- Enables low-rank coal use in downstream conversion process for high value products and applications
- Outstanding environmental credentials including a zero net CO, footprint from the process
- Construction-ready designs for first commercial scale plant ready to go

## Matmor - Primary iron processing technology

- Intellectual property owned 100% by ECT
- Integrates with Coldry which acts as the feedstock preparation stage
- Reduces manufacturing costs by ~65% through use of low cost, abundant raw materials
- Reduces energy costs through innovative thermo-chemical pathway (impact embedded in manufacturing costs above)
- CO<sub>2</sub> emissions reduction helps deliver lower emissions intensity





# Coldry Technology

## **Coldry Contents**

Introduction	22
Coldry Value Proposition	22
The low rank coal challenge	23
The Drying Challenge	23
Coldry Process Overview	24
Coldry Process	25
Coldry Physical Transformation	26
Coldry Value Transformation	26
CO <sub>2</sub> Mitigation & Water Savings	26
Status of Development	27

## General Information

- Opens new markets
- Establishes new revenue streams
- Diversifies energy & resource options
- Upward revaluation of stranded or low value low rank coal assets
- Enhanced efficiencies
- Mitigate CO<sub>2</sub> emissions

## Introduction

The Coldry process is designed to meet a single crucial objective - reduction of brown coal water content.

In doing so, it increases the energy content of the finished product, which significantly increases its value. The low processing cost also opens significant margin opportunities for lignite asset owners.

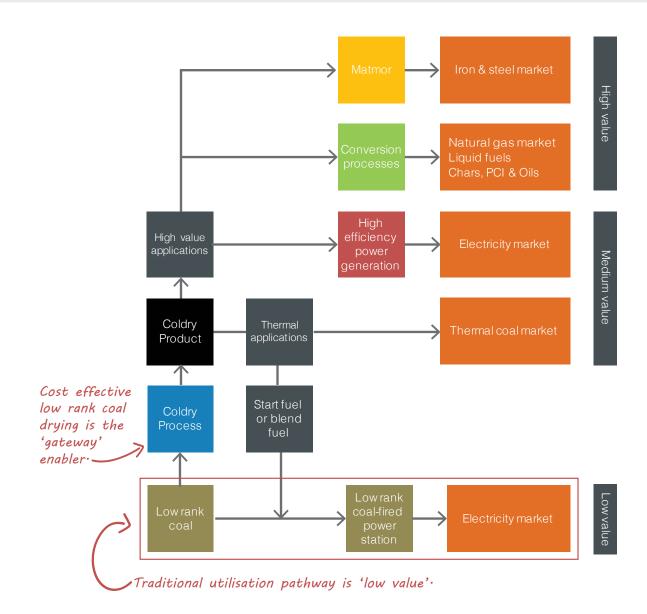
Developed in Australia and patented globally, Coldry is a cost effective and energy efficient method for dewatering high-moisture low rank coals such as lignite, creating an upgraded product similar in material properties to black coal for local and export markets.

ECT have designed Coldry to work as a standalone technology that has applications in the power industry where it can be used to upgrade low-quality coal, reduce  $\mathrm{CO}_2$  intensity and increase the efficiency of coal- fired power plants.

The Coldry process also acts as the feed preparation stage for the Matmor process, enabling the high value utilisation of lignite in iron and steel making.

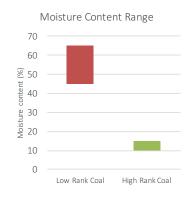
# Coldry Value Proposition

By converting high moisture, low calorific value lignite from a low value material with limited usage opportunities into a high energy, low moisture, transportable solid fuel, Coldry opens up new markets and a wide range of applications. It also reduces the  ${\rm CO}_2$  emissions intensity associated with utilisation, enabling greater sustainability of outcomes.



To enable low rank coal use in higher value applications, it needs to be dried.

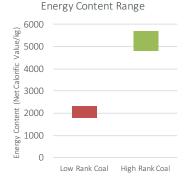
- High moisture content:
  - Low net energy content
  - Not suitable for use in black coal applications or most upgrading processes
  - CO<sub>2</sub> intensive power generation
- Significant risk of spontaneous combustion compared to bituminous coal
  - Limits storage volume and duration
  - Increased transport cost
- Inefficient transportation cost due to carting mostly water



The challenge is to get the moisture down from here...

... to there...

...and increase energy content from there...



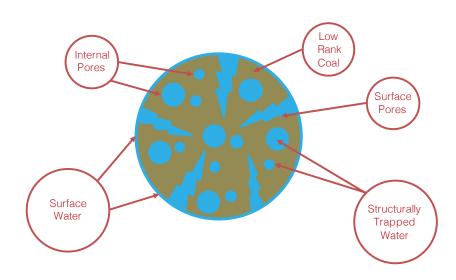
# The Drying Challenge

Drying is easy.

- Drying efficiently and cost-effectively is the challenge.
- Coldry meets the challenge.
- Achieving a net energy uplift and zero CO<sub>2</sub> emissions at the lowest possible marginal cost, is the goal.

"It is difficult to dry low rank coal with high efficiency. For hard coals, the majority of the moisture is present on the surface of coal particles. Energy required to remove free moisture is simply the latent heat of evaporation (~2.27MJ/kg). In contrast a considerable portion of the moisture is held by hydrogen bonds in the capillary pores or interstices of low rank coal particles. Hydrogen bonding increases the strength of moisture holding and more energy is needed to remove a certain amount of moisture from low rank coal. Another severe problem with drying low rank coal is the ease of reabsorption of moisture. To achieve deep drying of low rank coal, the number of hydrogen bonds has to be reduced by destroying them either using thermal or mechanical methods, which is the key to any effective drying process."

Dr Nigel S Dong, IEA Clean Coal Centre





# Coldry Process Overview

Coldry achieves low temperature, low pressure, low cost drying through a unique combination of:

- 1. Brown coal densification (BCD)
- 2. Waste heat utilisation

BCD is a physical and chemical phenomenon exhibited by a range of high-moisture coals that results in the expulsion of moisture and densification of the remaining coal solids.

The Coldry technology process involves several process stages:

- 1. Mechanical Shearing: The majority of the physically trapped moisture is released via destruction of the porous structure of the coal, which is achieved via mechanical shearing, resulting in a coal slurry of suitable consistency for extrusion.
- 2. Extrusion: The slurry is extruded to produce pellets of optimal dimension for subsequent drying.
- 3. Drying: Waste energy from a co-located power station (or another low-grade 'waste' energy source) is utilised to cost-effectively evaporate the mobilised water within the pellets, delivering a finished product with less than 15% moisture.

The Coldry process has impressive benefits in comparison to the traditional drying processes, including;

- No direct gaseous emissions (including CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>x</sub>);
- Significant energy uplift compared to the raw lignite (200% increase in calorific value);
- Thermally stable finished product, with reduced spontaneous combustion profile;
- Where commercially desirable, there is also the option to harvest evaporated moisture;
- Flexibility for use in the upgrade of lower-quality coal for use in power generation and to create the feedstock for an integrated steel-producing direct reduced iron (DRI) facility.



Primary processing begins when brown coal is mined and delivered to the Coldry plant where it is milled and screened to achieve a consistent size.

This is where the process of Brown Coal Densification is triggered.

attrition

control

A small quantity of water is added to form a paste which is then subjected to mechanically induced shear stress over time.

The coal paste is extruded to form pellets.

The pellets are soft, malleable and prone to sticking together.

As such, they need to be conditioned.

Utilising low grade waste heat from a co-located power station, the pellets are conditioned, drying the surface to reduce adhesion and increasing their strength to minimise breakage.

Following conditioning, the pellets are ready to proceed to the secondary drying stage. Our Packed Bed Dryer utilises low grade waste heat to drive the continuous moisture removal from the pellets.

packed bed drying

The process can collect the expelled moisture as 'Class A' water, suitable for immediate industrial use without expensive treatment. Water recovery incurs an additional cost and may be suitable in drought prone areas.

(Optional)

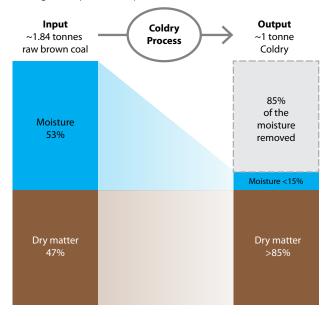
Coldry Pellets

Coldry pellets
are continuously
discharged from the
Packed Bed Dryer after
a pass through time of
between 36 and 48 hours.

Coldry pellets feature a stable moisture level of between 10 and 15%.

# Coldry Physical Transformation

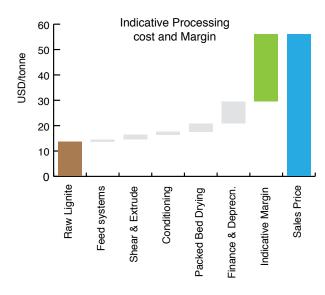
The Coldry process specifically targets the removal of moisture, leaving the dry matter in place.



In the case of Indian lignite, approximately 1.84 tonnes of asmined lignite is physically transformed to produce 1 tonne of Coldry solid fuel pellets.

The water is evaporated, so unlike processes that heat and squeeze brown coal to remove water, there's no waste water contamination issue.

# Coldry Value Transformation

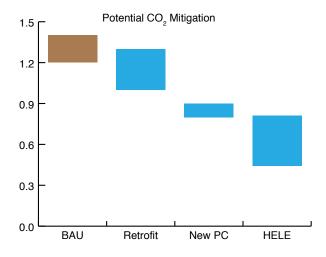


The marginal upgrading cost supports substantial value add through allowing low-rank coal to service higher value coal markets, with significant margin.

The graph shows the estimated value transformation from low value lignite to higher value solid fuel, and the processing cost on the way through.

And while each project will have its own unique profile, this illustrates the potential economics of deploying the Coldry process on lignite assets.

# CO<sub>2</sub> Mitigation & Water Savings



The Coldry process is designed to harvest the waste heat from a power station and direct that heat to drying the lignite.

Under business-as-usual (BAU) scenarios, Coldry can be retrofitted to existing power stations, providing a mixed feed, reducing CO<sub>2</sub> by up to 15%.

Coldry can be integrated from the ground up into a new power station.

For standard pulverised coal (PC) technology the  ${\rm CO}_2$  saving is around 30%.

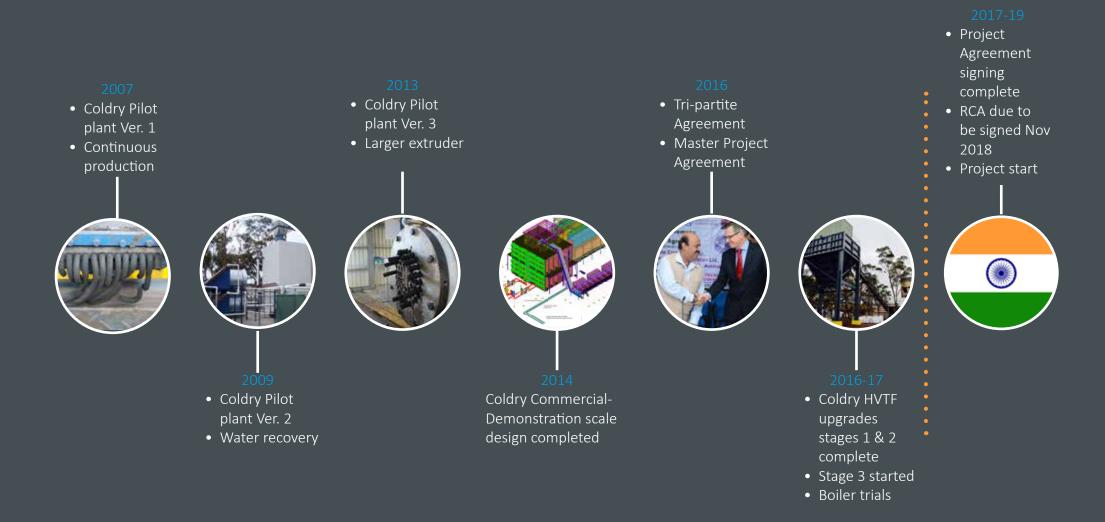
Whereas High Efficiency, Low Emission (HELE) technology could deliver savings of between 42% and 63%.

In addition, the Coldry process acts as a heat sink when cooling the power station, reducing or eliminating the need to draw water from local rivers.

# Status of Development

The research and development of the Coldry technology have followed a methodical, stepwise process involving scale-up, validation and optimisation from lab scale to pilot scale to inform the current Coldry plant modular design.

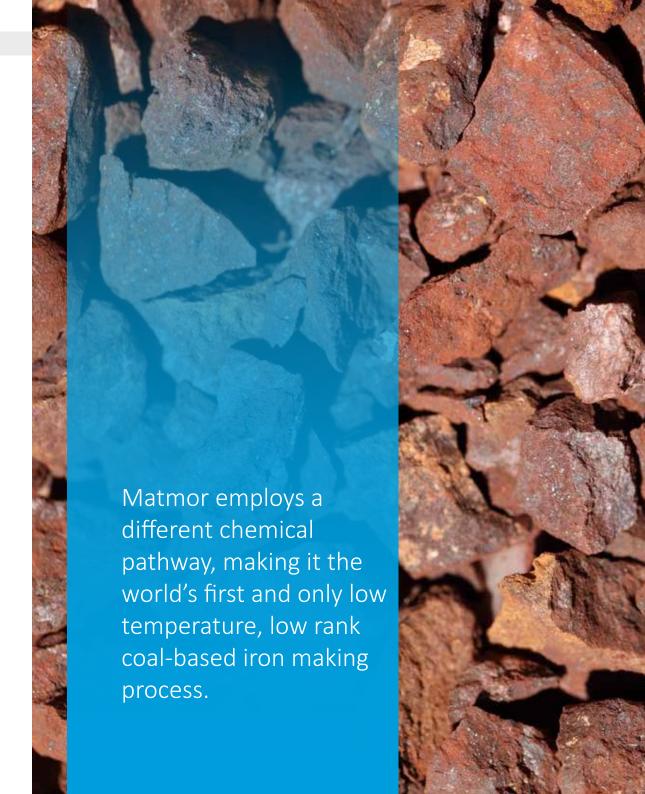
The process is poised for demonstration in partnership with NLC India Limited and NMDC Limited.



# Matmor Technology

## Contents

Introduction	29
Matmor Value Proposition	30
The 'alternative raw material' opportunity	30
Lower Plant Cost	30
The Steel Intensity Challenge	32
Matmor Process	3
Matmor Process vs Blast Furnace	34
Benefit vs Blast Furnace	3!
Benefits v other methods	36
Status of Development	3
Commercialisation Strategy	3,9





## Introduction

Matmor is a novel iron processing technology that facilitates the efficient production of high quality direct reduced iron from inexpensive materials that have been traditionally thought of as poor or sub-economic quality such as mill scale, nickel tailings, high or low-grade iron ore and iron ore fines and lignite and other low-quality coals.

Matmor, integrated with Coldry, can utilise these low-cost feed materials which are traditionally regarded as sub-economic and low quality due to their incompatibility with traditional iron production techniques.

The Matmor retort processes Coldry pellets specifically blended according to the makeup of the feed materials and can efficiently reduce Iron oxide at relatively low temperature.

The Matmor retort's unique combination of a highly reactive atmosphere, coupled with the pelleted compounding of reductant and ore enable a uniquely efficient metal production.

# Matmor Value Proposition

The value proposition for Matmor is characterised by two distinct advantages:

- 1. Alternative raw material opportunity
- 2. Lower plant cost

## The 'alternative raw material' opportunity

There exists a vast, 'above ground ore body' in the form of iron ore mine fines and slimes, and industrial wastes such as mill-scale and nickel refinery tailings.

Current processes can't utilise fines and wastes without expensive pre-processing. Matmor liberates this resource in an efficient, cost-effective manner.

Matmor enables a lower cost primary iron production pathway by leveraging two unique features:

#### 1) Decoupling iron making from coking coal

By utilising the rich organic chemistry within low rank coal, the Matmor process utilises a different chemical pathway to deliver a high quality product without the need for high quality coking coal, resulting in decreased raw material cost and diversified supply options.

#### 2) Exploiting the 'above ground ore body'

By harnessing the vast 'above ground ore body' that exists as mine tailings, fines and slimes and from industrial wastes such as mill-scale and nickel refinery tailings, Matmor is able to leverage sunk mining and processing costs by providing a waste remediation solution that turns a contingent liability into a revenue stream.

Tailings storage locks up significant swathes of valuable land. Matmor minimises waste, releasing land for productive use.

