ENVIRONMENTAL CLEAN TECHNOLOGIES LIMITED

Annual Report

2018-19

Corporate Directory

Directors	Glenn Fozard Barry Richards (resigned 11 September 2019) David Smith James Blackburn (appointed 11 September 2019) Ashley Moore (appointed 11 September 2019)
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 3, 50 Holt Street Surry Hills NSW 2010 Phone 1300 288 664 (within Australia); +61 2 9698 5414 (outside Australia) www.automic.com.au
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: ECT)
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 2019.

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Corporate Strategy

	Tier	Description	Target Outcome	Target Benefit
1	Organic Growth	Bacchus Marsh plant; char, syngas and steam fuel production	$3M EBITDA	Finance basic operating costs
2	Acquisition	Proposed acquisition targets where ECT technology can be leveraged for better value	$3M+ EBITDA	Finance ongoing project and technology development
3	Structure	Corporate restructuring to improve market rating	10-20x earnings multiples	Drive return to shareholders

Chairman's Message

Dear fellow shareholder,

Following unexpected delays in India and the rapid advancement of our domestic activities, we've needed to regroup and refocus.

As a result, we've developed a 3-tiered strategy aimed at reaching a positive cashflow position within a year.

Redefining the Direction Ahead

Stepping back for a moment, it's helpful to restate what we do, so we may better frame our strategy for both present and future investors.

We're in the business of researching, developing and commercialising leading edge technologies for upgrading low-rank and waste resources that can deliver both economic and environmental benefits.

The nature of research, development and commercialisation requires a clear long-term vision and considerable investment. Developing capital-intensive first-of-a-kind technologies and processes is challenging.

Crucial to meeting this long term challenge is establishing operational cashflows which evidence the commercialisation of our technology suite.

Over the past 8 months, ECT has been advancing a strategy aimed at developing near-term operational cash-flows in parallel to proposed projects in India, the Latrobe Valley and other regions.

Three-Tiered Approach

To deliver positive cashflows sufficient to continue the broader research, development and commercialisation objectives over and above basic operating expenses, we're adopting the following three-tiered approach.

To improve group cashflows, we're aiming to maximise revenues from our existing facility at Bacchus Marsh. Further, this will support ongoing market and application testing of Coldry products to underpin the offtake from larger capacity Coldry plants, including our proposed Latrobe Valley project.

Additionally, the we believe there are significant upside opportunities for technology-leveraged business acquisitions. Through increased economies of scale, and supported by organic revenue growth, we're aiming to consolidate our market position through the acquisition of businesses with complementary processes, similar products and established earnings. These target businesses will be evaluated for synergies with our existing suite of technologies and, where appropriate benefit from their deployment or integration post-acquisition can be identified, leverage the existing business value.

Finally, in building earnings with the first two tiers, we're also considering corporate transactions and structures that improve market ratings for our asset class. At the core of our business model is the development of technology which beneficiates low-rank and waste resources. Our technology suite utilises a diverse set of waste feedstocks to produce higher value products with low to zero emissions profiles.

We believe that this approach will allow the market to better categorise and rate its value according to earnings multiples commensurate with its market peers.

This current corporate strategy aligns with our 5-year stated purpose where we, "bridge the gap between today's use of resources and tomorrow's zero emission future."

As we drive our corporate strategy over the coming year and advance local market opportunities, we look forward to providing ongoing updates during 2020 and on behalf of the board of directors, executive and staff, we thank you, our shareholders for your continued, invaluable support.

Sincerely,

Glenn Fozard
Executive Chairman

Executive Committee’s Message

We are very pleased to provide this report on your Company for the 2019 financial year as we step forward into a new and exciting phase.

In the coming pages, we focus on areas of key interest to shareholders, aligned with important themes from the Director’s Report (page 38 of this Annual Report) and take a look at the year ahead.

Corporate Strategy

As touched upon in our Chairman’s message, having embraced the need for change and a refocus to growing operational income, we’ve embarked on an ambitious but achievable mission to deliver net positive cashflows by this time next year.

Following is an outline of the plan to deliver this objective.

Three-Tiered Approach

Tier	Description	Targeted Outcome	Targeted Benefit
Organic Growth	Bacchus Marsh plant; char, syngas and steam fuel production	$3m EBITDA	Finance basic operational costs
Acquisition	Proposed acquisition targets where ECT technology can be leveraged for better value	$3M+ EBITDA	Finance ongoing project and technology development
Structure	Corporate restructuring to improve market rating	10-20x earnings multiples	Drive return to shareholders

Tier 1 - Organic Growth

The first tier of the strategy aims to leverage our existing Coldry high volume test facility (HVTF) northwest of Melbourne to build upon the demand in the local market for solid fuel and char products.

Following the successful signing last year (9 August 2018) of a 5-year deal for the provision of fuel and steam services to a Victorian customer, we subsequently announced (12 April 2019) the launch of our steam and boiler package division.

This division offers turnkey solutions to industrial-scale steam and hot water users, encompassing the upgrade of existing equipment, installation of new equipment, new equipment financing, operations, maintenance and fuel supply with the unique proposition of offering significant savings to customers on their total cost of ownership.

The launch of this new business initiative was made following upgrades to our Coldry HVTF which increased the testing capacity of the plant, making higher volumes of Coldry solid fuel available for sale.

In parallel, we’ve been assessing other markets for potential Coldry sales. This has led to consideration of the char market.

We see three key applications within the market:

1. Smokeless fuel (e.g. BBQ fuel);
2. Carburiser, used in specialty metallurgical applications, and;
3. Agricultural char, used as a soil enhancer.

The next phase of development at the HVTF aims to increase capacity to 25,000 tonnes per annum, with the following sales and revenue targets:

Market	Description	Volume (Tonnes per annum)	Revenue Target ($)
Steam & boiler systems	Support existing marketing & operations	~5,000	1,000,000
Char products	Vertical integration with char process	~10,000 char	5,000,000-6,000,000
Syngas	Derived from the char process	~10,000 (equivalent)	TBC
Total		**~25,000**	**~6,000,000+**

Crushing and screening

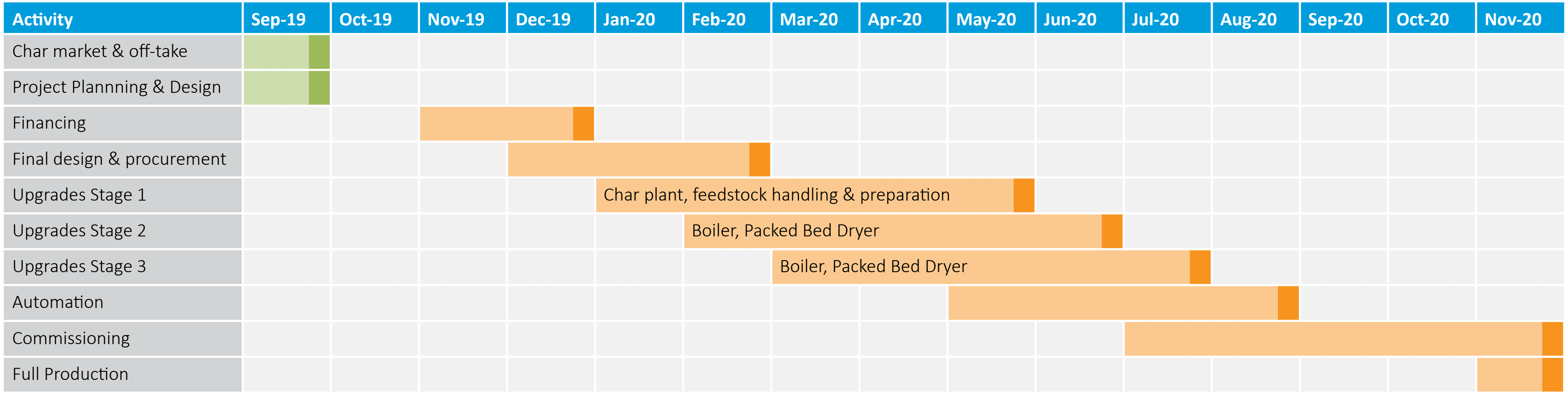
Extrusion and conditioning

Raw coal stockpile

To deliver the above sales objective, the Company aims to execute the following key capital works:

#	Upgrade	Description
1	Raw lignite handling	Further upgrade of terminals 15 & 16 at Yallourn coal mine to underpin lignite supply
2	Feedstock preparation	Installation of milling & screening equipment to provide increased volume capacity
3	Primary processing	Installation of larger pug mill & extruder with 25,000 tpa capacity
4	Drying	Installation of larger conditioning belt to provide increased volume capacity and upgrades to packed bed dryer to improve efficiency
5	Char	Installation of rotary char kiln
6	Energy	Installation of syngas harvester for process heat requirements and other economic uses (e.g. co-generation of electricity)