## Lower plant cost

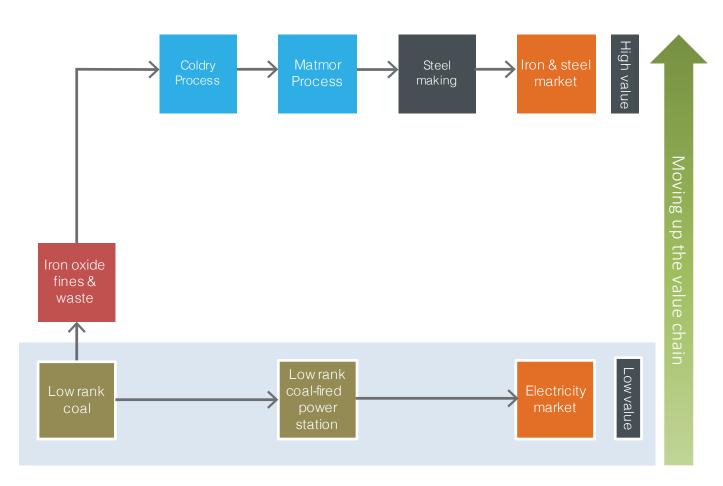
- The Matmor plant, incorporating Coldry as its front-end raw material preparation stage, is up to 40% less capital intensive than an equivalent capacity Blast Furnace or Coal-based DRI plant.
- Relatively low operation temperatures reduce material capital cost of plant
- Smaller equipment sizes, when compared to existing steel production processes, results in reduced land area requirements
- Efficient reaction kinetics result in lower reductant requirements when compared to DRI technologies
- Simple equipment design facilitates low maintenance requirements, high asset availability and long production lifetime
- Simple process flow and high levels of process automation allow for low operational staffing requirements
- Very low water consumption compared with other DRI technologies

# **Key Features**

- Lower cost raw materials
- Lower capital cost plant
- Lower emissions
- Higher value products
- Resource diversity & security
- Waste remediation solution
- Coldry provides essential feed preparation step

Business-as-usual use of lignite is relatively low value.

Matmor allows lignite to be used to produce high value metal products.



# The Steel Intensity Challenge

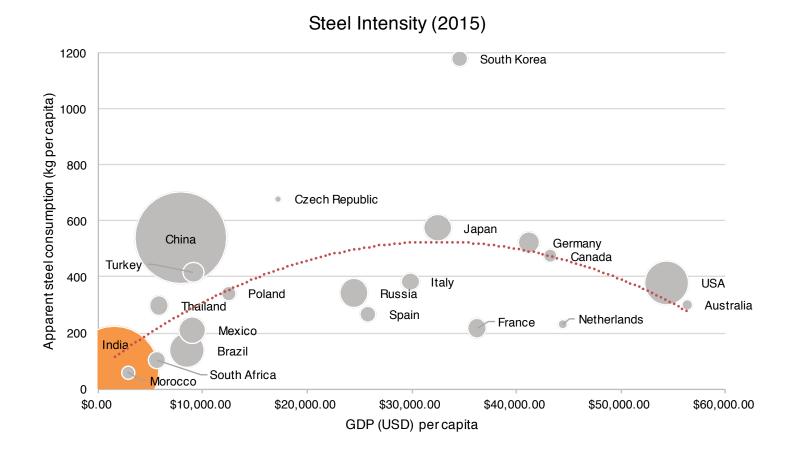
India is positioned to substantially increase its steel demand, yet is heavily reliant on imports of coking coal and iron ore.

India has signaled its intent to double steel intensity from 64kg to 120kg per capita per year.

Matmor opens up new domestic raw material supply options in support of growth in emerging nations.

In countries with mature steel intensity curves, Matmor is an ideal waste remediation solution.

The most powerful forces driving steel demand are aligned. As economies develop and modernise, steel consumption per capita grows, reflecting a wide range of growing applications – basic infrastructure, water treatment plants, food processing distribution centres, roads, bridges – and, as the middle class emerges, durable goods such as appliances and cars.





Iron ore fines are combined in a specific ratio with lignite, then processed through the Coldry Process, beginning with shearing and extrusion.

The 'green' pellets are sticky and malleable, requiring conditioning prior to delivery to the Packed Bed Dryer.

The pellets are dried in our Packed Bed Dryer, utilising waste heat from the process to drive delivered to the via a unique evaporation.

/ The dried **t**composite pellets contain approx. 5% moisture and are ready to be Matmor Retort. chemical

The Matmor Retort is where the action happens. is a 'direct Iron oxides are reduced to iron process.

The output from the Matmor Retort reduced iron' (DRI) pellet suitable for melting in either an induction or electric arc furnace.

Electric Arc / Furnace steel refining allows the iron to be refined to deliver a specific grade of steel.

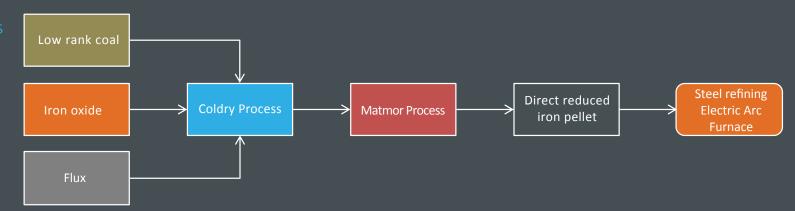
Casting delivers specific iron and steel sheets, rods, wire, slabs and billets.

The finished product is then ready for sale into its forms, including desired market.

## Matmor Process vs Blast Furnace

#### Matmor Process

- > Lower cost
- > Simpler
- > More flexible
- > Less CO<sub>2</sub>



- > Lower cost inputs
- > Utilise domestic raw materials
- > Utilise waste grade ore

# Environmental improvement eliminates:

- > Sinter plants
- > Coke ovens
- > Associated CO<sub>2</sub> emissions

#### Efficient:

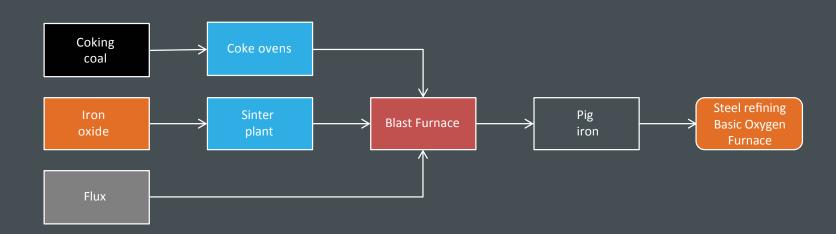
# Lower temperature than Blast Furnace:

- > Lower capex
- > Lower maintenance cost
- > Economic at smaller scale

#### **Product:**

Tailored to the same specification as tradtional processes delivering the desired grades of iron and steel for the various applications.

### Blast Eurnace



## Benefit vs Blast Furnace

Decoupling from traditional raw materials strengthens a business' resistance to inherent price volatility:

- Critical raw material prices have moved between early and late 2016; mainly Coking coal
- Compared below is F2015/16 average (left) vs. mid September spot (right)

## TEF Study basis: 2015/16 average RM costs & sales prices

	Traditional	Indian Alternative	ECT
	BF - BOF	CB DRI-EAF	C/M - EAF*
	Blast Furnace - Basic Oxygen Furnace	DRI Kiln - EAF	Coldry / Matmor - EAF* + Power Generation
Case / Scenario	Base Case	Base Case	Mid Case
CAPEX (index)	100%	90%	64%
OPEX (index)	100%	123%	103%
SALES (index)	100%	108%	103%
ROI (index)	100%	70%	160%

#### 2015/16 pricing:

- EAF Electric Arc Furnace
- Coking coal ~USD85 FOB
- Non-coking coal ~USD55 FOB

# TEF model updated using 2018 September RM costs & Sales prices

P		
Traditional	Indian Alternative	ECT
BF - BOF	CB DRI-EAF	C/M - EAF*
Blast Furnace - Basic Oxygen Furnace	DRI Kiln - EAF	Coldry / Matmor - EAF* + Power Generation
Base Case	Base Case	Mid Case
100%	90%	64%
100%	106%	86%
100%	109%	104%
100%	130%	250%

#### 2018 current pricing:

- Coking coal >100% increase
- Non-coking coal >25% increase
- Lignite; flat pricing
- Fe ore fines ~ flat pricing

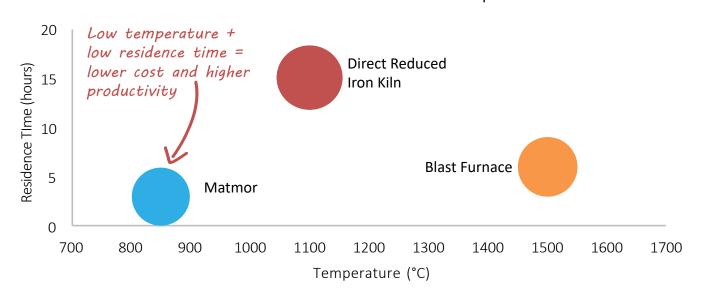
## Benefits v other methods

- Lower temperature
- Lower residence time, higher productivity
- Lower cost

In the graph below, residence time is a proxy for asset productivity and temperature is a proxy for asset capital intensity

Bubble size represents 'Relative Raw Material Cost'.

Iron Production
Relative Raw Material Costs vs. Time & Temperature







during a test run.

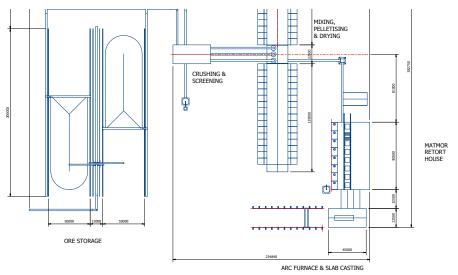
# Status of Development

The research and development of the Matmor technology has followed a methodical, stepwise process involving scale-up, validation, and optimisation from lab scale to test plant and to pilot scale.

The Matmor test facility has undergone significant upgrades over the past year to support test programs that will inform the Pilot Plant development program and increase confidence as we advance through scale-up toward commercial capacity.

The upgrades have included reconfiguration of plant parameters, the addition of new process equipment to manage inputs and outputs and extra monitoring points for temperature, gas flow and gas sampling.

These upgrades enable the collection of steady state operation data and inform future engineering design decisions.













# **Commercialisation Strategy**



ECT's commercialisation strategy is a core part of its business model. Revenue is the goal.

- Commercialisation is the process that converts ideas, research, or prototypes into viable products and production systems.
- Commercialisation relies on the creation of effective manufacturing, supply chain and implementation strategies.
- Research, development and commercialisation require significant investment before revenue is realised.
- Our commercialisation strategy also includes marketing and sales systems, which will seek to drive the transition from research investment to revenue generation.





# Financial Report

### Contents

General information	39
Director's Report	40
Statement of profit or loss and other comprehensive income	57
Statement of financial position	58
Statement of changes in equity	59
Statement of cash flows	60
Notes to the financial statements 30 June 2017	61

## General information

The financial statements comprise those of Environmental Clean Technologies Limited as a consolidated entity consisting of Environmental Clean Technologies Limited ('the Company') and the entities it controlled at the end of, or during, the year (together referred to as the 'consolidated entity'). The financial statements are presented in Australian dollars, which is the consolidated entity'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:

388 Punt Road South Yarra, VIC, 3141 Australia

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 30 August 2017. The directors have the power to amend and reissue the financial statements.

# 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 2018.

### 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 Executive Chairman
- Ashley Moore (resigned 16 October 2017)
- Barry Richards
- David Smith

## Principal activities

During the financial period, the principal continuing activities of the consolidated entity consisted of investment, research, development and commercialisation of technologies which bridge the gap between today's use of resources and tomorrow's zero-emissions future, with emphasis on the energy and resource sectors. These included:

- development of a large-scale demonstration project for the Coldry Process;
- advancement of the Matmor Process toward pilot scale; and
- managing the development of, and extracting value from, the consolidated entity's intellectual property.

# **Coldry Process**

The Coldry process is low temperature, low pressure and therefore a low-cost method of de-watering low-rank coal to produce an upgraded black coal equivalent. The process is currently poised to progress from pilot-scale to demonstration-scale allowing technoeconomic validation ahead of intended broader commercial rollout.

The Coldry process produces pellets that are stable, easily stored, can be transported, and are of equal or higher energy value than many black coals. When used in energy generation, Coldry pellets have a significantly lower  ${\rm CO_2}$  footprint than the low-rank coal from which they are made, providing a compelling emissions abatement solution.

The Coldry process also acts as a 'gateway technology', making an ideal front-end feedstock that enables numerous higher-value upgrading applications such as coal to oil, gas and iron production. When integrated with the Matmor process, the Coldry process provides an essential and cost effective front-end drying and pelletising solution that enables the world's first and only low-rank coal based primary iron production method.

Essentially, the Coldry process combines two mechanisms to achieve efficient, cost-effective de-watering; Brown Coal Densification; and Waste Heat Utilisation. Brown Coal Densification is achieved through the destruction of the internal porous structures, mobilising the structurally trapped water within low-rank coal. Waste Heat Utilisation provides 'free' evaporative energy to remove the moisture, thereby minimising paid energy input, resulting in net energy uplift and net CO<sup>2</sup> reductions.

#### Matmor Process

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

The Matmor process leverages a fundamentally different chemical pathway compared to the incumbent blast furnace process, enabling the use of alternative raw materials, providing a lower-cost primary iron making alternative.

Matmor creates a high-grade iron product from low-rank coal and ferrous media such as iron ore, mill scale or other iron bearing wastes or tailings. The process involves blending low-rank coal with iron ore or other metal oxide bearing media to form a paste that is dewatered using the Coldry process. The 'composite' pellets are then fed into the Company's simple low cost, low emission, patented Matmor retort where the remaining moisture is removed, the coal volatiles are harnessed, and the iron oxides are reduced to metal.

The Matmor process operates below 1000°C, compared to a blast furnace which operates at around 1500°C. Lower temperature operation requires less energy input and results in less thermal stress on the plant, enabling lower cost materials to be used in its construction.

Matmor metal product is an ideal feedstock for the production of specific grades and forms of iron and steel, via secondary processes such as electric arc, induction furnace or fully integrated steel making.

# Intellectual property

The consolidated entity owns both the Coldry and Matmor intellectual property. Aspects of the Coldry process are covered by patents in all major markets with significant brown coal deposits.

Matmor is covered by an Australian patent, and due to its intrinsic reliance on Coldry for feedstock preparation, is afforded an additional degree of protection via Coldry patents. In markets where neither Coldry nor Matmor patents exist, the Company will employ other IP protection strategies.

In November 2017, the Company submitted its Patent Cooperation Treaty application following the submission of the Australian provisional patent application in November 2016. This is the next step in the intellectual property protection of the Company's new HydroMOR technology platform. The filing sets in place the timetable for the subsequent national based process for IP protection, where individual patent submissions will be made in each geography of interest. HydroMOR is an improvement over the existing Matmor process, deriving further advantage from its unique raw material base, especially the hydrocarbon-rich low-rank coals used in the role of reductant. The process derives its name from the utilisation of hydrogen to enhance the reduction process used to produce metals from ore.

The benefits the Company sees in the application of the HydroMOR process include further reductions in capital cost due to its ability to achieve the required metal reduction at a lower temperature, and operating savings in terms of raw material efficiency improvements, as well as decreased CO<sup>2</sup> intensity. With the capital cost savings being applied to carbon offsets, this brings closer the potential of carbon emissions neutral steel production.

# Equity Lending Facility (ELF)

During the period, ECT Finance Ltd, a subsidiary of the Company, offered ELF loans to holders of ESIOA and ESIOB options, for the sole purpose of financing the exercise of these options and conversion into Fully Paid Ordinary shares of the Company.

### 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 \$5,133,685 (30 June 2017: \$4,357,282).

Major Highlights:

(i) ECT Finance Ltd

In July and August 2017, the consolidated entity's subsidiary, ECT Finance Ltd, entered into limited recourse loans with option-holders allowing them to obtain finance to exercise ESIOA and ESIOB options. Loans expire on 30 July 2020. As at reporting date there are 1,159,584,270 shares held as security for these loans.

(ii) New research and development rebate loan with Brevet

On 10 May 2018, the Company signed a loan agreement for a new research and development rebate loan facility with its existing debt provider, New York-based Innovation Structured Finance Co. LLC (Brevet) for the financial year ended 30 June 2018. The loan facility allows for the provision of funding to the Company of up to \$4 million. The Company's research and development tax rebate received represents the security for the facility. The defaults and covenants contained within the agreement are typical of those that may be expected for a facility of this type.

On 3 August 2018, the Company signed a new Secured Loan Agreement with Brevet for the 2018/19 financial year for \$4 million on the same terms and conditions as the previous facility.

(iii) Receipt of research and development tax incentive and repayment of December 2017 Brevet loan balance

On 17 January 2018, the Company received the full amount of the research and development tax incentive receivable recognised in the financial statements at 30 June 2017 amounting to \$2,015,295. This was partially used to fully

repay borrowings in respect of the 2017 financial year from Brevet Capital.

(iv) India project

On 30 May 2018, the Company signed a project agreement for the largest ever (~AUD\$35 million) research and development collaboration between Australia and India for the joint development of its two leading technologies - Matmor and Coldry. The Company's partners, NLC India Limited (NLCIL) and NMDC Limited (NMDC), majority Indian government owned enterprises and India's largest lignite (brown coal) and iron ore miners respectively, will fund the project in return for 25.5% each of the equity in the ensuing joint-venture entity. The first order of business under the project agreement is the finalisation and execution of a set of detailed sub-agreements, which form a condition precedent to financial close. The partners expect these agreements will be signed prior to the end of October 2018.

(v) Coldry High Volume Test Facility (HVTF)

Under the Federal Government's research and development tax incentive program, product generated from eligible experimental activity is permitted to be sold. The Company is pleased to report that the Coldry solid fuel test product consumed by participants in the Company's trial programs has performed well and, as a result, the Company continues to supply these customers with further product generated by its experimental activity on an ongoing basis. The Company is now expanding its HVTF test program and will continue to make Coldry solid fuel test product available for sale to these consumers across Victoria and Tasmania.

In addition to the successful initial testing across several consumers and the subsequent ongoing sale of available Coldry solid fuel over recent months, the Company also assisted customers with the review and scoping of boiler upgrades, with a focus on Coldry handling systems, allowing for progressive scale up as capacity at the Bacchus Marsh site is expanded.

The establishment of regular sales of Coldry solid fuel test product supports the planned Stage 3 upgrade of the HVTF to a capacity of up to 35,000 tonnes a year, including development of an expanded raw materials handling and finished product storage capacity. The upgrade activity at the HVTF will further support collection of critical scale-up research data to inform aspects of both the integrated Coldry demonstration and Matmor pilot plant project in India and the Company's proposed Latrobe Valley project here in Australia.

#### (vi) Latrobe Valley project

A feasibility study for the proposed establishment of a large-scale Coldry demonstration plant of ~170,000 tonnes per annum capacity has commenced. The feasibility study scope entails: Phase 1: Scoping study and selection phase; Phase 2: Pre-feasibility study; Phase 3: Feasibility study and funding assessment. Phase 1 was completed and announced (15 November 2017), highlighting the Company's partnership with Energy Australia for potential site location and coal supply. The Company's focus on advancing the India project has taken priority since the conclusion of Phase 1, resulting in a pause in activity around the Latrobe Valley project in recent months. The initial scoping and site selection provided a solid foundation to proceed to pre-feasibility and the Company looks forward to progressing this program in coming months.

This proposed project holds significant short-term interest in providing increased energy security and affordability through diversification of Victoria's energy solutions and longer-term interest as a gateway enabler to the deployment of High-Efficiency, Low Emissions (HELE) electricity production and low emission chemical production, including hydrogen, from Victoria's world-class lignite assets. HELE power stations, hydrogen production and fertilizer production are all industries of the future for the Latrobe Valley and they all share the common need to reduce moisture content of brown coal. Following successful scale up, Coldry has the potential to deliver this outcome economically and with zero-emissions when integrated with a waste heat source.

#### (vii) ECT Finance Ltd

During the period, ECT Finance Ltd, a subsidiary of the Company, offered ELF loans to holders of ESIOA and ESIOB options, for the sole purpose of financing the exercise of these options and conversion into Fully Paid Ordinary shares of the Company. As announced on 1 August 2017, ECT Finance Ltd approved approximately \$14,100,000 worth of ELF loans. During the year, ECT Finance Ltd has received \$536,325 in principal and interest payments. Cashflows raised through repayment of principal and interest over the loan period will be available to the Company to finance ongoing working capital.

The value of the loan book as at 31 July 2018 is \$15,259,809 (including interest accrued and capitalised to the loans to 31 July 2018). The value of security held is \$16,234,180 (based on a 1.4c share price). The loans are scheduled to expire on 30 July 2020 and interest rates across each of the loans can vary according to payment methods. For accounting purposes, the ELF loans (and the related shares issued) are treated as the issue of options as required by accounting standards (refer to notes 21 and 22 to the financial statements for further details). Notwithstanding this, the loans represent funds owed to ECT Finance Ltd by shareholders pursuant to commercial and legal contracts.

#### (viii) Issue of options

ECTOC options (originally called ESIOC options) were bonus options issued to shareholders on the basis of one option for every four shares held as at 21st July 2017. This resulted in the issue of issue of 846,088,751 ECTOC options with an exercise price of \$0.045 and expiry date of 31 July 2019.

#### Financial results:

The reportable loss for the consolidated entity was higher at \$5,133,685 compared to the prior year loss of \$4,357,282. This result is a combination of a decrease in total recorded income and increase in expenses. Cash expenses increased year on year, driven largely by increases in Bacchus Marsh plant activity and upgrades, and India project preparation works. Non-cash expense items decreased.

Sales of by-products from the consolidated entity's research and development activities decreased by \$23,159 as preparations were made to upgrade the HVTF and market testing of the solid fuel product continued.

The 'Other Income' category of \$1,699,766 (2017: \$2,016,075) largely represents the AusIndustry research and development tax incentive. The research and development tax incentive rebate earned within the year decreased due to lower qualifying depreciation and amortisation expenditure.

Corporate costs increased by \$793,494 which is attributable to the establishment and operating costs of ECT Finance Ltd, increased costs associated with the India project that are not eligible for the research and development tax incentive, government, media and investor relations and increased ASX costs. Finance costs decreased by \$192,611.

Depreciation and amortisation recorded a year on year decrease of \$1,809,665. This was driven by the conclusion of depreciation on much of the Matmor and Coldry test plant and associated assets. Depreciation and amortisation is a non-cash expense line.

Finally, the change in fair value of financial liabilities represents the combined movement in the Coldry earn-out creditor (the present value of future commitments, associated with the purchase of the Coldry intellectual property in 2009) and the Matmor deferred consideration (the present value associated with the purchase of the Matmor Test Plant assets in 2014). There was an increase in the expense for the period which reflects the remeasurement to the future anticipated cash flows associated with those liabilities.

## Significant changes in the state of affairs

During the period, ECT Finance Ltd, a subsidiary of the Company, offered ELF loans to holders of ESIOA and ESIOB options, for the sole purpose of financing the exercise of such options and conversion into Fully Paid Ordinary shares of the Company. Further details in relation to these loans is contained in the Review of Operations section within this report and the accompanying financial statements.

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 matters have arisen since 30 June 2018 that have 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:

- On 10 July 2018, the Company approved the exercise of 170 million unlisted options under an ELF. The transaction requires that the resulting shares be secured as collateral and restricted from trading until the loan established under the ELF is repaid in full.
- On 27 July 2018, the Company announced the completion of the integrated basic engineering design program for the Coldry-Matmor project in India.
- On 3 August 2018, the Company signed a Secured Loan Agreement with Innovation Structured Finance Co. LLC (Brevet) for a research and development rebate loan facility for the 2018/19 financial year of \$4 million on the same terms and conditions as the previous facility.
- On 9 August 2018, the Company announced the signing of a contract for a 5-year supply contract for the sale of Coldry solid fuel in the Victorian market via the provision of a turnkey solution for steam services with an estimated value of \$1.3 million. The contract outlines the commercial terms and will be followed by a three-month construction and services commissioning phase. The supply of Coldry as a component of this agreement would have an immaterial impact on the present value of the estimated cash flows in relation to the deferred consideration payable for the acquisition of the Coldry intellectual property and is therefore a non-adjusting event.
- On 15 August 2018, the Company announced that an agreement had been executed to extend financial close of the India Pilot Plant project agreement to 31 October 2018. The extension was requested by NLC India Limited to allow further time to complete their review and approval processes following changes to key personnel. Parallel engineering and recruitment activities are continuing in support of project commencement.

No other matter or circumstance has arisen since 30 June 2018 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

Delivery of the Integrated Coldry Demonstration and Matmor Pilot Plant is the consolidated entity's primary objective. To that end the consolidated entity has developed its India strategy to establish a partnership with two leading Indian government public sector undertakings (PSU's), NLC India Ltd (NLCIL) and NMDC Ltd (NMDC), for the largest ever research and development collaboration between Australia and India.

Commencing with an ~AUD\$35 million research and development phase, the project aims to scale up the consolidated entity's Matmor and Coldry technologies to deliver an integrated Coldry demonstration and Matmor pilot plant to validate their technical and economic feasibility at a capacity of approximately 2 tonnes of metal output per hour.

Following successful phase one research and development outcomes, the project agreement provides the framework to proceed with a commercial-scale integrated steelmaking facility. The partners have previously contemplated the potential scope for the commercial phase via the techno-economic feasibility study completed in July 2016, which includes a notional capacity of 500,000 tonnes per annum steel output and an estimated AUD\$300 million capital investment. The site for the research and development plant at NLCIL has been chosen to allow room for expansion into a commercial-scale facility as required.

The consolidated entity also continues to evaluate and consider the prospects and merits of a commercial demonstration plant in Victoria to scale up the technology, as well as support growing domestic demand for solid fuel products to support the utility heating requirements of a range of industries in Victoria and Tasmania.

## 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 Demonstration Plant, this status will change. Appropriate planning is in place to manage this transition.

## Information on directors

Name Glenn Fozard

**Title** Executive Chairman

**Qualifications** BBus (Int. Trade), BA (Psych)

**Experience and expertise**Glenn has a strong commercial background and extensive experience in 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.

Glenn is the founding partner of Greenard Willing, a specialist financial advisory firm. Glenn held an advisory position with the Company prior to becoming a

director in 2013.

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

**Special responsibilities**Member of Remuneration, Nomination and Governance Committee

**Interests in shares** 8,000,000 ordinary shares

Interests in options Nil

**Contractual rights to shares** 42,000,000 shares (held as security under the ELF)

Name Barry Richards

**Title** Non-Executive Director

**Qualifications** MAICD

**Experience and expertise**Barry has a strong industry and commercial background of over 30 years including his role as Managing Director of Mecrus Pty Ltd since its formation over 16 years

ago, contract and business development roles with Siemens / Silcar, and operations and maintenance management experience with the State Electricity Commission of Victoria (SECV). He provides extensive experience in business management, major project development and delivery, coal plant operations and maintenance and

has a broad understanding of technology and process development.

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

**Special responsibilities**Chair of Remuneration, Nomination and Governance Committee

Interests in shares Nil
Interests in options Nil

Name David Smith

**Title** Non-Executive Director

**Qualifications** Bachelor of Commerce, Bachelor of Laws (Hons), GAICD

**Experience and expertise**David has a strong legal and commercial background, having practised commercial law for over 25 years including nearly 20 years as a partner in national firms. He is

currently a partner in the intellectual property and technology group at Gadens Lawyers. He has assisted many companies with protecting their intellectual property,

IP commercialisation agreements, collaborative research agreements and international negotiations. David chairs the Company's Audit and Risk Committee.

Best Lawyers named David as 2018 Lawyer of the year — Privacy and Data Security Law for Melbourne, Australia. He is also currently listed as a "Best Lawyer" for Intellectual Property Law, Information Technology Law and Gaming Law. Doyle's Guide lists David as a recommended non-contentious intellectual property lawyer

for 2018. David is the immediate past President of Bicycle Network and is a graduate of the Australian Institute of Company Directors (AICD).

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

**Special responsibilities**Chair of Audit and Risk Committee

Interests in shares Nil
Interests in options Nil

Name Ashley Moore

 Title
 Managing Director (resigned 16 October 2017)

 Qualifications
 BEng(Chem)(Hons), 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 30 years in industry. Ashley joined the Company in 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

Interests in shares45,138,892 ordinary sharesInterests in options11,284,723 ECTOC options

**Contractual rights to shares** 37,046,173 shares (held as security under the ELF)

'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

Martin Hill was appointed to the position of Company Secretary on 15 December 2017 and has extensive experience in the areas of general management and accounting across a range of industries including manufacturing, finance and service providers. He also acts as the Company's Chief Financial Officer and is a member of the Audit and Risk Committee. His role encompasses the key responsibility areas of finance, accounting and governance with a focus on managing these functions across multiple jurisdictions.

# 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 2018, and the number of meetings attended by each director were:

	Full Board			Remuneration, Nomination and Governance Committee		Audit and Risk Committee	
	Attended	Held	Attended	Held	Attended	Held	
Glenn Fozard	13	13	2	2	-	-	
Ashley Moore	3	3	-	-	1	1	
David Smith	13	13	-	-	4	4	
Barry Richards	13	13	2	2	-	-	

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 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.

At the 2017 AGM of the Company, David Smith and Glenn Fozard were both re-elected.

## Remuneration report (audited)

The remuneration report details 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 consolidated entity, directly or indirectly, including all directors.

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 KMPs in similar positions in other companies.

The non-executive directors, through the Remuneration, Nomination and Governance Committee is responsible for the executive reward framework and making recommendations on remuneration packages and policies applicable to the Board members and senior executives of the Company. The framework aligns executive reward with the achievement of strategic objectives and the creation of value for shareholders and is consistent with market best practice. It is the aim of the Board that the executive reward structure satisfies appropriate corporate

governance guidelines such that it is competitive and reasonable, acceptable to shareholders, aligns remuneration with KMP performance indicators, and is transparent to all stakeholders.

In accordance with best practice corporate governance, the structure of non-executive director and executive director remuneration is separate.

## Non-executive directors' remuneration

Fees and payments to non-executive directors reflect the demands and responsibilities of their role. Non-executive directors' fees and payments are reviewed annually by the Remuneration, Nomination and Governance Committee. The Remuneration, Nomination and Governance Committee may, from time to time, receive advice from independent remuneration consultants to ensure that non-executive directors' remuneration is appropriate and in line with the market. Non-executive directors do not receive share options or other incentives.

The aggregate non-executive director remuneration is determined by a general meeting. Effective 1 July 2012, the base fee payable to non-executive directors for discharging their duties as directors was 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.

The Company has a three-tier base remuneration and a two-tier additional remuneration structure in place as follows:

#### Three tier base remuneration:

- Non-executive directors \$25,000
- Non-executive directors (committee members) \$50,000
- Trainee Director \$30,000

#### Two tier additional reward remuneration structure

- Committee chair \$10,000
- Chairman \$25,000

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 responsibilities of the non-executive director;
- 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 if absent, their delegate)
  must report to the Board on the budgetary impact to
  the Company of the proposed engagement of the nonexecutive director. Any engagement of a non-executive
  director to provide those additional services must be
  unanimously approved by all directors (other than the nonexecutive 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 Chairman does not make any decisions relating to his own remuneration. The remuneration levels are reviewed regularly to ensure the Company remains competitive as an employer.

#### **Executive remuneration and reward framework**

The executive remuneration and reward framework has four components which comprises an executive's total remuneration:

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

Fixed remuneration, consisting of base salary, superannuation and non-monetary benefits, is 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 remuneration levels.

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 may be granted to

executives based on specific annual targets and key performance indicators (KPIs) being achieved. KPIs include profit contribution, customer satisfaction, leadership contribution and project management. There were no STI's granted during the year.

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

#### Use of remuneration consultants

During the financial year ended 30 June 2018 the consolidated entity, through the Nomination, Remuneration and Governance Committee, engaged the Remuneration Strategies Group at a cost of \$8,000 payable on invoice for the purpose of providing advice on an employee share purchase plan. No specific recommendations were made in relation to any individual staff member or KMP. No other advice was provided by the remuneration consultant.

The Board is satisfied that any recommendations made have been free from undue influence of any director or KMP

## Voting and comments made at the Company's 2017 Annual General Meeting ('AGM')

At the 2017 AGM, 68.2% of the votes received supported the adoption of the remuneration report for the year ended 30 June 2017. The Company did not receive any specific feedback at the AGM regarding its remuneration practices.

The function of reviewing and approving director and executive remuneration is undertaken by the Remuneration, Nomination and Governance Committee of the Board. This committee comprises the incumbent Chairman of the Company and one non-executive director.

It is relevant to the discussion of remuneration that the consolidated entity is experiencing a substantial growth in the scope and complexity of its operations commensurate with implementation of its major strategic projects.

At the Company's AGM in 2017, when the resolution that the remuneration report for the last financial year be adopted was put to a vote, more than 25% of the votes cast were against adoption of that report.

To address this, and within this context set out above, the Board, and the Remuneration, Nomination and Governance Committee, have taken a number of steps over the past 12 months to ensure that the Company's remuneration structures remain appropriate in the context of both the Company's operations and the level of responsibility and accountability that resides within director and executive roles. This activity has included:

- Conducting year on year executive performance review programs for all senior executives. Inclusive in this program is a review and assessment of remuneration.
- All executive position descriptions, against which remuneration and performance are assessed, were updated in the financial year 2018 to reflect and respond to changes in core functions and responsibilities of these roles. These will be reviewed again in the current financial year.
- The Company, under guidance of the Board, has commenced a review program of its current and future staffing structure and executive leadership which supports the Company's strategic plan.
- Any planned or additional executive recruitment programs
  will continue to be implemented in consultation with
  professional recruitment firms who, as part of this service,
  benchmark employee salaries to specific industries and
  broader market measures. Any recommendation they make
  on salaries will be presented directly to the non-executive
  director on the Remuneration, Nomination and Governance
  Committee.

Throughout the financial year 2018, the Board has continued to assess its need for additional skilled resources and to measure this need against the additional costs of further appointments. No additional director appointments were made during the financial year 2018, and one director resigned which reduced the size of the Board from 4 to 3 directors.

The Board, through the Remuneration, Nomination and Governance Committee, will continue to review and assess its practices in this regard and ensure that it maintains the quality and depth of resources needed to execute its strategic plan.

The Board is confident that the Company's remuneration levels appropriately balance the need to pay competitive remuneration to attract quality personnel to a company of this nature, and retain them, against the Company's philosophy of "frugal innovation". This is a difficult balance to strike and the Board will continue to review it.