The target timeline to deliver the upgrades and revenue is as follows:



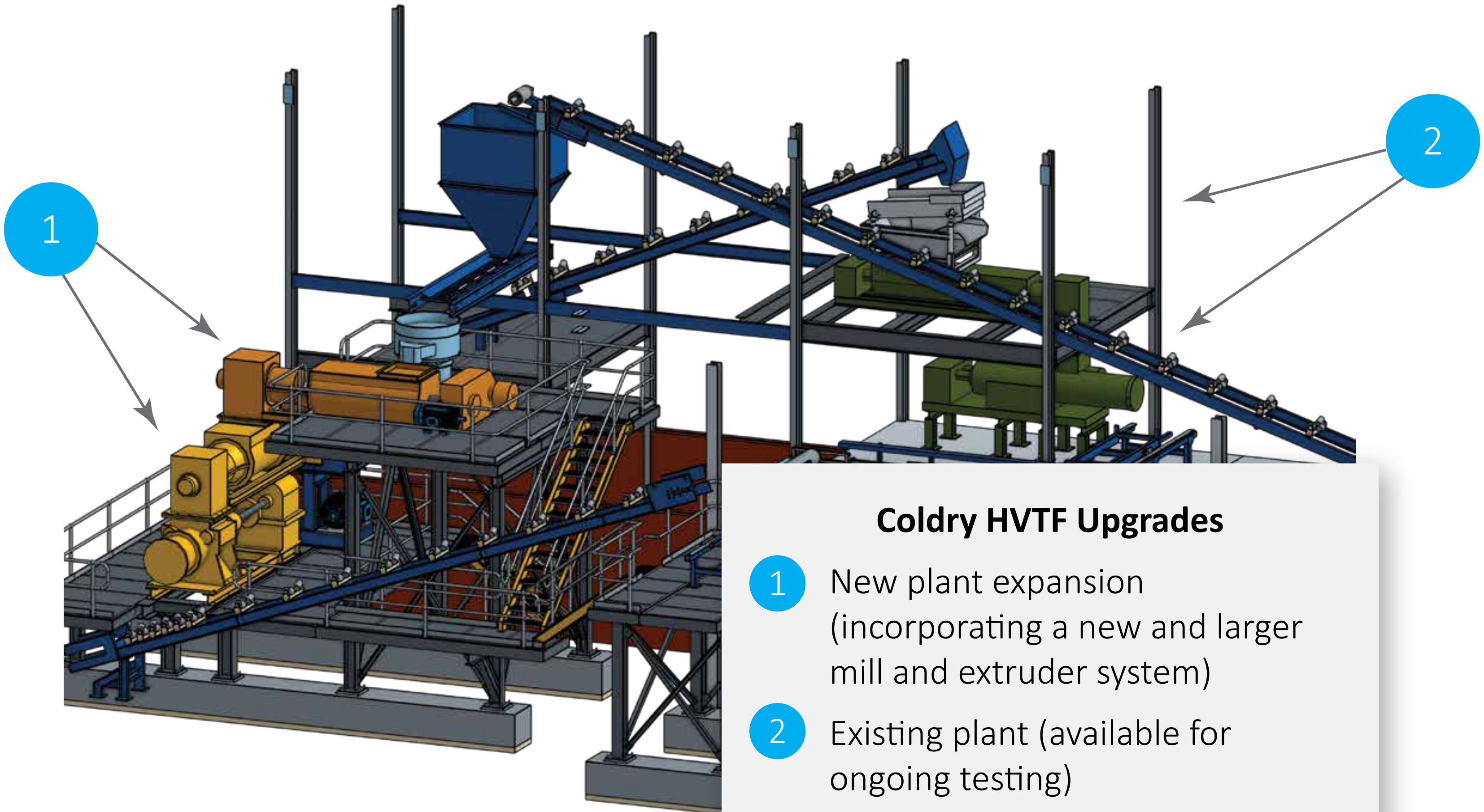
Further details will be announced as key elements of the project are finalised, including off-take arrangements, project design and implementation plan, refined revenue targets and project financing.

The upgrade program will also establish the final plant capacity which may exceed 25,000 tonnes per annum, thus giving potential upside to the economics of this plant as described above.

Preparations for Plant Upgrades

In preparation for the planned upgrades at the HVTF at Bacchus Marsh, we announced the appointment of two additional plant operators who provide the ability to implement continuous operating shifts, whilst also managing the raw coal processing, finished product and maintenance programs to optimise plant uptime and throughput.

Under the guidance of our Group Chief Engineer Ashley Moore, we have conducted a comprehensive review of the site and are ready to take on the next stage of development. This work has been greatly rewarding for all of us in seeing the current potential of this site fully realised ahead of our focused program for greater volume throughput and product diversification to support the higher value market opportunities that we have been working to develop.



Coldry HVTF Upgrades

1. New plant expansion (incorporating a new and larger mill and extruder system)
2. Existing plant (available for ongoing testing)

Financing the Corporate Strategy

In developing the current strategic plan, we acknowledged that had the proposed India project proceeded as envisaged, we needed to improve short term operational cashflows.

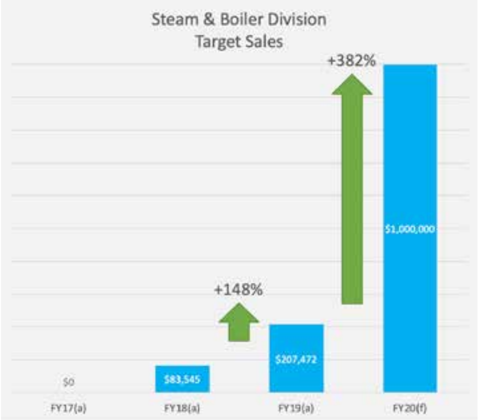
The development of our steam and boiler services business was the initial foray into establishing operational cashflows. And while we're happy with how we've progressed our value proposition, further sales will be underpinned by increasing trust in our service delivery and our brand recognition as we undertake customer quotations and tender responses. Therefore, it is evident that this business, whilst growing, will do so over a longer timeframe than first expected.

ECT's fuel sales from steam and boiler packages (chart, below) have grown significantly in percentage terms over the last three years on the back of a near fully developed marketing message. However, sales in FY20 will not be enough to meet our 12-month revenue targets and plant capacity.

If we add our targeted char sales of $5M-$6M to our forecasts, we enter a territory that justifies the additional upgrades at the HVTF.

Entering the char market will also allow us to establish a dedicated off-take partners for the upgraded capacity of the plant as well as produce valuable syngas to offset boiler costs and open up further revenue options from the excess syngas fuel.

Directing our resources and financing into completing the HVTF upgrades to support sales contracts for the full plant capacity is the most effective way to reach our $3M earnings target, for our first strategic tier, within 12 months.



It's important for shareholders to recognise that we are aiming to reach significant operational earnings via this upgrade pathway whilst also improving the feasibility of our larger facility, currently being planned, for the Latrobe Valley. As such, we expect the char product off-take partners will also contract output from the larger plant, benefitting from the lower cost of production provided by economies of scale.

Tier 2 & 3 - Acquisition & Structural Growth

Broadly, we're currently engaging with potential acquisition targets that meet our requirements, being:

1. Existing and established earnings
2. Processes or plant which would benefit from the application of one or more of ECT's existing technologies

Additionally, we're in formal but incomplete discussions with companies capable of realising its goals for a listed market re-rating, with a focus on:

1. Earnings accretion
2. Resource or feedstock access

Project & Technology Development

As we drive the upgrade of our Coldry HVTF over the coming months, project and technology development and R&D activities will be advanced as time and resources permit.

Our engineering and technical team in Australia and India will work to deliver on the mix of projects for our Coldry HVTF expansion project, as well as the continuing advancement of our suite of technologies. Our India team will play a particularly important role in sourcing competitively priced equipment, such as the rotary kiln system, to support the expansion project.

Latrobe Valley – Integrated Coldry-CDP Project

There is a close alignment between the Coldry HVTF upgrades, the recent acquisition of the CDP-WTE technology and the proposed Latrobe Valley project feasibility study, currently underway.

The feasibility study scope entails:

- Phase 1: Scoping study and selection phase (complete);
- Phase 2: Pre- feasibility study (complete);
- Phase 3: Feasibility study and funding assessment (in progress).

We completed Phase 1 during November 2017, highlighting our partnership with Energy Australia for potential site location and coal supply.

Our focus on advancing the India project took priority following the conclusion of Phase 1, resulting in a pause in activity around the Latrobe Valley project.