## Details of remuneration

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

- Glenn Fozard Chairman and Executive Director
- Ashley Moore former Managing Director of the Company (now director of ECT India)
- David Smith Non-Executive Director

- Barry Richards Non-Executive Director
- Martin Hill Chief Financial Officer & Company Secretary
- James Blackburn Chief Operating Officer

#### **Amounts of remuneration**

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

		Short-term benefits		Post-employment benefits	Long-term benefits	Share-based Payments	
2018	Cash Salary \$	Consulting fees \$	Non-monetary \$	Super-annuation \$	Leave benefits \$	Equity-settled \$	Total \$
Non-executive Directors							
David Smith	54,795	-	-	5,205	-	-	60,000
Barry Richards	-	54,166	-	-	-	-	58,333
<b>Executive Directors</b>							
Glenn Fozard(a)	75,000	232,300	3,558	-	-	-	310,858
Ashley Moore(a),(b)	72,752	-	-	6,418	12,763	-	91,933
Key Management Personn	el						
Martin Hill	84,234	-	-	7,612	-	-	91,846
James Blackburn (c)	175,436	-	56,037	15,613	-	106,399	353,485
	520,550	232,300	59,595	34,848	12,763	106,399	966,455

- a) Glenn Fozard's and Ashley Moore's remuneration includes a 2% discount on their ELF loans.
- b) Represents Ashley Moore's remuneration up to date of resignation as a director of the Company and cessation as KMP.
- As part of James Blackburn's compensation package, a limited recourse loan was provided to support the acquisition of fully paid ordinary shares at market pricing. Subject to vesting conditions (continued tenure with the Company), the debt will be waived at conclusion of the loan period. The amount of equity settled share based payments represent amortisation of the loan for the year. Non-monetary benefits represent the grossed up taxable value of deemed interest and interest paid by the Company in respect of the limited recourse loan.

	Short-term benefits		Post- employment benefits	Long-term benefits	Share-based Payments		
2017	Cash Salary \$	Consulting fees \$	Non- monetary \$	Super- annuation \$	Leave benefits \$	Equity-settled \$	Total \$
Non-executive Directors							
David Smith	54,794	-	-	5,206	-	-	60,000
Barry Richards	-	54,166	-	-	-	-	54,166
<b>Executive Directors</b>							
Glenn Fozard (a)	-	156,550	-	-	-	(15,643)	140,907
Ashley Moore (b)	239,956	-	-	19,615	53,559	-	313,130
Other Key Management Personnel							
James Blackburn (c)	100,912	-	-	9,586	5,766	62,200	178,464
	395,662	210,716	-	34,407	59,325	46,557	746,667

For the financial year, the proportions of fixed remuneration and remuneration that is linked to performance are as follows:

Name	Fixed Remuneration 2018	Fixed Remuneration 2017	At risk LTI 2018	At risk LTI 2017
Non-executive Directors				
Barry Richards	100%	100%	-	-
David Smith	100%	100%	-	-
Executive Directors:				
Glenn Fozard *	100%	100%	-	-
Ashley Moore	100%	100%	-	-
Other Key Management Pers	sonnel:			
Martin Hill	100%	100%	-	-
James Blackburn	70%	65%	30%	35%

<sup>\*</sup> Glenn Fozard's remuneration for the 2017 year as shown in the remuneration table above reflects the expiry of unvested options (LTI), the value of which is required to be reversed pursuant to accounting standards. This produces a negative LTI remuneration expense and would result in a negative LTI percentage of (10%) which has not been shown in the above table.

- a) Glenn Fozard's remuneration includes the granting of performance-based options. During the year,
   11,000,000 options expired without meeting vesting conditions. This has had a negative impact on his remuneration for the financial year.
- Ashley Moore's remuneration package for the year was \$250,000 inclusive of salary and superannuation plus \$9,572 of annual leave sacrificed to super.
- c) As part of James Blackburn's compensation package, a limited recourse loan was provided to support the acquisition of fully paid ordinary shares at market pricing. Subject to vesting conditions (continued tenure with the Company), the debt will be waived at conclusion of the loan period. The amount of equity settled share-based payments represent amortisation of the loan waived at conclusion of the loan period. The amount of equity settled share-based payments represent amortisation of the loan for the year.

## Service agreements

The Company has employment agreements with all executives. These contracts are capable of termination in accordance with standard employment terms. With the exception of Glenn Fozard, 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 of the following KMP has a written agreement governing their service with the Company, and separate agreements, where appropriate, for the discharge of executive responsibilities or the provision of other services.

Name:	Glenn Fozard
Title:	Executive Chairman
Agreement commenced:	16 May 2017
Term of agreement:	3 years
Details:	Executive remuneration (contract) at \$100 per hour capped at 198 hours per month. No leave or superannuation is payable under this contract. The contract may be terminated by either party providing six months written notice.

Name:	Ashley Moore
Title:	Director - ECT India
Agreement commenced:	23 June 2013
Term of agreement:	Ashley Moore's employment may be terminated by either party by providing three (employee) or six (Company) months written notice of termination
Details:	Annual salary, including superannuation, of \$250,000

Name:	Martin Hill
Title:	Chief Financial Officer and Company Secretary
Agreement commenced:	23 November 2017
Term of agreement:	Martin Hill's employment may be terminated by either party by providing two months written notice of termination
Details:	Annual salary, including superannuation, of \$160,000

Name:	James Blackburn
Title:	Chief Operating Officer
Agreement commenced:	22 November 2016
Term of agreement:	James Blackburn's employment may be terminated by either party by providing three months written notice of termination
Details:	Annual salary, including superannuation, of \$189,435

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. Key management personnel have no entitlement to termination payments in the event of removal for misconduct.

## 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 2018.

## **Options**

There were no options over ordinary shares issued to directors and other KMP as part of their compensation either during the year, or since the end of the financial year.

## Additional information

The earnings of the consolidated entity for the five years to 30 June 2018 are summarised below:

	2018 \$	2017 \$	<b>2016</b> \$	2015 \$	2014 \$
Income*	1,838,563	2,392,705	2,400,899	1,691,785	1,644,631
EBITDA	(4,052,141)	(1,273,462)	(548,691)	(712,630)	(949,154)
EBIT	(4,052,141)	(3,971,071)	(3,579,708)	(2,605,844)	(1,468,697)
Loss after income tax	(4,052,141)	(4,357,282)	(4,238,067)	(3,716,176)	(2,548,113)

<sup>\*</sup> Income includes favourable changes in the fair value of financial liabilities in 2017.

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

	2018 \$	2017 \$	2016 \$	2015 \$	2014 \$
Share price at financial year end (\$)	0.012	0.012	0.10	0.018	0.002
Basic earnings per share (cents per share)	(0.151)	(0.154)	(0.160)	(0.155)	(0.122)

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 given that the Company is essentially still engaged in a research and development phase of operations.

# Additional disclosures relating to key management personnel

## **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:

Ordinary shares	Balance at the start of the year	Received as part of remuneration	Additions	Other movements	Balance at the end of the year
Glenn Fozard (a)	-	-	50,000,000	-	50,000,000
Ashley Moore (b)	40,138,892	-	42,046,173	-	42,046,173
Martin Hill (c)	-	-	1,300,000	600,000	1,900,000
James Blackburn (d)	25,000,000	-	-	-	25,000,000
Total	65,138,892	-	93,346,173	600,000	159,085,065

- a) Additions to Glenn Fozard's shareholding during the financial year relate to shares issued on exercise of ESIOA and/or ESIOB options via the ELF. A total of 50,000,000 shares were issued under the ELF. All shares issued under the ELF are held in escrow and cannot be traded until the loans drawn down to acquire such shares have been paid. Loan repayments of \$72,000 have been made during the year which resulted in 8,000,000 shares being released as security.
- b) Additions to Ashely Moore's shareholding are made up of 5,000,000 shares issued on the conversion of options paid for in cash and 37,046,173 shares issued under the ELF. Mr Moore resigned as a director in October 2017.
- c) Martin Hill commenced employment with the Company on 23 November 2017 at which time he owned 600,000 shares. This is represented in the 'other movements' figure.
- d) Part consideration for acquisition of these shares has been deferred pursuant to a separate loan funded share plan.

## **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:

Options over ordinary shares	Balance at the start of the year	Issued	Exercised	Expired/ forfeited/ other	Balance at the end of the year
Ashley Moore	42,046,173	11,284,723	(42,046,173)	-	11,284,723
Glenn Fozard	50,000,000	-	(50,000,000)	-	-
Martin Hill	-	150,000	-	-	150,000
Total	92,046,173	11,434,723	(92,046,173)	-	11,434,723

<sup>\*</sup> The above table does not include the in-substance issue or holding of options related to the ELF. The ELF relates to the issue of shares funded by limited recourse loans which are accounted for as an in-substance issue of options pursuant to accounting standard requirements within the financial statements of the Company

#### **ELF Loans**

Glenn Fozard was advanced \$450,000 under the ELF for the exercise of 50,000,000 options at \$0.009 each. Principal paid during the year was \$72,000 (2017: n/a). Interest paid during the year was \$13,146 (2017: n/a). Movements in the loan balance during the year consisted of principal advanced, interest incurred and principal repaid. Interest was payable on the outstanding balance at a rate of 7.39% calculated daily.

Ashley Moore was advanced \$339,249 under the ELF for the exercise of 36,073,950 options at 0.009 cents each and 972,223 options at an exercise price of \$0.015 each. Principal paid during the year was \$nil (2017: n/a). Interest paid during the year was \$nil (2017: n/a). Movements in the loan balance during the year consisted of principal advanced and interest incurred. Interest was payable on the outstanding balance at a rate of 7.39% calculated daily.

#### Other loans

- Glenn Fozard was advanced \$50,000 for the acquisition of 50,000,000 options in 2015 which has been fully repaid (2017: \$36,000 repaid). Interest incurred during the 2018 financial year was \$3,557 (2017: \$2,182). Interest repaid during the year was \$3,557 (2017: \$2,182). Movements in the loan balance during the year consisted of interest incurred and payments made. Interest was payable on the outstanding balance at the rate of 6% p.a. calculated daily.
- James Blackburn was advanced \$275,000 in the 2017 year to partly fund the acquisition of 25,000,000 shares issued at \$0.02 each. The loan is subject to proportionate settlement over the period of the loan, with such settlement deemed to occur as Mr Blackburn fulfils his employment over the duration of 3 years. As such, amortisation of the deferred component forms part of Mr Blackburn's remuneration over the period of the arrangement. Subject to certain vesting conditions, amongst them continued tenure with the Company, the debt will be waived following the completion of the loan period (on 30th June 2019). The loan is provided on an interest free basis. The shares issued are subject to lock-up from the date of issue (1 December 2016) for a term of 3 years, or, in the event that Mr Blackburn's employment terminates, upon a cash settlement of the unamortised principal balance. The fair value of the deferred settlement component at grant date was \$246,779, calculated as the present value of the deferred principal outstanding discounted at an interest rate of 6.5%. An amount of \$106,399 (2017: \$62,200) was charged as a share-based payment expense for the year representing the amortisation of the settlement amount for the period and the deemed compensation received by Mr Blackburn.

Other transactions with key management personnel and their related parties

During the period, the Company paid Mecrus Pty Ltd, an entity associated with Barry Richards, for engineering support services during the period. Such payments were on normal arm's length commercial terms. The value of services provided was \$169,873 (2017: \$108,412).

This concludes the remuneration report, which has been audited.

### **Shares under option**

Unissued ordinary shares under option at the date of this report are as follows:

	Expiry date	Exercise Price	Number under option
Listed ordinary options (ECTOC)	31 July 2019	\$0.045	846,088,751

The options table above does not include the in-substance issue of options (ELF Options) relating to arrangements involving the issue of shares financed by limited recourse loans. Accounting for such as an in-substance issue of options is a requirement of accounting standards.

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 or interests issued on the exercise of options

Shares or interests in the Company issued during or since the end of the year as a result of the exercise of an option over unissued shares were as follows:

	Exercise price	Number of shares issued
ESIOA Options	\$0.009	921,505,742
ESIOB Options	\$0.015	662,163,547
Unlisted Options	\$0.015	170,000,000
Total		1,753,669,289

The above shares issued include shares that were financed by the ELF of ECT Finance Ltd. The details of this facility are disclosed within the Annual Report (refer to notes 21 and 22 of the financial statements for details). Shares issued under the ELF are held as security and remain restricted from trading by the shareholder until the debt issued to the respective shareholder has been repaid and the shares released. These shares are accounted for as the in-substance issue of options for accounting purposes.

Of the shares issued on exercise of options detailed in the above table, 1,358,020,273 shares (relating to 1,188,020,273 ESIOA/ESIOB options converted on 31 July 2017 and 170,000,000 unlisted options converted on 10 July 2018) were issued as part of an ELF scheme and were held as security. As at the date of this report, 28,436,003 shares have since been released to the shareholders on the basis that the shareholder's ELF debt was repaid.

As at the date of this report, there are therefore 1,329,584,270 shares on issue and held as security where monies (principal and interest loans) are owing to the Company. The term of such loans is 3 years. Should loans remain unpaid at expiry, ECT Finance Ltd has recourse to those shares held as security and may settle the outstanding debt with the borrower via a number of mechanisms including but not limited to a) disposal of shares on the market with the proceeds used to repay the loan and b) selective buy-back in exchange for debt forgiveness by the parent company.

#### 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 partners of BDO East Coast Partnership

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

2018 Annual Report 55

## 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

Glenn Fozard

**Executive Chairman** 

30 August 2018

Melbourne



Tel: +61 3 9603 1700 Fax: +61 3 9602 3870 www.bdo.com.au Collins Square, Tower Four Level 18, 727 Collins Street Melbourne VIC 3008 GPO Box 5099 Melbourne VIC 3001

# DECLARATION OF INDEPENDENCE BY WAI AW TO THE DIRECTORS OF ENVIRONMENTAL CLEAN TECHNOLOGIES LIMITED

As lead auditor of Environmental Clean Technologies Limited for the year ended 30 June 2018, I declare that, to the best of my knowledge and belief, there have been:

- 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.

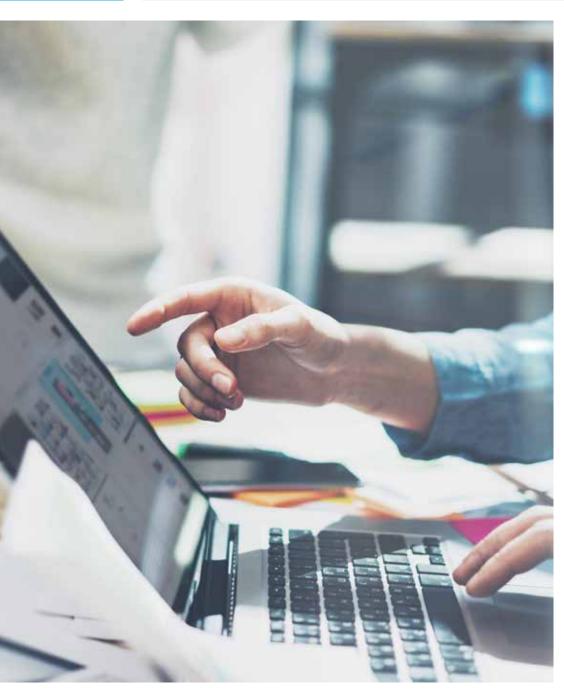
This declaration is in respect of Environmental Clean Technologies Limited and the entities it controlled during the period.

Wai Aw Partner

**BDO East Coast Partnership** 

Melbourne, 30 August 2018

BOD East Closel Partnership, ABM 83 238 997 76 is a member of a national association of independent entities which are all members of 8DO Australia Ltd. after 75 050 to 1077, an Australian company intende by generative. BOD Class Code Partnerships and BOD Australia Ltd. as W.C. company limited by generative. BOD Class Australia Ltd. as W.C. company limited by generative, and firm part of the international EDO network of independent member firms. Liability limited by a scheme approved under Professional Standards Leptiological, other than the the action constitution of Financial services licensees.