The full feasibility study , currently underway, aims to establish the business case for the construction of a large-scale Coldry demonstration plant in the Latrobe Valley.

At a high level, 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.

Establishing financial feasibility requires several key elements, including:

1. Coal supply
2. Site & site services
3. Engineering & design
4. Offtake (receptive markets)
5. Logistics

The Coldry HVTF upgrades underpin the market development aspect of the Latrobe Valley feasibility, helping define and refine our product and service offerings to both the utility-scale heat and char markets.

Establishing a reliable capacity to deliver solid fuel products and services, in addition to a consistent char product, provides the foundation upon which to scale up from the Coldry HVTF capacity of 25,000-35,000 tpa to a commercial scale of around 170,000 tpa.

The market research performed under the feasibility study so far indicates the commercial capacity will exceed local market demand for solid fuel and char products, prompting the need to evaluate and develop alternative markets.

It became clear that the traditional thermal coal exports market is constrained by local transport logistics and challenges around 'social licence'.

Our attention turned to alternative offtake routes, leading us to review several potential high-value downstream applications for the further upgrade of Coldry output, including conversion to gas and liquid fuels.

This led to the identification of a waste-to-energy (WTE) process called catalytic depolymerisation (CDP) designed to convert hydrocarbon-rich waste such as wood and plastics into diesel.

We evaluated the process for its ability to work with Coldry as a feedstock, both as a supplement to waste and on its own.

During the course of our engagement with the owner of the CDP-WTE, who had established the CDP process at pilot scale in China, they entered voluntary administration. We were approached by the receiver to purchase the intellectual property and, following a period of due diligence, concluded the acquisition in July.

The acquisition of the CDP-WTE process provides an important offtake-route for the proposed Latrobe Valley project, opening the local diesel fuel market.

Next steps for the LV project include:

Basic engineering design – integrated Coldry CDP-WTE plant, scope and quote:

The combined Australian and India-based engineering team have completed the scope and quoting process for the Coldry basic engineering program in concert with a network of domestic and international engineering design firms. The Company is pleased with the support and response to the design basis for the LV project and believe the range of firms engaged represent not only good value but industry-leading expertise for our first commercial-scale project.

CDP-WTE engineering review program and integration pathway analysis:

Having onboarded the CDP engineering program over the past 3 months, engineering personnel have been focused on a deep analysis of potential integration pathways with existing Coldry technology, focused on the significant potential for Coldry to supply the stable baseload feedstock for the production of diesel and other valuable hydrocarbon products. The team has been evaluating the full process chain including raw material handling and preparation, core process engineering and opportunities for further development of catalysts and additional output product processing.

Targeted short-term CDP-WTE R&D program:

The ongoing evaluation of the proposed integration pathway between the CDP-WTE and Coldry technologies has provided the Company with some key additional R&D objectives which will support the required basic engineering design process. In this way the teams can target key process steps, and mirror to an extent the R&D program that has been conducted by CDP-WTE for the timber and plastic waste streams over the past 4 years. This narrow focus will allow the timeframe and budgets for any additional R&D activities to remain tightly managed.

Revised basic engineering design package for integrated Coldry/ CDP-WTE plant:

The outcome of the technical evaluation and targeted R&D activities will be to then add the CDP-WTE technology element to the scope and budget for the encompassing integration basic engineering design program. With both technologies advanced to this stage of preparation, the project will move forward as a single design, construction and commissioning program, under a project-specific special purpose vehicle (SPV) and future external capital raising program, supporting both waste-to-energy (including lignite to diesel) and other higher value Coldry applications (char, solid fuels, etc) through proposed market offtake agreements.

CDP-WTE – Alternative Project Opportunities

We recently announced the completion of the acquisition of the CDP Waste-to-Energy (WTE) technology and are pursuing two specific objectives:

1. LV project: integration of the CDP-WTE technology with the Coldry process, and;
2. New project development: exploring the existing and new opportunities for commercial deployment of external CDP-WTE projects utilising wood fibre and plastic waste streams.

As previously announced, a key feature of the acquisition of the CDP Group was the previous project development work undertaken on a number of prospective standalone projects, positioning the CDP-WTE technology to progress to commercial demonstration. We've continued to explore these opportunities with a range of interested parties to quantify and qualify the commercial potential.

We have a clear strategy to develop the CDP-WTE technology for deployment globally, as both an integrated Coldry-enabled plant such as proposed for the Latrobe Valley and as a standalone WTE application using other waste feedstocks such as timber and plastic waste.

In addition, we're working to finalise a licensing and route-to-market structure to support these commercial projects and will announce additional detail as these processes are concluded and terms become binding.

COHgen – Hydrogen Industry Development

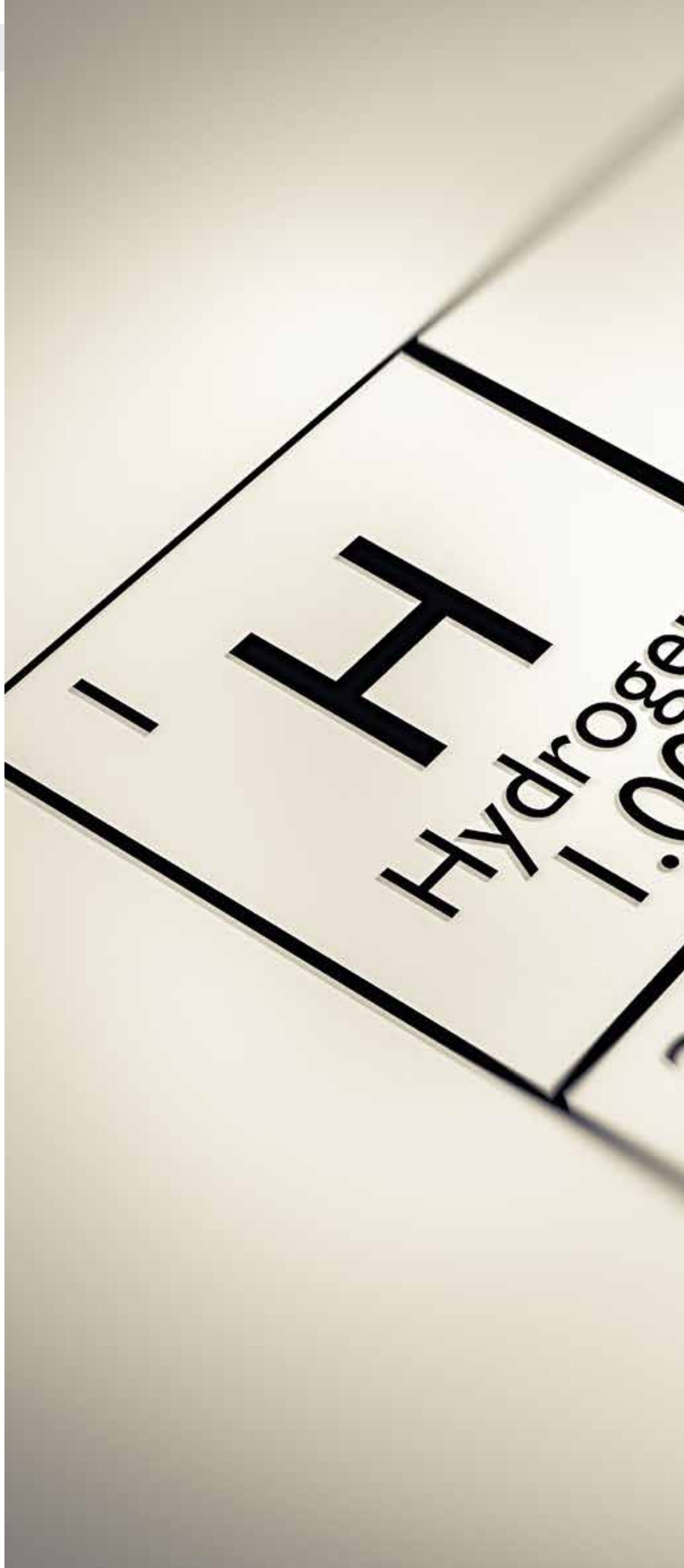
The hydrogen industry represents a material opportunity. As such, we're currently undertaking to develop and promote our technologies to hydrogen project stakeholders with the objective of delivering lower cost, lower emission outcomes in support of Australia's brown coal-based hydrogen industry.

We have been actively and purposefully developing our technology suite to support applications in the emerging hydrogen industry since 2013. We have known for a long time that our Coldry and Matmor technologies have a significant economic edge over conventional processes, but it has only been in the last few years that we have extended our understanding of the role that hydrogen plays in various chemical processes to make breakthroughs in primary iron making and more recently, hydrogen production.