# Contents

#### 30 June 2018

Statement of profit or loss and other comprehensive income	57
Statement of Financial Position	58
Statement of Changes in Equity	59
Statement of Cashflows	60
Notes to the Financial Statements	61
Directors' declaration	91
Shareholder Information	94

## General information

The financial statements comprise those of Environmental Clean Technologies Limited as a consolidated entity consisting of Environmental Clean Technologies Limited ('the Company') and the entities it controlled at the end of, or during, the year (together referred to as 'the consolidated entity'). The financial statements are presented in Australian dollars, which is the consolidated entity'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:

388 Punt Road South Yarra, VIC, 3141 Australia

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 30 August 2018. 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 2018

		Consolida	ated
	Note	2018 \$	2017 \$
Revenue	4	138,797	111,416
Other income	5	1,699,766	2,016,075
Expenses			
Remeasurement of financial liabilities	6	(186,626)	265,214
Corporate costs		(1,571,937)	(778,443)
Legal costs		(315,495)	(315,495)
Employee benefits expense	7	(1,399,517)	(1,127,979)
Sales and marketing		(78,956)	(72,516)
Depreciation and amortisation expense	7	(877,944)	(2,687,609)
Engineering and pilot plant costs		(1,996,900)	(1,120,281)
Occupancy expense		(120,080)	(189,875)
Travel and accommodation		(221,193)	(102,123)
Finance costs	7	(203,600)	(396,211)
Loss before income tax expense		(5,133,685)	(4,357,282)
Income tax expense	8	-	-
Loss after income tax expense for the year attributable to the owners of Environmental Clean Technologies Limited	23	(5,133,685)	(4,357,282)
Other comprehensive income for the year, net of tax		-	-
Total comprehensive income for the year attributable to the owners of Environmental Clean Technologies Limited		(5,133,685)	(4,357,282)
		Cents	Cents
Basic earnings per share	37	(0.151)	(0.154)
Diluted earnings per share	37	(0.151)	(0.154)

The above statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes

# Statement of Financial Position

### As at 30 June 2018

				Consolida	ited
			Note	2018 \$	2017 \$
		Cash and cash equivalents	9	611,751	588,682
	Current Assets	Trade and other receivables	10	1,801,759	2,334,502
	Cur Ass	Other	11	75,811	55,813
S		Total current assets		2,489,321	2,978,997
Assets	Ħ	Investments accounted for using the equity method		1	2
4	urre	Property, plant and equipment	12	238,790	455,637
	Non-current assets	Intangibles	13	5,280,000	5,760,000
	ž	Total non-current assets		5,518,791	6,215,639
		Total assets		8,008,112	9,194,636
	ies	Trade and other payables	14	454,041	723,460
	Current liabilities	Borrowings	15	1,245,713	1,483,257
	rt lia	Provisions	16	152,948	86,175
v	rren	Other financial liabilities	17	491,573	997,267
Liabilities	<b>5</b>	Total current liabilities		2,344,275	3,290,159
iabi	s	Borrowings	18	84,379	73,930
_	Non-current liabilities	Provisions	19	1,480	68,926
	on-c iabi	Other financial liabilities	20	1,249,318	1,066,989
	ž	Total non-current liabilities		1,335,177	1,209,845
		Total liabilities		3,679,452	4,500,004
		Net assets		4,328,660	4,694,632
		Issued capital	21	70,244,766	63,371,602
Equity		Reserves	22	1,333,081	3,876,010
		Accumulated losses	23	(67,249,187)	(62,552,980)
		Total equity		4,328,660	4,694,632

The above statement of financial position should be read in conjunction with the accompanying notes

339,252

4,328,660

# Statement of Changes in Equity

#### For the year ended 30 June 2018

Shares issued on repayment of ELF loans

Balance at 30 June 2018

	Issued capital	Reserves	Accumulated Losses	Total Equity
Consolidated	\$	\$	\$	\$
Balance at 1 July 2016	60,084,680	4,157,764	(58,195,698)	6,046,746
Loss after income tax expense for the year	-	-	(4,357,282)	(4,357,282)
Other comprehensive income for the year, net of tax	-	-	-	-
Total comprehensive income for the year	-	-	(4,357,282)	(4,357,282)
Transactions with owners in their capacity as owners:				
Contributions of equity, net of transaction costs (note 21)	225,000	-	-	225,000
Share-based payments (note 38)	62,200	(15,643)	-	46,557
Shares issued on exercise of options (note 21)	2,733,611	-	-	2,733,611
Transfer option premium (exercised options) net of adjustments	266,111	(266,111)	-	-
Balance at 30 June 2017	63,371,602	3,876,010	(62,552,980)	4,694,632
	Issued capital			
		RACATVAC	Accumulated Income	Total Fourity
Consolidated		Reserves	Accumulated Losses	Total Equity
	\$	\$	\$	\$
Balance at 1 July 2017			<b>\$</b> (62,552,980)	\$ 4,694,632
Balance at 1 July 2017 Loss after income tax expense for the year	\$	\$	\$	\$
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax	\$	\$	\$ (62,552,980) (5,133,685)	\$ 4,694,632 (5,133,685)
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax  Total comprehensive income for the year	\$	\$	<b>\$</b> (62,552,980)	\$ 4,694,632
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax  Total comprehensive income for the year  Transactions with owners in their capacity as owners:	\$ 63,371,602	\$	\$ (62,552,980) (5,133,685)	\$ 4,694,632 (5,133,685) - (5,133,685)
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax  Total comprehensive income for the year  Transactions with owners in their capacity as owners:  Share-based payments (note 38)	\$	\$ 3,876,010	\$ (62,552,980) (5,133,685) - (5,133,685)	\$ 4,694,632 (5,133,685)
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax  Total comprehensive income for the year  Transactions with owners in their capacity as owners:  Share-based payments (note 38)  Expired options (note 22)	\$ 63,371,602	\$ 3,876,010 (437,478)	\$ (62,552,980) (5,133,685)	\$ 4,694,632 (5,133,685)  - (5,133,685)  106,398
Balance at 1 July 2017  Loss after income tax expense for the year  Other comprehensive income for the year, net of tax  Total comprehensive income for the year  Transactions with owners in their capacity as owners:  Share-based payments (note 38)	\$ 63,371,602 106,398 -	\$ 3,876,010	\$ (62,552,980) (5,133,685) - (5,133,685)	\$ 4,694,632 (5,133,685) - (5,133,685)

339,252 **70,244,766** 

1,333,081

(67,249,187)

The above statement of changes in equity should be read in conjunction with the accompanying notes.

# Statement of Cashflows

## For the year ended 30 June 2018

		Consoli	dated
	Note	2018 \$	2017 \$
Cash flows from operating activities		Ţ	Ą
Receipts from customers (inclusive of GST)		191,685	50,39
Research and development offset		2,047,139	1,524,47
Payments to suppliers and employees		(6,403,889)	(3,454,409
Other income		87,956	
Interest received		5,526	4,71
Interest and other finance costs paid		(263,127)	(396,211
Net cash used in operating activities	34	(4,334,710)	(2,271,042
Cash flows from investing activities			
Payments for property, plant and equipment		(181,097)	(1,054,301
Payments for security deposits		-	(15,125
Proceeds from disposal of property, plant and equipment		25,000	
Proceeds from release of security deposits		6,129	
Proceeds from loan repayments		14,000	11,00
Net cash used in investing activities		(135,968)	(1,058,426
Cash flows from financing activities			
Proceeds from issue of shares		4,464,254	2,958,61
Proceeds from issue of options		197,061	
Proceeds from borrowings		1,164,777	1,740,19
Repayment of borrowings		(1,332,345)	(1,464,965
Net cash from financing activities		4,493,747	3,233,83
Net increase/(decrease) in cash and cash equivalents		23,069	(95,632
Cash and cash equivalents at the beginning of the financial year		588,682	684,31
Cash and cash equivalents at the end of the financial year	9	611,751	588,68

The above statement of cash flows should be read in conjunction with the accompanying notes.

## Notes to the Financial Statements

#### 30 June 2018

## 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 or amended Accounting Standards and Interpretations adopted

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

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

### **Going concern**

For the financial year ended 30 June 2018, the consolidated entity had an operating net loss of \$5,133,685 (2017: \$4,357,282), net cash outflows from operating activities of (\$4,334,710) (2017: (\$2,271,042)) and net current assets at the reporting date of \$145,046 (2017: net current liabilities of \$311,162). The consolidated entity currently does not have a material source of revenue and is reliant on receipt of research and development tax incentives, ELF loan repayments, equity capital or loans from third parties to meet its operating costs.

The ability to continue as a going concern is dependent upon a number of factors, one being the continuation and availability of funds. The financial statements have been prepared on the basis that the consolidated entity is a going concern which contemplates the continuity of its business, realisation of assets and the settlement of liabilities in the normal course of business.

To this end, the consolidated entity is expecting to fund ongoing obligations as follows:

- utilisation of its current cash resources (in excess of \$600,000 at report date);
- sale of solid fuels produced in the course of execution of the Company's research and development plan;

- principal paid and interest earned from its ELF debt arrangements (treated as capital injections);
- drawdowns against the loan facility per the agreement with Brevet Capital of New York, secured over the Company's entitlements to available future research and development tax incentive receipts for which it has an Advance Finding and Overseas Ruling in relation to the Coldry component of its project in India; and
- issuance of the Company's securities under ASX Listing Rule 7.1.

Based on the above and cash flow forecasts prepared, the directors are of the opinion that the consolidated entity is well positioned to meet its objectives and obligations going forward and therefore that the basis upon which the financial statements are prepared is appropriate in the circumstances.

The reliance on future funding described above indicates a material uncertainty that may cast significant doubt about the consolidated entity's ability to continue as a going concern. 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 at 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 be necessarily incurred should the consolidated entity not 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, except for, where applicable, the revaluation of available-for-sale financial assets, financial assets and liabilities at fair value through profit or loss, investment properties, certain classes of property, plant and equipment, derivative financial instruments and contingent consideration that has been measured at fair value.

## **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 31.

## **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 2018 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.

#### Sale of goods

Sale of goods revenue is recognised at the point of sale, which is where the customer has taken delivery of the goods, the risks and rewards are transferred to the customer and there is a valid sales contract. Amounts disclosed as revenue are net of sales returns and trade discounts.

#### Rendering of services

Consulting services revenue is recognised by reference to the stage of completion of the respective contract.

Stage of completion is measured by reference to labour hours incurred to date as a percentage of total estimated labour hours for each contract. Where the contract outcome cannot be reliably estimated, revenue is only recognised to the extent of the recoverable costs incurred to date.

#### Research and development tax incentive

The consolidated entity has adopted the income approach to accounting for research and development tax offsets pursuant to AASB 120 'Accounting for Government Grant and Disclosure of Government Assistance' whereby the incentive is recognised in profit or loss on a systematic basis over the periods in which the consolidated entity recognises the eligible expenses.

#### 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 the 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 be applied 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 at 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 nor 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 classified as current when: it is either expected to be realised or intended to be sold or consumed in the entity's 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 classified as current when: it is either expected to be settled in the entity's 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 noncurrent.

### Cash and cash equivalents

Cash and cash equivalents include 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

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade receivables are generally due for settlement within 30 days.

Collectability of trade receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off by reducing the carrying amount directly. A provision for impairment of trade receivables is raised when there is objective evidence that the consolidated entity will not be able to collect all amounts due according to the original terms of the receivables. Significant

financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments (more than 60 days overdue) are considered indicators that the trade receivable may be impaired. The amount of the impairment allowance 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. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

Other receivables are recognised at amortised cost, less any provision for impairment. Collectability of receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off by reducing the carrying amount directly. A provision for impairment of receivables is raised when there is objective evidence that the consolidated entity will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation and default or delinquency in payments (more than 60 days overdue) are considered indicators that the trade receivable may be impaired. The amount of the impairment allowance 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. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

A receivable for the research and development tax incentive receivable is recognised at the time that the eligible expenditure has been incurred and the consolidated entity has reasonable certainty that the amounts will be received.

#### **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. There were no associates that were material to the operations of the consolidated entity during the year.

#### 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.

For the purposes of establishing the expected useful life, assets are defined as either 'commercial' or 'research and development'.

Depreciation is charged to write off the net cost of each item of property, plant and equipment over their expected useful lives. Depreciation of plant and equipment is calculated on a diminishing value basis whilst depreciation of furniture and fittings and office equipment is calculated on a straight-line basis.

Asset class (Useful life):

- Plant and equipment (3 years)
- Furniture and fittings (3 years)
- Office equipment (2 years)

Depreciation of research and development assets is calculated on a diminishing value basis to write off the net cost of each item of plant and equipment over its expected useful life within a defined research and development program context as follows:

## Asset class (Useful life)

- Matmor research and development plant and equipment (2 years)
- Coldry research and development plant and equipment upgrades (12 months)

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.

#### Leases

The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement and requires an assessment of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

A distinction is made between finance leases, which effectively transfer from the lessor to the lessee substantially all the risks and benefits incidental to the ownership of leased assets, and operating leases, under which the lessor effectively retains substantially all such risks and benefits.

Finance leases are capitalised. A lease asset and liability are established at the fair value of the leased assets, or if lower, the present value of minimum lease payments. Lease payments are allocated between the principal component of the lease liability and the finance costs, so as to achieve a constant rate of interest on the remaining balance of the liability.

Leased assets acquired under a finance lease are depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the consolidated entity will obtain ownership at the end of the lease term.

Operating lease payments, net of any incentives received from the lessor, are charged to profit or loss on a straight-line basis over the term of the lease.

### **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 estimated 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.

# Financial liabilities - deferred and contingent consideration

Deferred and contingent consideration liabilities are initially recognised at fair value. At each reporting date, the deferred consideration liability is reassessed against revised estimates and any increase or decrease in the net present value of the liability will result in a corresponding gain or loss to profit or loss.

The group's financial liabilities for the Coldry earn-out provision and the Matmor deferred consideration were previously presented as provisions in the balance sheet. Management considers it to be more relevant if all financial liabilities at fair value through profit or loss are presented in one separate line item in the balance sheet and prior year comparatives as at 30 June 2017 have been restated.

#### **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. The unwinding of the discount on the present value of future cash flows associated with deferred consideration and earn-out provisions is recognised as finance costs.

## **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 wholly within 12 months of the reporting date 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 high quality corporate bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

#### Share-based payments

Equity-settled share-based compensation benefits are provided to employees.

Equity-settled transactions are awards of shares, or options over shares, that are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using either the Binomial or Black-Scholes option pricing model that takes into account the exercise price, the term of the option, the impact of

dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with nonvesting conditions that do not determine whether the consolidated entity receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

Market conditions are taken into consideration in determining fair value. Therefore, any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the consolidated entity or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the consolidated entity or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

#### 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 interests. 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.

Assets and liabilities measured at fair value are classified, into three levels, using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. Classifications are reviewed at each reporting date and transfers between levels are determined based on a reassessment of the lowest level of input that is significant to the fair value measurement.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

## **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. There were no business combinations occurring during the current or comparative periods.

#### 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 2018. 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

This standard is applicable to annual reporting periods beginning on or after 1 January 2018. The standard replaces all previous versions of AASB 9 and completes the project to replace IAS 39 'Financial Instruments: Recognition and Measurement'. AASB 9 introduces new classification and measurement models for financial assets. A financial asset shall be measured at amortised cost, if it is held within a business model whose objective is to hold assets in order to collect contractual cash flows, which arise on specified dates and solely principal and interest. All other financial instrument assets are to be classified and measured at fair value through profit or loss unless the entity makes an irrevocable election on initial recognition to present gains and losses on equity instruments (that are not held-for-trading) in other comprehensive income ('OCI'). For financial liabilities, the standard requires the portion of the change in fair value that relates to the entity's own credit risk to be presented in OCI (unless it would create an accounting mismatch). New simpler hedge accounting requirements are intended to more closely align the accounting treatment with the risk management activities of the entity. New impairment requirements will use an 'expected credit loss' ('ECL') model to recognise an allowance. Impairment will be measured under a 12-month ECL method unless the credit risk on a financial instrument has increased significantly since initial recognition in which case the lifetime ECL method is adopted. The standard introduces additional new disclosures. The consolidated entity will adopt this standard from 1 July 2018.

AASB 9 is not expected to significantly impact the financial statements on the basis that the main financial assets recognised represent cash and cash equivalent and trade receivables that do not carry a significant financing component and involve a single

cash flow representing the repayment of principal, which in the case of trade receivables is the transaction price. Both asset classes will continue to be measured at face value. Other financial asset classes are not material to the consolidated entity. Financial liabilities of the consolidated entity that are material to the financial statements are unaffected by the application of AASB 9.

#### AASB 15 Revenue from Contracts with Customers

This standard is applicable to annual reporting periods beginning on or after 1 January 2018. 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 standalone 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 judgments 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 from 1 July 2018. As the Company does not have any material revenue

from customers at this time, the impact of its adoption is not considered significant to the business.

#### AASB 16 Leases

This standard is applicable to annual reporting periods beginning on or after 1 January 2019. The standard replaces AASB 117 'Leases' and for lessees will eliminate the classifications of operating leases and finance leases. Subject to exceptions, a 'right-of-use' asset will be capitalised in the statement of financial position, measured as the present value of the unavoidable future lease payments to be made over the lease term. The exceptions relate to shortterm leases of 12 months or less and leases of low-value assets (such as personal computers and small office furniture) where an accounting policy choice exists whereby either a 'right-of-use' asset is recognised or lease payments are expensed to profit or loss as incurred. A liability corresponding to the capitalised lease will also be recognised, adjusted for lease prepayments, lease incentives received, initial direct costs incurred and an estimate of any future restoration, removal or dismantling costs. Straightline operating lease expense recognition will be replaced with a depreciation charge for the leased asset (included in operating costs) and an interest expense on the recognised lease liability (included in finance costs). In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results will be improved as the operating expense is replaced by interest expense and depreciation in profit or loss under AASB 16. For classification within the statement of cash flows, the lease payments will be separated into both a principal (financing activities) and interest (either operating or financing activities) component. For lessor accounting, the standard does not substantially change how a lessor accounts for leases. The consolidated entity will adopt this standard from 1 July 2019. As the Company does not have significant operating leases, the impact of its adoption is not expected to be material.