This led to our hydrogen-based HydroMOR iron making process superseding our carbon-based Matmor iron making process, which led to the advancement of the practical application of certain catalysts and the current development of our unique brown coal-based hydrogen generation process, COHGen or Catalytic Organic Hydrogen generation.

COHgen is proceeding through fundamental R&D and as such, we can't provide any detail yet, as we need to step through patent application process to secure the intellectual property.

Suffice to say, if our R&D is successful, and the process is scalable, we may have a new low-emission hydrogen production process.



COHgen Research

COHGen development has continued with the assessment of test data from Monash University, Newcastle University and specialist laboratory service providers aimed at characterising the hydrogen yield potential and profile of lignite through application of the COHgen technology.

We've completed phase one of the COHgen R&D program and set out a further 3-phase program inclusive of patent application and proposed strategic partner involvement. The broad structure for future development of the COHgen technology includes:

- **Phase 2 – Expanded R&D program focused on:**
    - Process chemistry determination
    - Catalyst selection and catalyst manufacturing process development
    - By-product characterisation and application development
    - Generate test vessel to move from batch operations at bench scale to testing that is semi-continuous in nature
    - Patent application process
- **Phase 3 - COHgen test (scale) plant – Bacchus Marsh:**
    - Verification at scale of semi-continuous hydrogen production from COHgen plant
    - Process design for raw materials, formulations, process algorithms
    - Scope of basis of design formulation for pilot / commercial demonstration plant
    - Early verification of economic model (CAPEX and OPEX cost factors) for pilot scale / commercial demonstration plant
- **Phase 4 - COHgen pilot scale / commercial demonstration plant:**
    - Investment / corporate / legal structure
    - Basic engineering design program
    - Detailed engineering design program
    - Project implementation

Establishing a new hydrogen production method in an industry dominated by large players is a challenge. As such, we intend to adopt a collaborative approach to advance COHgen commercialisation. To this end we've commenced discussions with potential strategic partners with broader interests aligned with hydrogen production, storage, distribution and consumption. Considering the stage of development and potential scale of commercial deployment, we believe it's prudent to engage in a joint venture structure early in the technology development lifecycle, basing plans for funding, intellectual property (IP) development and commercialisation on this approach.

Capital Management

R&D Loan – Brevet

On 27 August 2019 we signed a new loan agreement for a 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 2020 on the same terms as the previous facility.

The loan facility allows for the provision of funding to the Company of up to $3.6 million. Our research and development tax rebate to be received represents the security for the facility.

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.

Since the end of the previous financial year, we've drawn down $341,043 in additional debt from Innovation Structured Finance Co. LLC (Brevet).

R&D Tax Incentive

On the 25th October 2018 we advised receipt of our 2018 financial year R&D Tax Incentive Refund of $1.673 million. The refund of $1.673 million was in line with accruals disclosed in the 2018 Annual Report and repaid in full the then current R&D loan provided by New York-based financier 'Brevet'.

A surplus of ~$282,000 was allocated to working capital in support of our priority initiatives. Of note, the refund had been processed and received in record time, reflecting the continuous refinement of our accounting and loan facility management processes, driven by our CFO Martin Hill.

FY20 – The path ahead

Delivery of positive cashflow is our primary objective.

To that end we've developed our 3-tier corporate strategy to drive local activities to deliver revenues.

The successful delivery of our corporate strategy will position us for the sustained effort required to commercialise our technology suite.

And we haven't forgotten about the tremendous potential of the India market. We will follow through on our committment to explore opportunities.

We look forward to working on your behalf to deliver the above and thank you for your continued, invaluable support.

Yours sincerely,

Glenn Fozard	Jim Blackburn	Ashley Moore	Martin Hill
Executive Chairman	Executive Director & Chief Operating Officer	Executive Director & Chief Engineer	Company Secretary & Chief Financial Officer

Board

Glenn Fozard

Executive Chairman

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 held an advisory position with the Company prior to becoming a director in 2013.

David Smith

Non-executive Director

David has a strong legal and commercial background, having practised commercial law for over 25 years including over 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.

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

James Blackburn

Executive Director
Chief Operating Officer

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

Executive Director
Chief Engineer

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.

Key Personnel

Martin Hill
Chief Financial Officer & 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.

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.

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.

Our Technologies

“Bridging the gap between todays use of resources and tomorrow’s zero-emissions future.”

Coldry

Worlds most cost-effective drying method for brown coal. Zero net emissions footprint.

HydroMOR

World’s first brown coal-based iron making technology. Utilising hydrogen to decrease costs & emissions.

COHgen

Capturing hydrogen from brown coal without all the emissions. Low temperature, near-zero emissions.

CDP-WTE

Low emission conversion of waste to diesel, bitumen and asphalt.

Resource and energy solutions for a low emissions future

ECT is developing a broad range of technology solutions for commercialisation, focusing on upgrading low-value and waste resources into higher value products.

The technology suite targets char, fuel pellets, hydrogen, diesel and primary iron with low or zero emission profiles.

Coldry Technology

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_2 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.

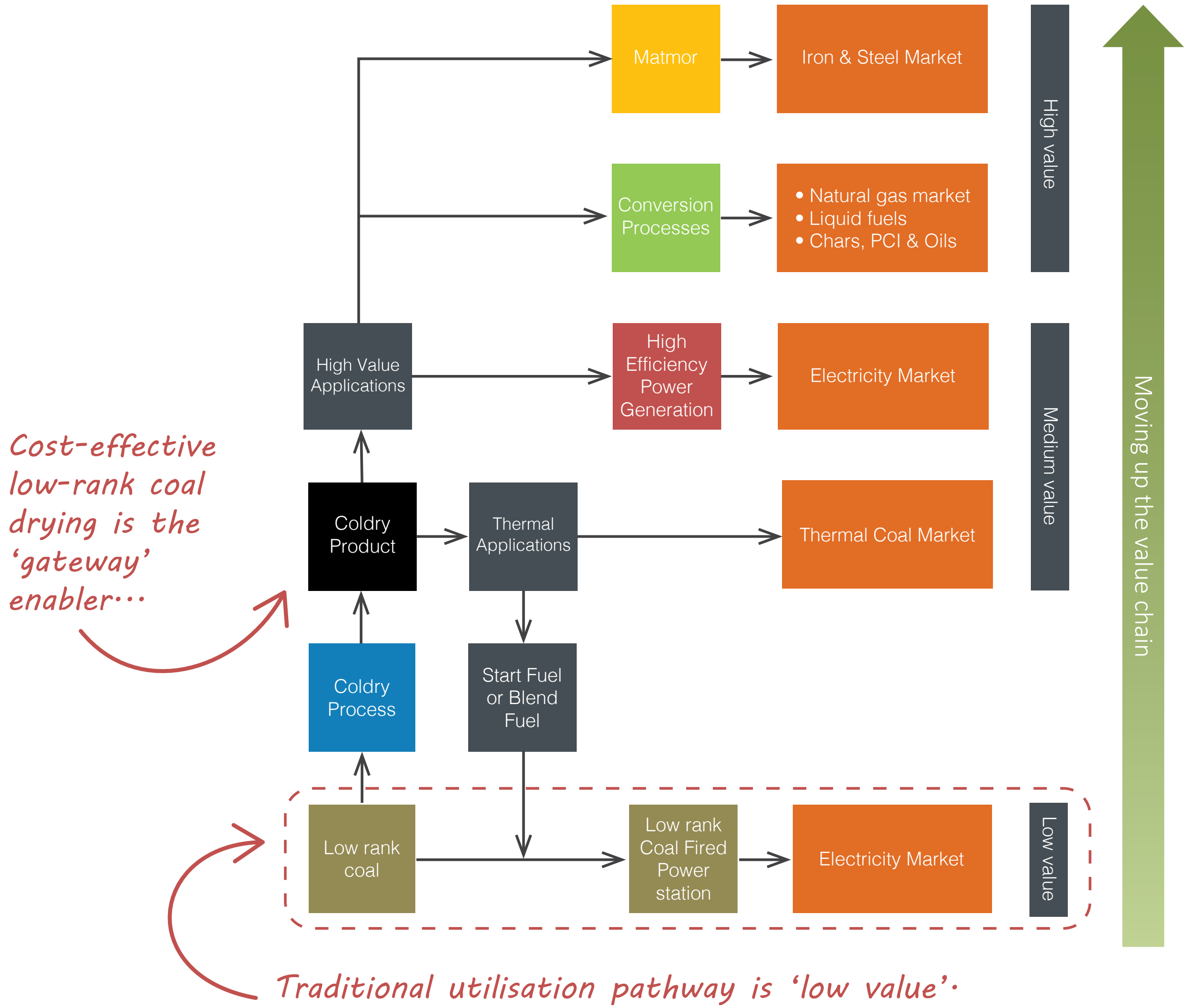
Developed in Australia and patented globally, Coldry is a cost effective and energy efficient method for dewatering high-moisture low rank coals such as lignite, creating an upgraded product similar in material properties to black coal for local and export markets.