#### IASB revised Conceptual Framework for Financial Reporting

A revised conceptual framework for financial reporting has been issued by the International Accounting Standards Board ('IASB'), but the Australian equivalent has yet to be published. The revised

framework is applicable for annual reporting periods beginning on or after 1 January 2020 and the application of the new definition and recognition criteria may result in future amendments to several accounting standards. Furthermore, entities who rely on the conceptual framework in determining their accounting policies for transactions, events or conditions that are not otherwise dealt with under Australian Accounting Standards may need to revisit such policies. The consolidated entity will apply the revised conceptual framework from 1 July 2020 and is yet to assess its impact.

# 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.

## Fair value measurement hierarchy

The consolidated entity is required to classify all assets and liabilities, measured at fair value, using a three level hierarchy, based on the lowest level of input that is significant to the entire fair value measurement, being: Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date; Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3: Unobservable inputs for the asset or liability. Considerable judgement is required to determine what is significant to fair value and therefore which category the asset or liability is placed in can be subjective.

The fair value of assets and liabilities classified as level 3 is determined by the use of valuation models. These include discounted cash flow analysis or the use of observable inputs that require significant adjustments based on unobservable inputs.

#### Estimation of useful lives of assets

The consolidated entity estimates the effective life of 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.

## **Earn-out provision - Coldry**

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 34.0% (2017: 35.0%). In determining the present value of the liability, estimates of expected timing and quantities of production are taken into consideration.

## Recovery of deferred tax assets

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

#### **Deferred consideration - Matmor**

The deferred consideration liability has been calculated based on discounted cash flow projections out to January 2020 using a discount rate of 12% (2017: 35.0%). The projections used in calculating the liability include consideration of events as disclosed at Note 20 that would trigger a cash outflow pursuant to the deferred consideration structure. At each reporting date, the deferred consideration liability is reassessed against revised estimates and any increase or decrease in the net present value of the liability will result in a corresponding gain or loss to profit or loss. The increase in the liability resulting from the passage of time or the change in discount rate is recognised as a finance cost.

### Research and development tax offset

The consolidated entity adopts the income approach to accounting for the research and development tax offset pursuant to AASB 120 'Accounting for Government Grants and Disclosure of Government Assistance'. The directors have concluded that the consolidated entity has developed sufficient systems and knowledge to allow reasonable assurance to be obtained with respect to the measurement and recognition of tax rebates receivable at the time of incurring eligible expenses.

## 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		
	2018 \$	2017 \$	
Sales revenue			
Sales of product	83,545	106,704	
Other revenue			
Management fees	49,726	-	
Interest	5,526	4,712	
Total other revenue	55,252	4,712	
Revenue	138,797	111,416	

# Note 5. Other income

	Consolidated		
	2018 \$	2017 \$	
Net gain on disposal of property, plant and equipment	25,000	-	
Research and development tax incentive *	1,636,536	2,015,295	
Other income	38,230	780	
Other income	1,699,766	2,016,075	

<sup>\*</sup> The Company has recognised a receivable related to the research and development tax incentive of \$1,636,536 at 30 June 2018 (2017: \$2,047,139) which relates to eligible expenditure.

# Note 6. Remeasurement of financial liabilities

	Consolidated		
	2018 \$	2017 \$	
Remeasurement of deferred consideration for Matmor assets	93,256	(467,665)	
Remeasurement of Coldry earn-out provision	93,370	202,451	
	186,626	(265,214)	

# Note 7. Expenses

	Consolidated		
	2018 \$	2017 \$	
Loss before income tax includes the following specific expenses:			
Depreciation			
Plant and equipment	367,170	2,193,393	
Fixtures and fittings	14,111	2,419	
Office equipment	16,663	11,797	
Total depreciation	397,944	2,207,609	
Amortisation			
Intellectual property - Coldry	480,000	480,000	
Total depreciation and amortisation	877,944	2,687,609	
Finance costs			
Interest and facility costs	203,600	396,211	
Rental expense relating to operating leases			
Minimum lease payments	110,059	111,601	
Employee benefits expense			
Defined contribution superannuation expense	95,171	92,285	
Share-based payments expense	106,399	46,557	
Other employee benefits	1,197,947	989,137	
Total employee benefits expense	1,399,517	1,127,979	

# Note 8. Income tax expense

	Consoli	Consolidated	
	2018 \$	2017 \$	
Income tax expense			
Deferred tax assets attributable to temporary differences	(123,157)	(104,960)	
Deferred tax assets attributable to carried forward tax losses	(639,362)	(339,501)	
Deferred tax assets attributable to movement for prior periods	(10,167)	(35,290)	
Total deferred tax assets not recognised	772,686	479,751	
Aggregate income tax expense	-	-	
Numerical reconciliation of income tax expense and tax at the statutory rate			
Loss before income tax expense	(5,133,685)	(4,357,282)	
Tax at the statutory tax rate of 27.5%	(1,411,763)	(1,198,253)	
Tax effect amounts which are not deductible/(taxable) in calculating taxable income:			
Research and development	584,545	739,962	
Options issued	29,260	12,804	
Sundry items	869	1,024	
	(797,089)	(444,463)	
Current year tax losses not recognised	639,362	339,501	
Current year temporary differences not recognised	123,157	104,960	
Adjustment recognised for prior periods	10,167	35,290	
Deferred tax movement not recognised	24,403	(35,288)	
Income tax expense		-	

# Note 8. Income Ttax expense (continued)

	Cons	Consolidated	
	2018 \$	2017 \$	
Tax losses not recognized			
Unused tax losses for which no deferred tax asset has been recognised	23,519,81	5 21,157,890	
Potential tax benefit at 27.5% (2017: 27.5%)	6,467,94	5,818,420	

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.

	Consolidated	
	2018	2017
	\$	\$
Deferred tax assets not recognized		
Deferred tax assets not recognised comprises temporary differences attributable to:		
Employee benefits	42,468	42,653
Accrued expenses	5,603	4,825
Plant and equipment	259,225	364,483
Finance costs	76,535	60,946
Intangible assets	743,221	601,730
Provision for earn-out (Coldry)	169,267	143,590
Matmor liability	(57,558)	(83,203)
Total deferred tax assets not recognised	1,238,761	1,135,024

The above potential tax benefit, which excludes tax losses, for deductible temporary differences has not been recognised in the statement of financial position as the recovery of this benefit is uncertain.

# Note 9. Current assets - cash and cash equivalents

	Consolidated	
	2018 \$	2017 \$
Cash at bank	611,751	588,682

## Note 10. Current assets - trade and other receivables

	Consc	Consolidated	
	2018 \$	2017 \$	
Trade receivables	24,099	81,019	
Other receivables	141,124	192,344	
Research and development tax incentive receivable	1,636,536	2,047,139	
	1,777,660	2,239,483	
Director loan - Glenn Fozard	-	14,000	
	1,801,759	2,334,502	

# Impairment of receivables

There were no impaired receivables recognised during the financial year.

# Note 11. Current assets – other

	Consolidated	
	2018 \$	2017 \$
Prepayments	60,157	34,030
Other deposits	15,654	21,783
	75,811	55,813

Note 12. Non-current assets - property, plant and equipment

	Consoli	dated
	2018 \$	2017 \$
Plant and equipment - at cost	6,877,285	7,196,684
Less: Accumulated depreciation	(6,638,495)	(6,756,098)
	238,790	440,586
Fixtures and fittings - at cost	19,885	7,782
Less: Accumulated depreciation	(19,885)	(5,774)
	-	2,008
Office equipment - at cost	76,973	73,353
Less: Accumulated depreciation	(76,973)	(60,310)
	-	13,043
	238,790	455,637

#### Reconciliations

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

Consolidated	Plant and equipment \$	Fixtures and fittings \$	Office Equipment \$	Total \$
Balance at 1 July 2016	1,357,301	4,427	22,478	1,384,206
Additions	1,276,678	-	2,362	1,279,040
Depreciation expense	(2,193,393)	(2,419)	(11,797)	(2,207,609)
Balance at 30 June 2017	440,586	2,008	13,043	455,637
Additions	165,374	12,103	3,620	181,097
Depreciation expense	(367,170)	(14,111)	(16,663)	(397,944)
Balance at 30 June 2018	238,790	-	-	238,790

# Note 13. Non-current assets – intangibles

	Consolidated	
	2018 \$	2017 \$
Intellectual property - at cost	9,600,000	9,600,000
Less: Accumulated amortisation	(4,320,000)	(3,840,000)
	5,280,000	5,760,000

#### Reconciliations

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

Consolidated	Intellectual Property* \$	Total \$
Balance at 1 July 2016	6,240,000	6,240,000
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2017	5,760,000	5,760,000
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2018	5,280,000	5,280,000

<sup>\*</sup> The intellectual property represents the patented technology related to Coldry acquired by the consolidated entity in 2009.

# Note 14. Current liabilities - trade and other payables

	Consolidated	
	2018	2017
	\$	\$
Trade payables	272,138	302,557
Other payables	181,903	420,903
	454,041	723,460

Refer to note 24 for further information on financial instruments.

### Note 15. Current liabilities – borrowings

	Consolidated	
	2018 \$	2017 \$
Innovation Structured Finance Co. (Brevet Capital) loan	1,179,283	1,332,448
Equipment finance	66,430	150,809
	1,245,713	1,483,257

Refer to note 24 for further information on financial instruments.

#### Innovation Structured Finance Co. (Brevet Capital) loan

On 10 May 2018, the Company signed a Secured Loan Agreement for a new research and development rebate loan facility with its existing debt provider, New York based Innovation Structured Finance Co., LLC (Brevet) through to the end of the 2018 financial year. On 3 August 2018 the Company signed a new agreement for the 2019 financial year. These loan facilities allow for the provision of funding up to \$4 million (including interest). The defaults and covenants contained within the agreement are typical of those that may be expected in a facility of this type.

#### Assets pledged as security

- The assets pledged as security for the equipment finance are represented by the underlying assets subject to financing. Financing of certain plant and equipment is over terms ranging from 2 to 5 years at interest rates of approximately 6%.
- The research and development tax rebate provided to the Company under the research and development tax incentive program serves as the primary security for the Brevet facility.

	Consolidated	
	2018 \$	2017 \$
Total facilities		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	4,000,000	1,332,448
Used at the reporting date		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	1,179,283	1,332,448
Unused at the reporting date		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	2,820,717	-

### Note 16. Current liabilities – provisions

	Consolidated	
	2018 \$	2017 \$
Annual leave	86,559	86,175
Long service leave	66,389	
	152,948	86,175

### Note 17. Current liabilities - other financial liabilities

	Consolidated	
	2018 \$	2017 \$
Earn-out provision - Coldry	1,315	2,151
Deferred consideration - Matmor	490,258	995,116
	491,573	997,267

Refer to note 20 for further details.

### Note 18. Non-current liabilities - borrowings

	Consolidated		
	2018 \$	2017 \$	
Equipment finance	84,379	73,930	

Refer to note 24 for further information on financial instruments.

#### Assets pledged as security

The assets pledged as security for such borrowings is represented by the underlying assets subject to financing. Financing is over two items of plant and equipment and is repayable within terms ranging from 2 to 5 years at interest rates of approximately 6%.

### Note 19. Non-current liabilities – provisions

	Consolidated		
	2018 \$	2017 \$	
Long service leave	1,480	68,926	

### Note 20. Non-current liabilities - other financial liabilities

	Consolidated		
	2018 \$	2017 \$	
Earn-out provision - Coldry	614,201	519,995	
Deferred consideration - Matmor	635,117	546,994	
	1,249,318	1,066,989	

#### **Deferred consideration - Matmor**

As part consideration for the acquisition of the Matmor asset, deferred consideration of \$3.5 million of cash was incurred. The timing of paying consideration up to the cash amount of \$3.5 million to Matmor Steel is dependent upon if, and when, issued options of the Company are exercised as well as the various milestones being met. The consideration will become payable through combination of any of the following triggers, and at the amounts attributed to each trigger, until the liability has been satisfied:

- a) 50% of proceeds received by the Company from exercise of ECT Options up to a cash amount of \$1 million
- b) a minimum of 15% of proceeds received by the Company from exercise of ECT Options thereafter
- c) \$500,000 on signing a binding contract for construction of the Matmor Pilot Plant
- \$500,000 on the Matmor Pilot Plant operations achieving an agreed steady state as well as conversion targets
- \$1 million on signing of a binding contract for construction of a commercial scale Matmor plant
- f) first collection of revenue in any form from commercialisation of Matmor technology

At reporting date a total of \$2,000,215 has been repaid under triggers (a) and (b) which are now satisfied. In measuring the value of the liability, management have estimated when the remaining milestones will likely be achieved. At each reporting date, the deferred consideration liability is reassessed against revised estimates and any increase or decrease in the net present value of the liability will result in a corresponding gain or loss to profit or loss. The increase in the liability resulting from the passage of time or the change in discount rate is recognised as a finance cost. The discount rate used is 12% (2017: 15%). The movement in the discount rate includes the estimated reduction in risk implicit in future cash flows.

#### Earn-out provision - Coldry

The earn-out provision represents deferred consideration related to the acquisition of the Coldry intellectual property from the Maddingley Group. The consideration payable is calculated based on \$0.50 per projected processed tonne of Coldry pellets and is discounted at a rate of 34.0% (2017: 35.0%). The total consideration payable is \$3,000,000 plus applicable interest at the Reserve Bank of Australia cash rate.

# Note 21. Equity - issued capital

	Consolidated				
	2018 Shares	2017 Shares	2018 \$	2017 \$	
Ordinary shares - fully paid	4,605,516,392	3,021,847,103	69,851,168	63,084,402	
Deferred share capital	25,000,000	25,000,000	393,598	287,200	
	4,630,516,392	3,046,847,103	70,244,766	63,371,602	

### Movements in ordinary share capital

Details	Date	Shares Issued	Issue Price	\$
Balance	1 July 2016	2,733,211,506		60,084,680
Exercise of ESIOA options	year to 30 June 2017	265,987,228	\$0.009	2,393,885
Exercise of ESIOB options	year to 30 June 2017	22,648,369	\$0.015	339,726
Transferred premium from options reserve on exercised options	year to 30 June 2017	-	\$0.000	266,111
Balance	30 June 2017	3,021,847,103		63,084,402
Exercise of ESIOA options	year to 30 June 2018	301,622,605	\$0.009	2,714,604
Exercise of ESIOB options	year to 30 June 2018	94,026,411	\$0.015	1,410,397
Exercise of ESIOA options under ELF scheme (a)	year to 30 June 2018	619,883,137	\$0.009	5,578,949
Exercise of ESIOB options under ELF scheme (a)	year to 30 June 2018	568,137,136	\$0.015	8,522,057
Adjustment for ELF on exercise of ESIOA/ESIOB options (a)		-	\$0.000	(14,101,005)
Release of shares on exercise of ELF options (b)	year to 30 June 2018	-	\$0.000	339,252
Transferred premium from options reserve on exercised options	year to 30 June 2018	-	\$0.000	2,302,512
Balance	30 June 2018	4,605,516,392		69,851,168

# Movements in deferred share capital

Details	Date	Shares	Issue Price	\$
Balance	1 July 2016	-		-
Share issue - partly paid to the extent of \$0.009	23 November 2016	25,000,000	\$0.020	225,000
Share based payment allocation		-	\$0.000	62,200
Balance	30 June 2017	25,000,000		287,200
Share based payment allocation		-	\$0.000	106,398
Balance	30 June 2018	25,000,000		393,598

#### **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.

#### **Notes**

- a) An amount of 1,188,020,073 shares in the Company was issued on exercise of ESIOA and ESIOB options pursuant to option-holders acquiring limited recourse loans in the ELF administered by ECT Finance Ltd, a subsidiary of the Company. In accordance with the requirement of accounting standards, the issue of shares financed by way of limited recourse loans (also issued by the consolidated entity) represents an in-substance issue of options (ELF Options), as effectively there has been a replacement of one type of option with another. Despite the actual ordinary shares in the Company being issued in the name of the ELF participant, the shares are not recognised for accounting purposes and have been excluded from issued capital. Such shares will be deemed as issued only upon repayment of ELF loans by the participant at which time the shares will be released from being held as security.
- b) The release of shares on exercise of ELF Options represents ELF loans that have been settled by participants.

### **Deferred share capital**

The account is used to recognise partly paid equity issued to employees that are held as security and subject to a deferred settlement arrangement. Refer to note 38 'Share based payments' for further information.

### **Options exercised**

The amounts attributable to shares issued pursuant to exercise of options consists of the price paid on exercise of the option. The related amount of option premium initially received at the time of initial issue of the option has been transferred from the relevant option reserve to which it was originally credited. The amount recognised in issued capital on exercise of ELF options represents the repayment of principal and interest on an ELF participant's ELF loan thereby allowing for such shares to be released from being held as security.

### 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.

Capital is regarded as total equity, as recognised in the statement of financial position, plus net debt. Net debt is calculated as total borrowings less cash and cash equivalents.

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 22. Equity – reserves

	Consolidated			
	2018 2017 \$ \$			
Options reserve	1,333,081	3,876,010		

### Share-based payments reserve

The reserve is used to recognise the value of unvested equity benefits provided to employees and directors as part of their remuneration. At reporting date, it has a \$nil balance. Movements in the reserve are provided in the table below.