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 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 CO_2 emissions intensity associated with utilisation, enabling greater sustainability of outcomes.



The Low Rank Coal Challenge

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_2 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

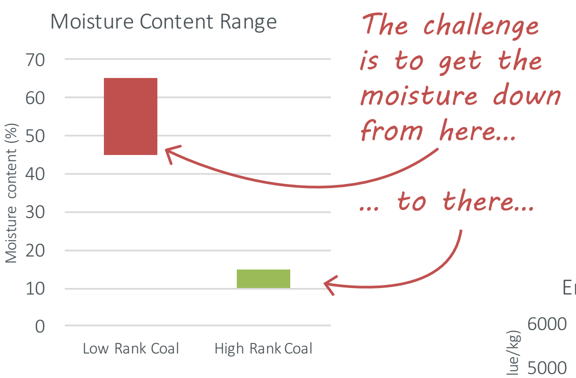
The Drying Challenge

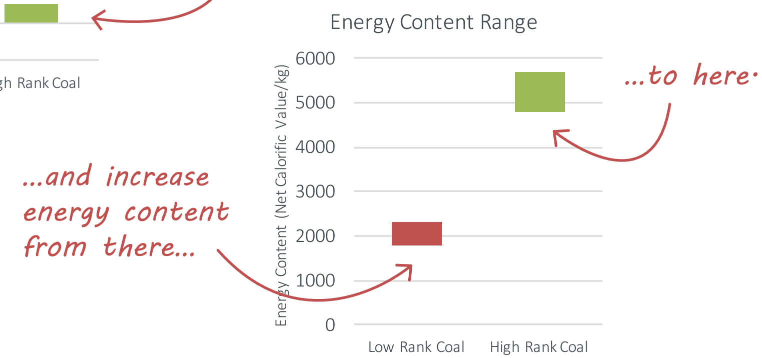
Drying is easy.

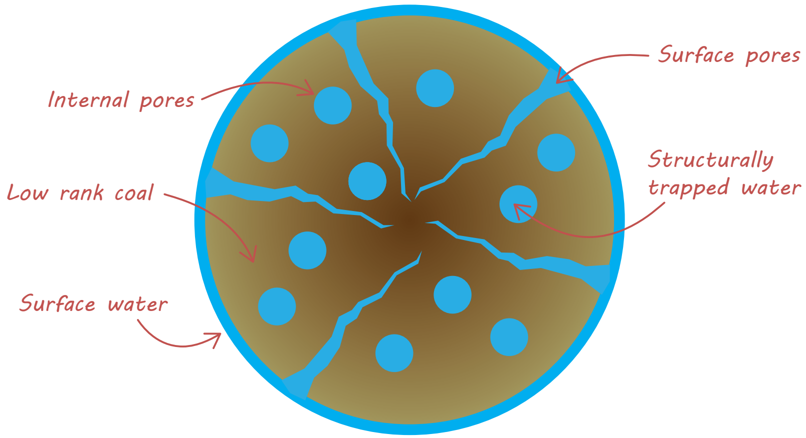
- Drying efficiently and cost-effectively is the challenge.
- Coldry meets the challenge.
- Achieving a net energy uplift and zero CO_2 emissions at the lowest possible marginal cost, is the goal.

"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 re-absorption 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 solid fuel pellets bagged and ready for shipement.

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.

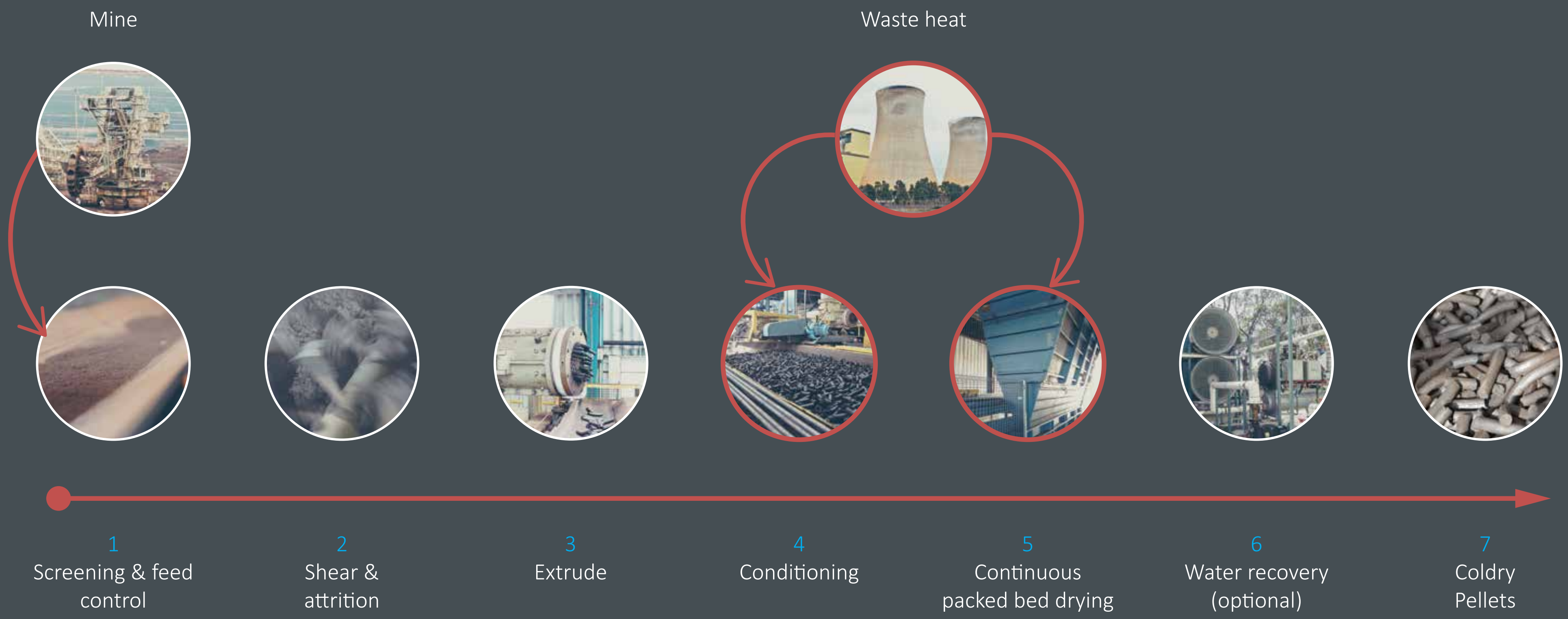
The Coldry technology process involves several process stages:

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_2, NO_x, and SO_x);
- 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.

Coldry Process



1 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.

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

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

3 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.

4 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.

5 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.

6 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.

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

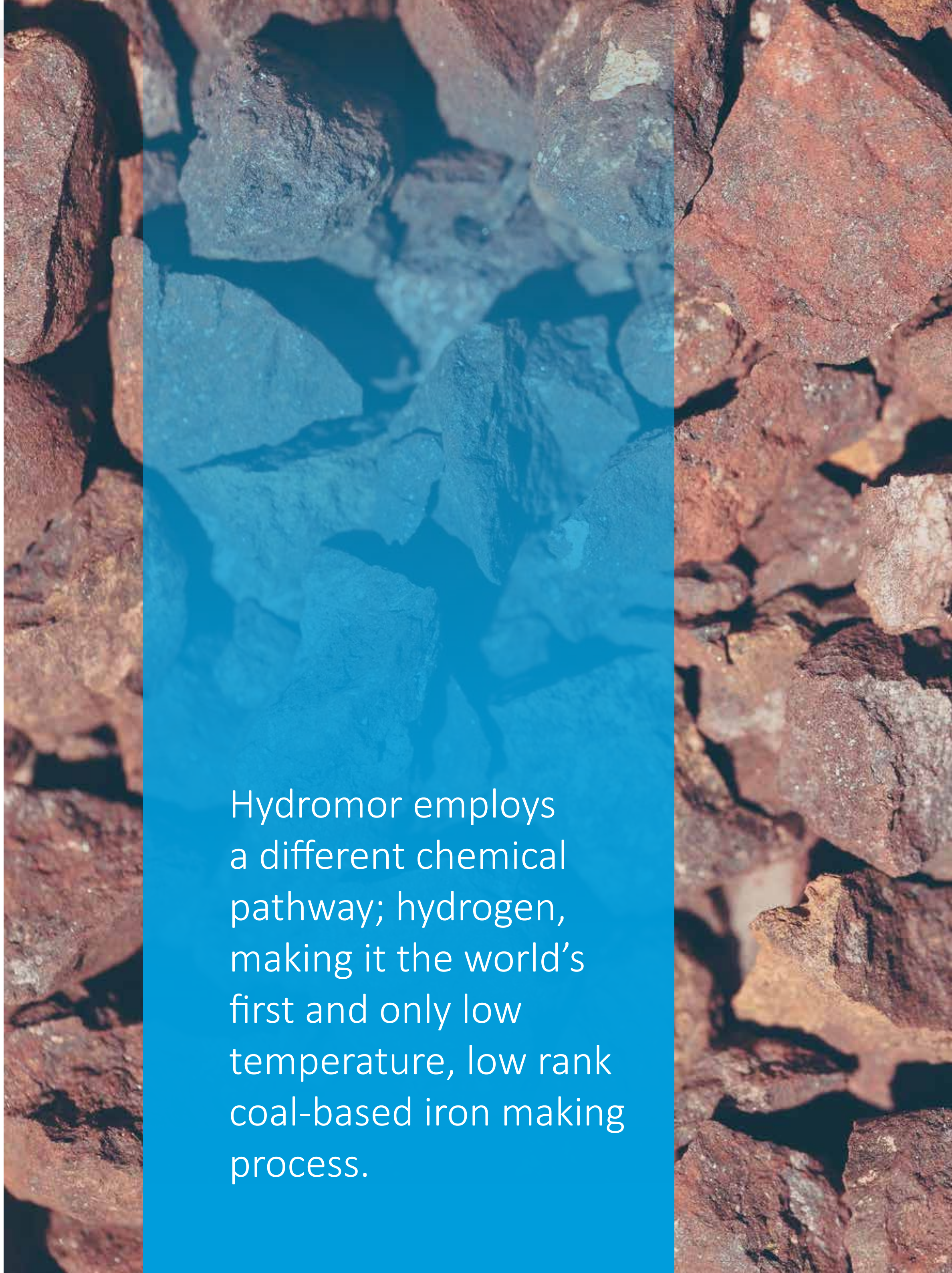
Coldry pellets feature a stable moisture level of between 10 and 15%.

Hydromor Technology

Since the advent of coke based iron production in 1709, primary iron making has relied on high-quality black coal as its reductant and heat source. The Hydromor process is positioned to revolutionise primary iron making thanks to the design of our simple, low cost, low emission, patented Hydromor retort using cheaper, alternative raw materials.

Hydromor comprises three exclusive facets:

1. **Inputs** – It uses brown coal (lignite) as a reductant and heat source – no other technology can claim this
2. **Hydrogen** – Hydromor is dominated by a hydrogen reduction reaction, instead of the traditional carbon-based reduction reaction
3. **Plant Design** – It employs our unique Hydromor retort – a vertical furnace that works with the natural chemistry of brown coal to deliver a lower cost, lower emission alternative to the blast furnace and DRI Kiln.



Hydromor employs a different chemical pathway; hydrogen, making it the world's first and only low temperature, low rank coal-based iron making process.

Introduction

Hydromor 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.

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

Hydromor Value Proposition

The value proposition for Hydromor 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. Hydromor liberates this resource in an efficient, cost-effective manner.

Hydromor 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 Hydromor 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’

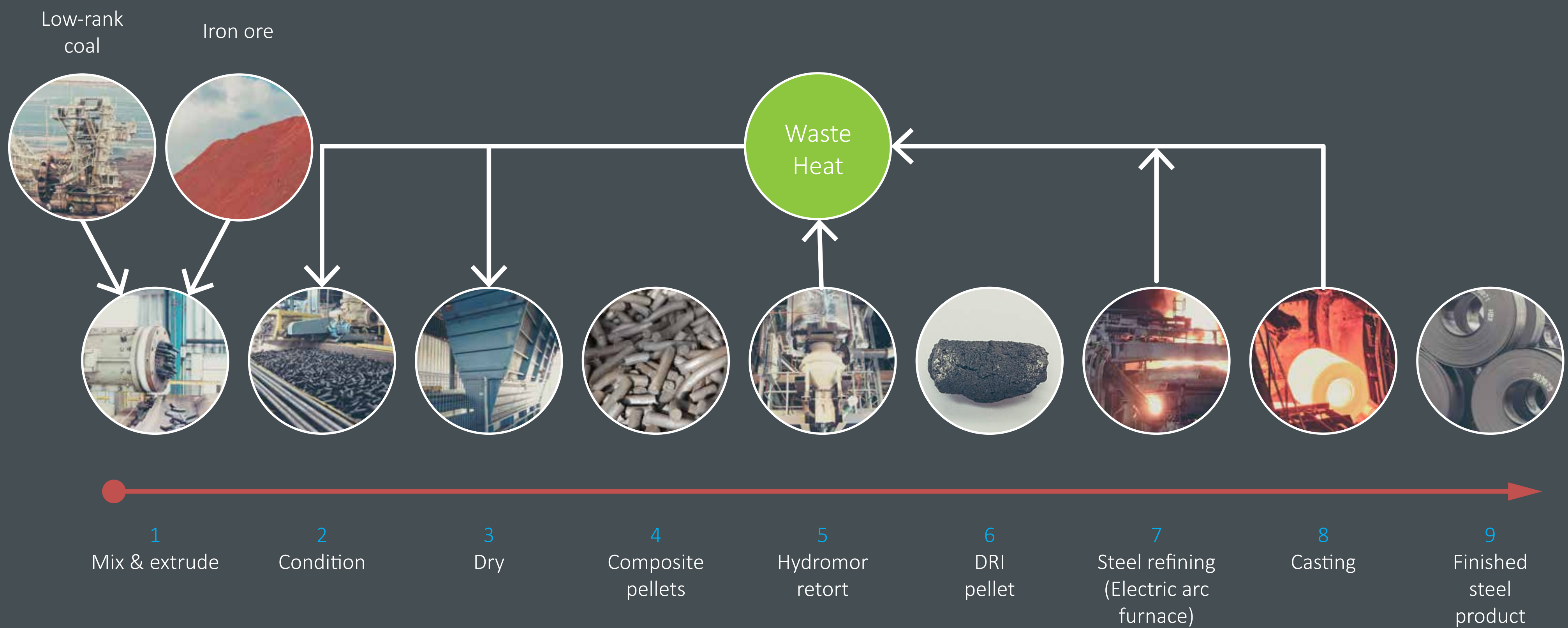
By harnessing the vast ‘above ground ore body’ that exists as mine tailings, fines and slimes and from industrial wastes such as mill-scale and nickel refinery tailings, Hydromor is able to leverage sunk mining and processing costs by providing a waste remediation solution that turns a contingent liability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

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

Lower plant cost

- The Hydromor 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

Hydromor Process



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

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

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

4 The dried composite pellets contain approx. 5% moisture and are ready to be delivered to the Hydromor Retort.

5 The Hydromor Retort is where the action happens. Iron oxides are reduced to iron via a unique chemical process.

6 The output from the Hydromor Retort is a ‘direct reduced iron’ (DRI) pellet suitable for melting in either an induction or electric arc furnace.

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

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

9 The finished product is then ready for sale into its desired market.

CDP-WTE Technology

General Information

- Introduction
- Value Proposition
- Overview of Coldry synergies
- Four main benefits of CDP-WTE
- CDP-WTE process

CDP-WTE

Catalytic Depolymerisation

Waste-to-energy

CDP-WTE converts a variety of waste feedstocks into high quality renewable diesel.

Coupled with Coldry, there are significant potential synergies to provide a highly cost effective and environmentally friendly solution for automotive fuel requirements in Australia

Introduction

Catalytic Depolymerisation, a process for converting polymers into monomers, is used to reduce complex organic materials into high quality synthetic diesel.

In the presence of a special catalyst, bespoke equipment, relatively low heat and approximately atmospheric pressure, the long chain and cyclic organic polymers decompose into short chain petroleum hydrocarbons.

Catalytic depolymerisation has the ability to efficiently convert a variety of feedstocks, such as construction and industrial waste, plastics or coal, into high-quality renewable diesel which can be used in both the transport sector or for energy generation.

The CDP-WTE technology features:

- Strong synergies with the Coldry process, providing a high value downstream application for Coldry deployment in lignite markets
- A highly prospective standalone technology in markets with suitable waste streams
- Suitably advanced in its development to fit well with current Coldry development timeframes
- Competitive advantage over other waste-to-energy technologies, being low temperature and low pressure, which are proxies for relatively lower opex and capex
- Production of products that have mature, well established markets and supply chains, facilitating financing and offtake

CDP-WTE Value Proposition

- Solution to Australia's 'waste crisis'
- Improving Australia's strategic reserves of fuel
- Contribution to 'Circular Economy'

Solution to Australia's 'waste crisis'

Catalytic depolymerisation is particularly relevant to addressing Australia's growing waste and recycling burden, representing a net economically beneficial solution for local governments, public authorities, energy providers and remote communities.