#### **Options reserve**

The options reserve is used to recognise the value of options issued. Movements in the reserve are provided in the table below. The following options were on issue at reporting date:

- Unlisted options have an exercise price of 1.5 cents and expiry date of 31 July 2018. There were 170,000,000 units (2017: 170,000,000 units) on issue as at 30 June 2018 with a recognised value of \$1,136,020 (2017: \$1,136,020). These were exercised after balance date pursuant to the ELF. Refer note 33.
- ESIOA options had an exercise price of 0.9 cents and expired on 31 July 2017. As at the date
  of expiry, there were 29,221,060 unexercised options on hand. The value of unexercised
  options was transferred to accumulated losses on expiry during the year.
- ESIOB options had an exercise price of 1.5 cents and expired on 31 July 2017. As at the date of expiry, there were 173,291,989 unexercised options on hand. The value of unexercised options was transferred to accumulated losses on expiry during the year.
- ECTOC options were issued to shareholders during the year as a bonus issue (nil consideration). The number of ECTOC options on issue at 30 June 2018 was 846,088,751 (2017: n/a). The recognised value of ECTOC options at 30 June 2018 was \$nil (2017: n/a)
- ELF options: refer below

#### **Equity Lending Facility options (ELF Options)**

The consolidated entity's subsidiary, ECT Finance Ltd, entered into limited recourse loans with option-holders during the period allowing them to obtain finance to exercise ESIOA and ESIOB share options. Shares were issued on exercise of options in accordance with the Loan and Security Agreement (the Agreement) of the ELF. Receipts from participants (principal and interest) are treated as equity contributions. Loans expire 3 years from grant date and interest is charged at commercial rates.

All shares issued pursuant to the ELF and financed by limited recourse loans are considered, for accounting purposes, to be options issued (ELF Options). As a result, neither the value of the loans receivable, nor the value of shares issued, are recognised in the financial statements. Shares issued will only be recognised in equity after the loan is repaid and shares released to the holder. The face value of limited recourse loans issued at reporting date was \$13,809,261 and interest accrued on such loans is \$343,004.

As at reporting date there are 1,159,584,270 shares held as security against these loans (ELF Shares) which equates to in-substance options (ELF Options) outstanding at reporting date of the same amount. Where the Company receives funds from participants in the form of principal or interest, such amounts are treated as the receipt of option premium and recognised in the option reserve. Once the accumulated premium received from a participant equates to the extinguishment of the participant's ELF loan balance, the ELF Option is effectively exercised and shares are released to the participant.

Notwithstanding any other provision of the ELF, each participant has a legal and beneficial interest in the ELF Shares issued to them except that any dealings with those ELF Shares by the participant is restricted in accordance with the Agreement. ELF Shares rank equally with all existing ordinary shares of the Company from the date of issue in respect of all rights issues, bonus issues, dividends and other distributions to, or entitlements of, ordinary shareholders. On termination of the loan facility, the participant may elect to settle the loan or default on the loan and the Company would enforce the return of the ELF Shares back to the Company, subject to requirements of the Corporations Act and as outlined in the Agreement signed by each borrower.

#### **Movements in reserves**

Movements in each class of reserve during the current and previous financial year are set out below:

Consolidated	Share-based payments \$	ELF Options \$	Unlisted Options \$	ESIOA Options \$	ESIOB Options \$	Total \$
Balance at 1 July 2016	15,643	-	1,136,020	1,216,682	1,789,419	4,157,764
Reversal of prior year share based payment expenses due to forfeiture	(15,643)	-	-	-	-	(15,643)
Current year share based payments expense	62,200	-	-	-	-	62,200
Transfer to partly paid share capital	(62,200)	-	-	-	-	(62,200)
Transfer option premium on exercised options	-	-	-	(266,111)	-	(266,111)
Balance at 30 June 2017	-	-	1,136,020	950,571	1,789,419	3,876,010
Receipt of premium	-	197,061	-	-	-	197,061
Exercise of options	-	-	-	(921,506)	(1,381,006)	(2,302,512)
Current year share based payments expense	106,399	-	-	-	-	106,399
Transfer to partly paid share capital	(106,399)	-	-	-	-	(106,399)
Expiry of options	-	-	-	(29,065)	(408,413)	(437,478)
Balance at 30 June 2018	-	197,061	1,136,020	-	-	1,333,081

# Note 23. Equity - accumulated losses

	Consoli	dated
	2018 \$	2017 \$
Accumulated losses at the beginning of the financial year	(62,552,980)	(58,195,698)
Loss after income tax expense for the year	(5,133,685)	(4,357,282)
Transfer from options reserve	437,478	-
Accumulated losses at the end of the financial year	(67,249,187)	(62,552,980)

#### Note 24. 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. 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, when considered necessary, hedges financial risks within the consolidated entity's operating units. Finance reports to the Board on a regular basis.

#### Market risk

#### Foreign currency risk

The majority of the consolidated entity's operations are within Australia. A subsidiary located in India does not currently expose the consolidated entity 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 currently have any material credit risk exposure to any single debtor or group of debtors.

### 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.

#### Financing arrangements

Unused borrowing facilities at the reporting date:

	Consol	idated
	2018 \$	2017 \$
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	2,820,717	-

Under the Brevet arrangement, the Company is entitled to draw down amounts of up to 80% of the estimated research and development tax incentive receivable.

### **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.

Consolidated - 2018	Weighted average interest rate %	1 year or less \$	Between 1 and 2 years \$	Between 2 and 5 years \$	Over 5 years \$	Over 5 years \$
Non-derivatives						
Non-interest bearing						
Trade payables	-	272,138	-	-	-	272,138
Other payables	-	181,903	-	-	-	181,903
Deferred consideration (Matmor)	-	500,000	-	999,785	-	1,499,785
Interest-bearing – variable						
Earn-out provision (Coldry)	1.50%	1,723	2,145	745,671	3,543,726	4,293,265
Interest-bearing - fixed rate						
Equipment finance	6.00%	73,324	33,731	64,650	-	171,705
Innovation Structured Finance Co. Loan	12.21%	1,179,283	-	-	-	1,179,283
Total non-derivatives		2,208,371	35,876	1,810,106	3,543,726	7,598,079
0 11 1 2047	Weighted average			D. 2 15 6	0.5	0.5

Consolidated - 2017	Weighted average interest rate %	1 year or less \$	Between 1 and 2 years \$	Between 2 and 5 years \$	Over 5 years \$	Over 5 years \$
Non-derivatives						
Non-interest bearing						
Trade payables	-	302,557	-	-	-	302,557
Other payables	-	420,903	-	-	-	420,903
Deferred consideration (Matmor)	-	995,116	500,000	514,659		2,009,775
Interest-bearing – variable						
Earn-out provision (Coldry)	1.50%	2,500	11,000	765,000	3,482,000	4,260,500
Interest-bearing - fixed rate						
Equipment finance	6.00%	81,242	73,324	98,381		252,947
Innovation Structured Finance Co. Loan	14.00%	1,332,448	-	-	-	1,332,448
Total non-derivatives		3,134,766	584,324	1,378,040	3,482,000	8,579,130

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

Cash flows related to settlement of the Coldry earn-out provision are based on timing of forecast production output upon which payment is calculated.

Settlement of the Matmor deferred consideration is dependent upon commercial outcomes, the actual timing of which cannot be determined. The timing of liability payments provided in the table above is consistent with the assumptions made in calculation of the liability. Future cash flows have been discounted at 12% (2017: 35%) in determining recognised carrying values within the financial statements.

#### 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 25. Fair value measurement

#### Fair value hierarchy

The following tables detail the consolidated entity's assets and liabilities, measured or disclosed at fair value, using a three level hierarchy, based on the lowest level of input that is significant to the entire fair value measurement, being:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Unobservable inputs for the asset or liability

Consolidated - 2018	Level 1 \$	Level 2 \$	Level 3 \$	Total \$
Liabilities				
Deferred consideration - current - Matmor assets	-	-	490,258	490,258
Deferred consideration - non-current - Matmor assets	-	-	635,117	635,117
Earn-out provision - current - Coldry IP	-	-	1,315	1,315
Earn-out provision - non-current - Coldry IP	-	-	614,201	614,201
Total liabilities	-	-	1,740,891	1,740,891

Consolidated - 2017	Level 1 \$	Level 2 \$	Level 3 \$	Total \$
Deferred consideration - current - Matmor assets	-	-	995,116	995,116
Deferred consideration - non-current - Matmor assets	-	-	546,994	546,994
Earn-out provision - current - Coldry IP	-	-	2,151	2,151
Earn-out provision - non-current - Coldry IP	-	-	519,995	519,995
Total liabilities	-	-	2,064,256	2,064,256

There were no transfers between levels during the financial year.

The carrying amounts of trade and other receivables and trade and other payables are assumed to approximate their fair values due to their short-term nature.

The fair value of financial liabilities is estimated by discounting the forecast cash flows required to discharge the liability at the current market interest rate that is available for similar financial liabilities. Movements in the fair value of the financial liabilities are disclosed in their respective notes.

#### Valuation techniques for fair value measurements categorised within level 3

The above financial liabilities have been valued using a discounted cash flow model. Refer to the respective note for further details.

#### Level 3 assets and liabilities

Movements in level 3 assets and liabilities during the current and previous financial year are set out below:

Consolidated	Deferred consideration Matmor assets \$	Earn-out provision Coldry IP \$	Total \$
Balance at 1 July 2016	-	319,695	319,695
Transfers into level 3	2,009,775	-	2,009,775
(Gains)/losses recognised in profit or loss	(467,665)	202,451	(265,214)
Balance at 30 June 2017	1,542,110	522,146	2,064,256
Losses recognised in profit or loss	93,256	93,370	186,626
Settlement of financial liabilities	(509,991)	-	(509,991)
Balance at 30 June 2018	1,125,375	615,516	1,740,891

The unobservable inputs and sensitivity of level 3 liabilities are as follows:

Description	Unobservable Inputs	Potential Range	Sensitivity
Coldry earn-out provision	Discount rate	25% - 35% (34% used)	A change in this rate of 5% would have an effect of: +5%: decreasing the carrying value of the liability by \$129,813 (and decreasing the loss); and -5%: increasing the carrying value of the liability by \$174,329 (and increasing the loss).
	Timing of production to discharge liability	Dec 2019 onwards	The rate of payment of the earn-out liability is linked to the expected timing of plant production. Obligations are currently forecast to commence this year from small production, escalating in forward years through commercial scale up. A change in timing of the commercial scale commencement of + 1 year from that currently forecast would reduce the loss and liability by \$134,749.
Matmor deferred consideration	Discount rate	7% - 17% (12% used)	A change in this rate of 5% would have an effect of: +5%: decreasing the carrying value of the liability by \$65,211 (and decreasing the loss); and-5%: increasing the carrying value of the liability by (\$75,817) (and increasing the loss).
	Timing of significant trigger events	July 2018 to June 2019 (January 2019 used)	Should the next major trigger event and subsequent events be delayed by + 1 year from that currently forecast, that would reduce the loss and liability by \$687,644.

### Note 26. 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	
	2018 \$	2017 \$
Short-term employee benefits	812,445	606,378
Post-employment benefits	34,848	34,407
Long-term benefits	12,763	59,325
Share-based payments	106,399	46,557
	966,455	746,667

#### Note 27. 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	
	2018 \$	2017 \$
Audit services - BDO East Coast Partnership		
Audit or review of the financial statements	65,012	58,500

### Note 28. Contingent liabilities

### **Perpetual Royalty Liability**

In addition to the Matmor deferred consideration liability recognised, the consolidated entity has incurred a future obligation to remit a perpetual royalty to Matmor Steel, the originator of the Matmor technology, at an amount calculated at 3% of licensing income received by the consolidated entity after allowing for deductions. If licensing income is generated in the future, any royalty payments on that income will be recognised.

#### Note 29. Commitments

	Consolidated	
	2018 \$	2017 \$
Lease commitments - operating *		
Committed at the reporting date but not recognised as liabilities, payab	ole:	
Within one year	164,091	110,225
Equipment finance		
Committed at the reporting date and recognised as liabilities, payable:		
Within one year	73,324	81,242
One to five years	98,381	171,705
Total commitment	171,705	252,947
Less: Future finance charges	(20,896)	(28,208)
Net commitment recognised as liabilities	150,809	224,739
Patent commitments **		
Committed at the reporting date but not recognised as liabilities, payab	ole:	
Within one year	38,171	28,790
One to five years	158,665	112,032
More than five years	40,373	33,157
	237,209	173,979

<sup>\*</sup> Operating lease commitments includes contracted amounts for offices under non-cancellable operating leases expiring in 2 years with an option to extend. The leases have various escalation clauses. On renewal, the terms of the leases are renegotiated.

### **Royalty commitments**

The Company has entered into agreements which require it to pay certain royalties on production of its Coldry and Matmor technologies. These include:

- Coldry Equity Sale Deed, 2009; and
- Royalty Payment Deed (Matmor), 2014.

<sup>\*\*</sup> Patent commitments represent maintenance payments pursuant to the registered patents of both Coldry and Matmor.

The Company is committed to make certain royalty payments in the event that commercial value is derived from the application of the technologies as follows:

- from production utilising the Coldry technology of Coldry pellets, a royalty rate of \$A0.195
  per tonne, which is increased by CPI each anniversary of the agreement. For 2018, this now
  stands at \$A0.2044 per tonne. This royalty is payable for a period of twenty years following
  commencement of payments; and
- from revenue achieved through commercialisation and deployment of Matmor technology, less valid deductions as required under any technology licence, the Company should pay 3%.
   This royalty is payable in perpetuity (refer note 28).

### Note 30. Related party transactions

#### Parent entity

Environmental Clean Technologies Limited is the parent entity.

#### **Subsidiaries**

Interests in subsidiaries are set out in note 32.

#### Key management personnel

Disclosures relating to key management personnel are set out in note 26 and the remuneration report included in the directors' report.

### **Transactions with related parties**

The following transactions occurred with related parties:

	Consolidated	
	2018 \$	2017 \$
Payment for goods and services:		
Payment for services from other related party *	169,873	108,412
Other transactions:		
Exercise of options for new ordinary shares by key management personnel	3,170	495,000

<sup>\*</sup> During the period, the Company paid Mecrus Pty Ltd, an entity controlled by Barry Richards, for engineering support services during the period. Such payments were on commercial terms.

#### 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

The following balances are outstanding at the reporting date in relation to loans with related parties:

	Consolidated	
	2018 \$	2017 \$
Current receivables:		
Loans to directors	-	14,000

During the period, the following loans advanced by the Company to a director or director related entity were on issue:

Glenn Fozard was originally advanced \$50,000 for the acquisition of 50 million options. The balance at year end is \$nil (2017: \$14,000). Interest incurred during the period was \$3,557 (2017: \$2,182). Interest repaid during the period was \$3,557 (2017: \$2,182). Principal of \$14,000 was repaid during the year.

### **Equity Lending Facility (ELF) Loans**

The following ELF loans were granted to key management personnel of the consolidated entity. Such loans are limited recourse loans issued to finance the exercise of options. Neither the loans nor the value of the issued capital are recognised in the financial statements as such arrangements are accounted for as an in-substance issue of options. Any principal and interest received on unpaid loans prior to their settlement is recognised in the options reserve. Employees and directors of the Company receive a 2% discount to the standard commercial interest rates.

- Glenn Fozard was advanced \$450,000 under the ELF for the exercise of 50,000,000 options at \$0.009 each. Principal paid during the year was \$72,000 (2017: n/a). Interest paid during the year was \$13,146 (2017: n/a). Movements in the loan balance during the year consisted of principal advanced, interest incurred, and principal repaid. Interest was payable on the outstanding balance at a rate of 7.39% calculated daily. Payments made by Glenn Fozard during the year resulted in the release of 8,000,000 shares to him.
- Ashley Moore was advanced \$339,249 under the ELF for the exercise of 36,073,950 options at \$0.009 each and 972,223 options at an exercise price of \$0.015 each. Principal paid during the year was \$nil (2017: n/a). Interest paid during the year was \$nil (2017: n/a). Movements in the loan balance during the year consisted of principal advanced and interest incurred. Interest was payable on the outstanding balance at a rate of 7.39% calculated daily.

### Note 31. Parent entity information

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

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

	Parent	
	2018	2017
	\$	\$
Loss after income tax	(4,257,686)	(3,877,282)
Total comprehensive income	(4,257,686)	(3,877,282)

#### Statement of financial position

	Parent	
	2018 \$	2017 \$
Total current assets	2,545,881	2,978,998
Total assets	12,384,671	13,034,636
Total current liabilities	2,344,936	3,290,160
Total liabilities	3,680,113	4,500,005
Equity		
Issued capital	73,000,660	66,663,528
Options reserve	1,529,012	3,876,010
Accumulated losses	(65,825,114)	(62,004,907)
Total equity	8,704,558	8,534,631

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 2018 and 30 June 2017.

### **Contingent liabilities**

For contingent liabilities of the parent entity, refer to note 28.

### Capital and other commitments

The parent entity has operating lease, patent, equipment finance and royalty commitments payable (not recognised as liabilities). Refer to note 29 for details.