Catalytic depolymerisation will help a broad range of organisations realise improved economic value, environmental outcomes, energy security and social value.

Improving Australia's strategic reserves of fuel

The primary product - renewable diesel - can be used in transportation and vehicle fleets as well as to generate power when coupled with diesel powered generating plants. Previously, CDP Waste2Energy had focused its research and development efforts on delivering production levels that provide commercially viable and competitive returns to investors, providing a point of differentiation in the W2E market.

Accordingly, the CDP technology is already progressed significantly towards being able to offer a Process Guarantee that ensures continuous and appropriate commercial production levels and diesel quality for the type of feedstock.

Logistics operations and remote and regional energy infrastructure is almost wholly dependent on oil.

In the near and medium term, there are no alternatives to substitute fossil liquid fuels used for transport in the regions with other fuels.

Consequently, liquid fuel supply poses an enduring risk to economic security, fuel security, food security and social stability.

Contribution to the 'Circular Economy'

An example Waste to Energy project in the Latrobe Valley

With the strategic acquisition of the CDP assets, we have commenced the pathway to development of a Coldry-enabled CDP plant to be established in the Latrobe Valley for the purpose of converting waste and biomass to diesel for the transport market.

Coldry would supplement the waste and biomass, improving homogeneity, and enhancing performance and yield.

Key benefits include:

- Alternative to current recycling and waste-management models, providing a solution that delivers a net economic benefit, rather than cost;
- Transitional solution, bridging the gap between today's use of lignite and a zero emissions future;
- Higher-value application for Coldry process
- Substitution of diesel imports for the transport fuel market

Overview of the Potential Synergies with Coldry

Coldry product is likely to need less refining to be suitable for the CDP process when compared to other applications.

The characteristics of the Coldry product are expected to reduce or remove the need for the first stage of the CDP process (being feedstock preparation) making a significant beneficial impact on both the capital and operational cost of the CDP plant.

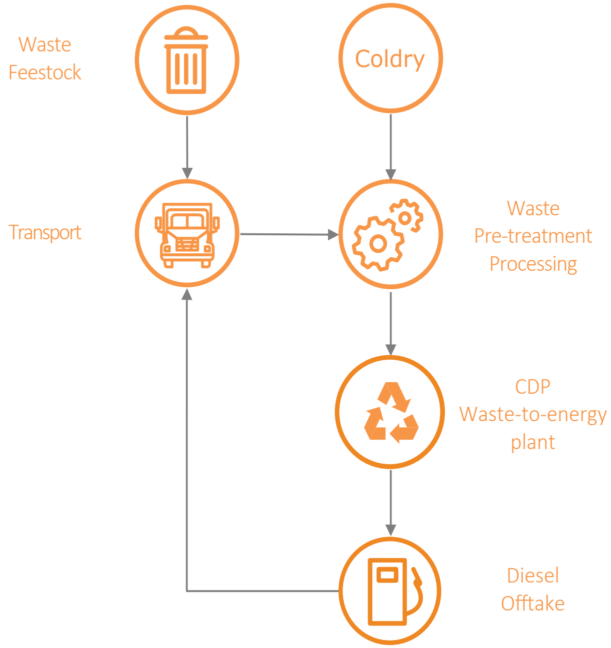
The Coldry product could be used to fuel a steam electrical generation system to supply the electricity for the CDP process and make it totally self sufficient.

There are mutual benefits in co-locating such as reduced rent, transport costs and staffing.

Consistency of feedstock is important for the CDP process, especially in the initial stages of the first commercial project. The Coldry feedstock can not only potentially satisfy that requirement, but can also be adjusted as required to facilitate testing other feedstocks in addition to Coldry.

The Coldry process may be able to be adapted to create blends of various waste feedstocks in addition to lignite to facilitate. This potentially could include high moisture content waste such as green waste.

Further R&D work is being conducted by ECT to investigate the cost effective production of hydrogen. This could save a significant amount of expense relating to the purchase of natural gas for use during the hydrotreating/refining of the CDP diesel.



Four Main Benefits of CDP Technology

With further testing, it is expected that the technology will be able to process a mix of waste feedstock, including:

- Biomass such as paper, cellulose, fats, wood and organic squeezing residues; and
- Fossil fuel derived materials e.g. coal, plastics, oils, bitumen

Eventually, the waste streams could include:

- Municipal Solid Waste (MSW), Construction and Demolition (C&D) waste
- All kinds of plastics and synthetics (PP, PET etc.)
- Biomass (waste plant material), wood, bioderived residues like leaves, straw
- Animal waste
- Coal, crude oil, bitumen, old tyres and refinery residues
- Waste oil, fat and bio solids

In comparison to other waste to fuel processes the CDP process is a reaction process that occurs at relatively low temperature and low pressure, complementing the low temperature, low pressure approach of the Coldry process:

- Low temperature and low pressure conditions are a proxy for lower opex and capex and avoid the production of toxic substances such as dioxin;
- The process does not consume any water, reducing the impact on the environment and community, unlike other technologies such as gasification and supercritical processes, and;
- A lower carbon footprint due to a relatively low reaction temperatures (~ 280°C) unlike other upgrading technologies such as pyrolysis (>500°C) and gasification (>700°C).

The high-quality diesel produced through the CDP process not only meets AS3570, but can provide the following benefits:

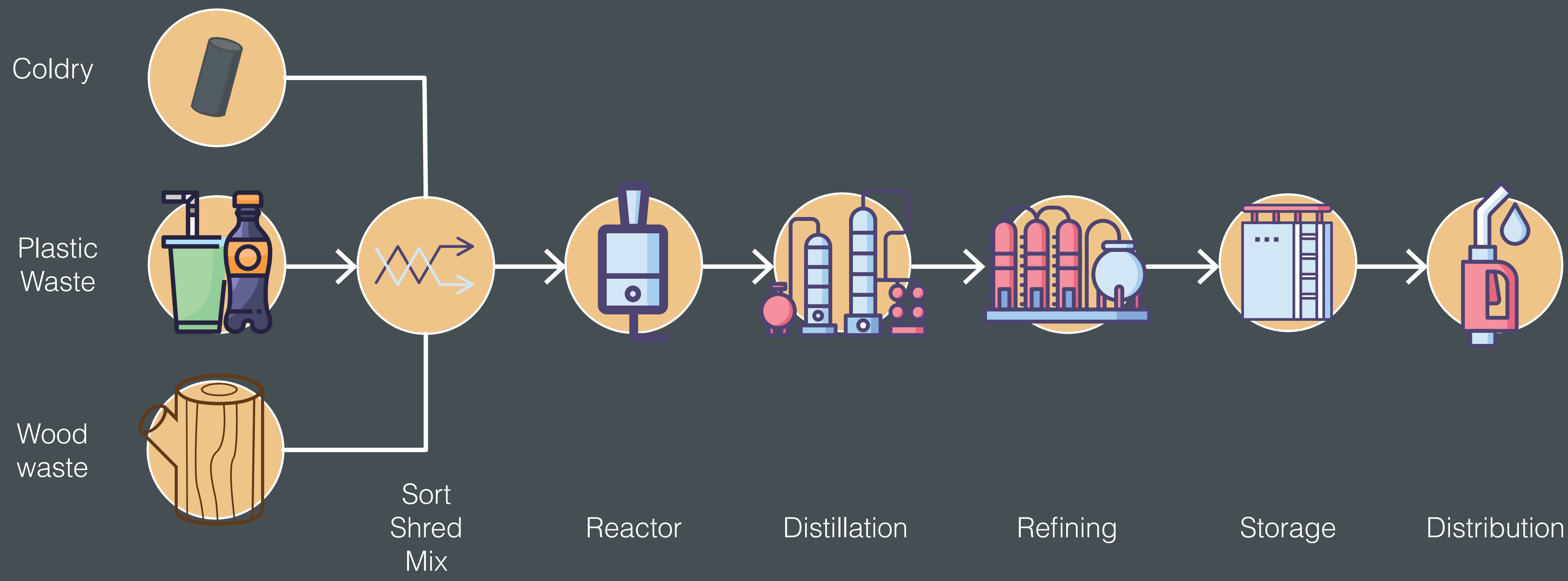
- not strongly acidic like pyrolysis oils;
- reduced costs per litre;
- diesel can be used to power generators for remote communities; and,
- reduced emissions.

Diesel offtake volumes could be met through a combination of fuel supply agreements to local independent fuel retailers and bulk supply agents and direct supply to the waste management company and logistics transport fleets.