#### 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.
- 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 32. 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:

		Ownershi	p Interest
Name	Principal place of business / Country of incorporation	2018 %	2017 %
Asia Pacific Coal and Steel Pty Ltd	Australia	100.00%	100.00%
Enermode Pty Ltd	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 Ltd	Australia	100.00%	100.00%
ECT Fuels Pty Ltd	Australia	100.00%	100.00%
ECT China Limited	Hong Kong	100.00%	100.00%
Coldry Demonstration Plant Pty Ltd	Australia	100.00%	100.00%
Coldry Master Lic. Pty Ltd	Australia	100.00%	100.00%
Environmental Clean Technologies Development and Services India Private Ltd	India	100.00%	100.00%
ECT Finance Ltd	Australia	100.00%	100.00%

### Note 33. Events after the reporting period

The following matters have arisen since 30 June 2018 that have 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:

- On 10 July 2018, the Company approved the exercise of 170 million unlisted options under an ELF. The transaction requires that the resulting shares be secured as collateral and restricted from trading until the loan established under the ELF is repaid in full.
- On 27 July 2018, the Company announced the completion of the integrated basic engineering design program for the Coldry-Matmor project in India.
- On 3 August 2018, the Company signed a Secured Loan Agreement with Innovation Structured Finance Co. LLC (Brevet) for a research and development rebate loan facility for the 2018/19 financial year of \$4 million on the same terms and conditions as the previous facility.
- On 9 August 2018, the Company announced the signing of a contract for a 5-year supply contract for the sale of Coldry solid fuel in the Victorian market via the provision of a turnkey solution for steam services with an estimated value of \$1.3 million. The contract outlines the commercial terms and will be followed by a three-month construction and services commissioning phase. The supply of Coldry as a component of this agreement would have an immaterial impact on the present value of the estimated cash flows in relation to the deferred consideration payable for the acquisition of the Coldry intellectual property and is therefore a non-adjusting event.
- On 15 August 2018, the Company announced that an agreement had been executed to
  extend financial close of the India Pilot Plant project agreement to 31 October 2018. The
  extension was requested by NLC India Limited to allow further time to complete their
  review and approval processes following changes to key personnel. Parallel engineering and
  recruitment activities are continuing in support of project commencement.

No other matter or circumstance has arisen since 30 June 2018 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 34. Reconciliation of loss after income tax to net cash used in operating activities

	Consolidated	
	2018 \$	2017 \$
Loss after income tax expense for the year	(5,133,685)	(4,357,282)
Adjustments for:		
Depreciation and amortisation	877,944	2,687,609
Finance costs - non cash	(59,527)	206,561
Share-based payments	106,398	46,557
Net gain on disposal of non-current assets	(25,000)	-
Change in operating assets and liabilities:		
Decrease/(increase) in trade and other receivables	518,743	(1,143,688)
Increase in prepayments	(26,127)	(16,240)
Increase/(decrease) in trade and other payables	(592,784)	274,586
Increase/(decrease) in employee benefits	(672)	30,855
Net cash used in operating activities	(4,334,710)	(2,271,042)

### Note 35. Non-cash investing and financing activities

	Consolidated	
	2018 \$	2017 \$
Acquisition of plant and equipment by means of finance leases	-	224,739

### Note 36. Changes in liabilities arising from financing activities

Consolidated	Equipment Finance \$	Innovation Structured Finance Co. (Brevet) \$	Total \$
Balance at 1 July 2016	-	1,057,223	1,057,223
Net cash from financing activities	-	275,225	275,225
Acquisition of plant and equipment by means of finance leases	224,739	-	224,739
Balance at 30 June 2017	224,739	1,332,448	1,557,187
Net cash used in financing activities	(73,930)	(153,165)	(227,095)
Balance at 30 June 2018	150,809	1,179,283	1,330,092

# Note 37. Earnings per share

	Consolidated	
	2018 \$	2017 \$
Loss after income tax attributable to the owners of Environmental Clean Technologies Limited	(5,133,685)	(4,357,282)

	Number	Number
Weighted average number of ordinary shares used in calculating basic earnings per share	3,402,082,562	2,824,948,057
Weighted average number of ordinary shares used in calculating diluted earnings per share	3,402,082,562	2,824,948,057

	Cents	Cents
Basic earnings per share	(0.151)	(0.154)
Diluted earnings per share	(0.151)	(0.154)

At 30 June 2018 there were 170,000,000 unlisted options (expiring 31 July 2018) on issue over ordinary shares with an exercise price of \$0.015. In addition, there were 1,159,584,270 shares held as security which are subject to the repayment of ELF loans. For accounting purposes, these ELF loans and the related shares issues are treated as an in-substance issue of options. The ELF shares issued are therefore not included in the Basic EPS calculation. All options were considered anti-dilutive and excluded from the calculations above. All partly paid shares on issue are also treated in the same way as options and hence considered dilutive for the purposes the calculation.

### Note 38. Share-based payments

The following share-based payment expenses were incurred for the year ended 30 June 2018:

#### Loan to James Blackburn

Mr Blackburn, the Company's Chief Operating Officer, acquired an interest in 25,000,000 shares issued at \$0.02 each (total consideration payable of \$500,000) partly funded by a Company loan which amounted to \$275,000 ('deferred amount'). The deferred amount is subject to a proportionate settlement over the period of the loan with such settlement deemed to occur as Mr Blackburn fulfils his employment over the duration of 3 years from the date of issue. As such, amortisation of the deferred component forms part of Mr Blackburn's remuneration over the period of the arrangement.

The shares issued are subject to a lock-up from the date of issue for a term of 3 years, or, in the event that Mr Blackburn's employment terminates, upon a cash settlement of the unamortised principal balance.

The fair value of the deferred settlement component at grant date was \$246,779, calculated as the present value of the deferred principal outstanding discounted at an interest rate of 6.5%. An amount of \$106,399 (2017: \$62,200) was incurred as a share-based payment expense representing the amortisation of the settlement amount for the period. As at reporting date, accumulated amortisation of the loan amounted to \$168,599.

	Consolidated	
	2018 \$	2017 \$
Share-based loan expense - J. Blackburn	106,399	62,200

### Directors' declaration

30 June 2018

In the directors' opinion:

- the attached financial statements and notes 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 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 give a true and fair view of the consolidated entity's financial position as at 30 June 2018 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

Glenn Fozard

Executive Chairman

30 August 2018 Melbourne



#### Material uncertainty related to going concern

We draw attention to Note 1 in the financial report which describes the events and/or conditions which give rise to the existence of a material uncertainty that may cast significant doubt about the Group's ability to continue as a going concern and therefore the Group may be unable to realise its assets and discharge its liabilities in the normal course of business. Our opinion is not modified in respect of this matter.

#### Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the Material Uncertainty Related to Going Concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

#### Revenue recognition of Research and Development tax incentive (R&D Tax Rebate)

#### Key audit matter

Refer to note 5 "Other income" and note 1 "Research and development tax incentive" under "Revenue recognition" in Significant accounting policies.

Accuracy of calculation of the R&D Tax Rebate is considered a key risk area associated with our audit, together with ensuring it is appropriately accounted for in accordance with the requirements of AASB 120 Accounting for Government Grants and Disclosure of Government Assistance.

We have considered this a key audit matter due to the amounts involved being material; and the inherent subjectivity associated with the calculation of the R&D Tax Rebate.

#### How the matter was addressed in our audit

In addressing this matter, we performed a number of procedures including the following:

- Assessed the processes and controls in place for recording and calculating the expenditures subject to the R&D Tax Rebate claim.
- Performed analytical procedures to gain comfort over the correct recognition of the R&D Tax Rebate revenue for the year.
- Reviewed the R&D Tax Rebate calculations to ensure such calculations have been performed on a reasonable basis with assistance from our internal indirect-tax experts.
- Obtained supporting documentation to confirm the appropriateness of recognition of the R&D Tax Rebate as income in line with the requirements of AASB 120 Accounting for Government Grants and Disclosure of Government Assistance.

2



#### Material uncertainty related to going concern

We draw attention to Note 1 in the financial report which describes the events and/or conditions which give rise to the existence of a material uncertainty that may cast significant doubt about the Group's ability to continue as a going concern and therefore the Group may be unable to realise its assets and discharge its liabilities in the normal course of business. Our opinion is not modified in respect of this matter.

#### Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the Material Uncertainty Related to Going Concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

#### Revenue recognition of Research and Development tax incentive (R&D Tax Rebate)

#### Key audit matter

Refer to note 5 "Other income" and note 1 "Research and development tax incentive" under "Revenue recognition" in Significant accounting policies.

Accuracy of calculation of the R&D Tax Rebate is considered a key risk area associated with our audit, together with ensuring it is appropriately accounted for in accordance with the requirements of AASB 120 Accounting for Government Grants and Disclosure of Government Assistance.

We have considered this a key audit matter due to the amounts involved being material; and the inherent subjectivity associated with the calculation of the R&D Tax Rebate.

#### How the matter was addressed in our audit

In addressing this matter, we performed a number of procedures including the following:

- Assessed the processes and controls in place for recording and calculating the expenditures subject to the R&D Tax Rebate claim.
- Performed analytical procedures to gain comfort over the correct recognition of the R&D Tax Rebate revenue for the year.
- Reviewed the R&D Tax Rebate calculations to ensure such calculations have been performed on a reasonable basis with assistance from our internal indirect-tax experts.
- Obtained supporting documentation to confirm the appropriateness of recognition of the R&D Tax Rebate as income in line with the requirements of AASB 120 Accounting for Government Grants and Disclosure of Government Assistance.



#### Valuation of the Coldry earn-out provision & Matmor deferred consideration

#### Key audit matter

Refer to notes 17 and 20 for the Group's current and non-current "Other financial liabilities", as well as note 2 "Earn-out provision - Coldry" and "Deferred consideration - Matmor" under Critical accounting judgments, estimates and assumptions.

The acquisition agreement for the Coldry IP in 2009 included an earn-out liability capped at \$3 million plus interest payable on forecast production from the projected Coldry plant (50c/tonne residual payments on commercial sales).

The valuation and completeness of the Coldry earn-out provision and Matmor deferred consideration recognized within the financial statements were determined based on significant judgments and estimates in respect of discount rates and forecast production, with each supported by underlying assumptions.

The Matmor deferred consideration is based on probabilities of conversion of certain options issued and other milestone payments as per the Matmor asset acquisition agreement. This consideration is capped at \$3.5 million.

We have considered this area as a key audit matter due to amounts involved being material; and the inherent subjectivity associated in assessing the critical judgements, estimates and assumptions noted above.

#### How the matter was addressed in our audit

In addressing this matter, we performed a number of procedures including the following:

- We reviewed the calculations (cash flow models) prepared by management in relation to both the Coldry earn-out provision and Matmor deferred consideration to ensure the methodology adopted is consistent with requirements of applicable accounting standards.
- With assistance from our internal corporate finance experts, we assessed the appropriateness of the discount factors used in the cash flow models.
- In relation to the Coldry earn-out provision we checked the mathematical accuracy of the calculations and the reasonableness of the underlying assumptions used by management in relation to the forecast production outcomes.
- In relation to the Matmor deferred consideration we performed an evaluation of the probabilities and the underlying assumptions used by management in relation to forecast milestone payments as per the Matmor asset acquisition agreement for reasonableness.
- Reviewed the adequacy of the disclosures made in the financial statements in relation to the Coldry earn-out provision and Matmor deferred consideration.

#### Other information

The directors are responsible for the other information. The other information comprises the information contained in the directors' report and shareholder information for the year ended 30 June 2018, but does not include the financial report and our auditor's report thereon, which we obtained prior to the date of this auditor's report, and the Annual Report, which is expected to be made available to us after that date.



Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the Annual Report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the directors and will request that it is corrected. If it is not corrected, we will seek to have the matter appropriately brought to the attention of users for whom our report is prepared.

#### Responsibilities of the directors 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 preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

#### Auditor's responsibilities for the audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website (http://www.auasb.gov.au/Home.aspx) at:

http://www.auasb.gov.au/auditors\_responsibilities/ar1.pdf

This description forms part of our auditor's report.



#### Report on the Remuneration Report

#### Opinion on the Remuneration Report

We have audited the Remuneration Report included in pages 8 to 15 of the directors' report for the year ended 30 June 2018.

In our opinion, the Remuneration Report of Environmental Clean Technologies Limited, for the year ended 30 June 2018, complies with section 300A of the Corporations Act 2001.

#### Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

BDO East Coast Partnership

-

Wai Aw

Partner

Melbourne, 30 August 2018



# Shareholder Information

#### 30 June 2018

The shareholder information set out below was applicable as at 21 August 2018.

# Distribution of equitable securities

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

	Number of ordinary shareholders	Number of ECTOC option holders
1 to 1,000	187	267
1,001 to 5,000	143	309
5,001 to 10,000	115	443
10,001 to 100,000	1,493	1,742
100,001 and over	2,189	891
	4,127	3,652
Holding less than a marketable parcel	1,071	3,144

# Equity security holders

### Twenty largest quoted equity security holders

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

ECT Ordinary shares	Number of ordinary shares held	% of total ordinary shares issued
LJ & K THOMSON PTY LTD (LJT & KT SUPER FUND A/C)	250,000,000	5.21
BRIAN JOHN MENZIES (MARBRIJEN SUPER FUND A/C)	140,000,000	2.92
ELGAR PARK PTY LTD (ELGAR PARK SUPER FUND A/C)	115,778,000	2.41
SUPERIOR COATINGS (AUST) PTY LTD	100,238,597	2.09
MR GREGORY MILTS	94,140,368	1.96
MENZIES SUPER PTY LTD (MENZIES SUPER FUND A/C)	78,251,582	1.63
MADDINGLEY BROWN COAL PTY LTD (MADDINGLEY MINE A/C))	63,325,370	1.32
CHALLENGE ROOFING PTY LTD (CHALLENGE ROOFING S/F A/C)	56,003,012	1.17
MR EMILIO MOSCA & MRS ANNA MOSCA (MOSCA SUPER FUND A/C)	54,000,010	1.12
P G FAMILY SUPER CUSTODIAN PTY LTD	53,434,923	1.11
MR PETER ANDREW PROKSA	52,000,000	1.08
MS SIHOL MARITO GULTOM	48,207,365	1.00
MR DAVID FAGAN	48,084,750	1.00
MS KATHY XIAO LIU	46,000,000	0.96
A & K MOORE NOMINEES PTY LTD (MOORE SUPERANNUATION A/C)	45,138,892	0.94
MR CAMERON LLOYD THOMSON	44,500,000	0.93
MRS LILY YUCHUN THOMSON	40,000,000	0.83
MR ASHLEY MOORE & MS KERRY MOORE	37,046,173	0.77
CHALLENGE BRICKS & ROOFING PTY LTD	35,458,950	0.74
MR IAIN ROBERT MCEWIN & MS DIANNE CHURCH (THROUGH2 SUPER FUND A/C)	33,100,000	0.69
	1,434,707,992	29.88

FCTOC Outland	Number of	% of total
ECTOC Options	ordinary shares held	ordinary shares issued
⊔ & k thomson pty ltd (ljt & kt super fund a/c)	56,803,125	6.71
ELGAR PARK PTY LTD (ELGAR SUPER FUND A/C)	28,944,500	3.42
MENZIES SUPER PTY LTD (MENZIES SUPER FUND A/C)	20,363,967	2.41
RSAM INVESTMENTS PTY LTD (RM INVESTMENT A/C)	18,472,500	2.18
MADDINGLEY BROWN COAL PTY LTD (MADDINGLEY MINE A/C)	15,831,343	1.87
MR GREGORY MILTS	14,418,532	1.70
CHALLENGE ROOFING PTY LTD (CHALLENGE ROOFING S/F A/C)	14,000,753	1.65
MR EMILIO MOSCA & MRS ANNA MOSCA (MOSCA SUPER FUND A/C)	13,500,003	1.60
MR DANNY SEGAL & MRS JENNIFER RUTH SEGAL (SEGAL INVESTMENT S/F A/C)	11,500,000	1.36
A & K MOORE NOMINEES PTY LTD (MOORE SUPERANNUATION A/C)	11,284,723	1.33
MRS LILY YUCHUN THOMSON	10,000,000	1.18
JACOBSON HOLDINGS PROPRIETARY LIMITED (P V & A W JACOBSON S/F A/C)	10,000,000	1.18
MR MARKO JERAK	8,179,094	0.97
MRS MARCELLE ANNE RODGERS	8,000,000	0.95
MRS HEATHER LORRAINE PERRY & MR WILLIAM GRANT PERRY (PERRY SUPERANNAUTION FUND A/C)	8,000,000	0.95
JB NO 2 PTY LTD (JB NO 3 A/C)	7,601,667	0.90
MR CHRISTOPHER JOHN MCGEE & MRS ANNE ELIZABETH MCGEE	6,948,496	0.82
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	6,873,370	0.81
MRS XIAOLI CAI	6,847,500	0.81
P A SHAKESPEARE INVESTING PTY LTD	6,783,502	0.80
	284,353,075	33.60

# Substantial holders

Substantial holders in the Company are set out below:

	Number of ordinary shares held	% of total ordinary shares issued
LJ & K THOMSON PTY LTD (LJT & KT SUPER FUND A/C)	250,000,000	5.21%

# 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.

### **Options**

Options do not convey any rights to the holder with respect to voting unless such options are exercised and ordinary shares are issued.