Local governments and other regional waste management operations are required to manage waste environmentally, socially and economically for their customers.

The CDP process is scalable, and could be based on the CDP1500 module size, a 1,500L per hour renewable diesel unit. A project comprised of three CDP1500 plants could deliver an aggregate of 4500L of diesel per hour from 115,000 tonnes of waste per annum.

CDP-WTE Process



COHgen

Catalytic Organic Hydrogen Generation

Introduction

ECT is developing an alternative method of hydrogen generation from lignite called Catalytic Organic Hydrogen generation, featuring:

- Enhanced hydrogen yield
- Lower operating temperature (lower operating cost, higher energy efficiencies)
- Lower CO_2 emissions – the majority of the carbon is deposited as a solid rather than being emitted, resulting in lower CCS cost

The successful outcome of R&D initiatives can be enhanced through collaborative programs, enabling the identification and joint development of innovative approaches to reducing cost and emissions.

The Process

How it works

The COHgen process utilises a unique low-cost catalyst (courtesy of our Hydromor process) to facilitate the low temperature catalytic thermal decomposition of the hydrocarbons generated from lignite.

We're currently proceeding through fundamental lab-scale research to generate the data necessary to define the parameters for our patent application.

As such, we can't disclose the underlying details, just yet.

Suffice to say we've achieved higher H_2 yield at a lower temperature than standard lignite gasification.

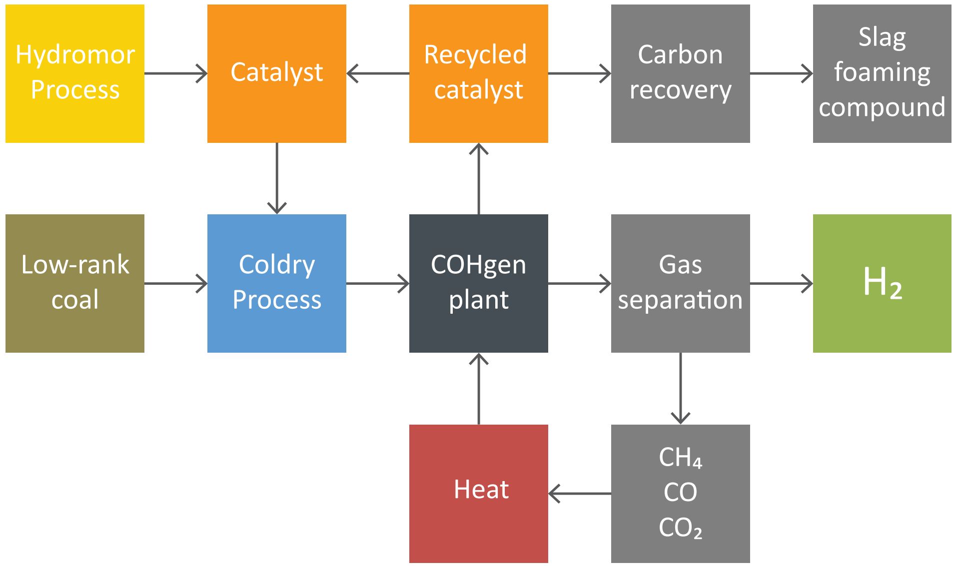
The other significant observation is the amount of carbon deposited within the process. Typical gasification is higher temperature and features high CO_2 emissions.

COHgen is different.

The majority of carbon remains in solid form, helping to overcome the biggest objection to the use of lignite for hydrogen production: CO_2 emissions.

Minimising CO_2 emissions has the benefit of reduced carbon capture and storage (CCS) cost.

We're also testing various methods for recovering the carbon as a valuable output. If successful, this could enhance the economics of the process, making it even more economically attractive compared to traditional methods.



The product

The output from the COHgen plant is a hydrogen-rich gas.

Other components include carbon monoxide (CO), methane (CH_4) and carbon dioxide (CO_2).

Standard gas separation processes can be employed to isolate the H_2 and, where appropriate concentrate the remaining CO_2 for capture, storage or utilisation.

The CO and CH_4 are a valuable gas fuel which can be utilised within the COHgen process or potentially sold to gas customers.

Applications

Hydrogen applications across domestic and export markets include:

- Transport fuel via hydrogen fuel cell vehicles (HFCV's)
- Supplementing or substituting natural gas
- Energy storage – firming intermittent wind and solar power

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

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 24 September 2019. The directors have the power to amend and reissue the financial statements.

Director's 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 2019.

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
- Barry Richards - Non-executive director (resigned 11 September 2019)
- David Smith - Non-executive director
- James Blackburn - Executive director (appointed 11 September 2019)
- Ashley Moore - Executive director (appointed 11 September 2019)

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 techno-economic validation ahead of intended broader commercial roll-out.

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 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_2 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 degrees Celsius, compared to a blast furnace which operates at around 1500 degrees Celsius. 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.

CDP Waste-to-Energy

The Company announced on 10 July 2019 that it had completed the purchase of a catalytic de-polymerisation (CDP) technology which is capable of producing automotive diesel from a range of hydrocarbon-based inputs including various waste and hydrocarbon streams such as waste timber, end-of-life plastics and low-rank coal.

This acquisition delivers significant opportunities and advantages for the ECT Group and its commercialisation program, linking existing projects and commercialisation activities to new and higher margin sectors of the energy market.

As part of the development of this waste to energy technology, a number of prospective stand-alone projects are poised to progress to the commercial demonstration stage. The Company will be working with a range of interested parties to build upon this position to quantify and qualify the commercial potential of these new projects.

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 an 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_2 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 year, ECT Finance Ltd, a subsidiary of the Company, continued to manage its portfolio of ELF loans to the previous holders of ESIOA and ESIOB options.

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 $8,903,015 (30 June 2018: $5,133,685).

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 3 August 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 2019. The loan facility allows for the provision of funding to the Company of up to $3.6 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. The Company has finalised arrangements for a facility covering the financial year ending 30 June 2020 and has received the first drawdown.

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

On 8 October 2018, the Company received the full amount of the research and development tax incentive receivable recognised in the financial statements at 30 June 2018 amounting to $1,673,044. This was partially used to repay in full borrowings in respect of the 2018 financial year loan facility from Brevet Capital with the excess of $281,671 returned to the Company as working capital.

(iv) **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 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.

In addition to the successful initial testing 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 the Company's proposed Latrobe Valley project should that project proceed.

(v) **Latrobe Valley project**

The Latrobe Valley project has been a key development focus of the Company for the past two years. Over this time, the Company has completed the pre-feasibility program which, in response to market demand, provided an indicative capital estimate of AUD $210M for 600,000 tonnes per annum (tpa) capacity. These initial estimates for a multi-module development have been further refined and the Company is now focused on initially deploying as a single module at a scale of 170,000- 300,000 tpa.

The Company explored opportunities for synergistic applications it could integrate within Coldry deployment timeframes, identifying a waste-to-energy (WTE) technology capable of producing diesel fuel via a process known as catalytic depolymerisation (CDP). The Company subsequently acquired the WTE-CDP technology in July 2019. The addition of the WTE-CDP technology to the Latrobe Valley project is intended to provide significant potential margins to Coldry solid fuel pellets via the conversion to higher value products, including diesel, bitumen and asphalt.

The next stage of the feasibility program, to be completed over the coming months, has focused on a detailed, in-depth assessment of specific site requirements at Yallourn power station (coal supply, waste heat integration and electrical tie-ins) and additional engineering design program targeting the integration of the newly acquired waste-to-energy (WTE) technology, led by the Company's engineering team. The Company expects that the project will be developed following completion of an Information Memorandum (IM) within a project Special Purpose Vehicle (SPV), and project funding raised by equity capital from external investor(s) in this separate entity.

A key component of the IM will be the basic engineering report, delivered by independent, external, well-regarded engineering design firms, and together with the project investment model will form the basis of an investment program through to financial close.

The current estimated timeframe to financial close for equity capital raising in the project SPV is the second half of 2020, with construction targeted to begin by December 2020.

(vi) **ECT Finance Ltd**

During the period, ECT Finance Ltd, a subsidiary of the Company, offered ELF loans to the value of $2,550,000 to holders of unlisted options, for the sole purpose of financing the exercise of these options and conversion into Fully Paid Ordinary shares of the Company. During the year, ECT Finance Ltd has received $2,169,193 of loan payments which is made up of principal and interest. Any cash receipts received through repayment of principal and interest over the loan period will be available to the Company to finance ongoing working capital. These loans are in addition to the ELF loans issued in the previous financial year to some of the former holders of ESIOA and ESIOB options.

The total value of the loan book as at 31 July 2019 is $16,101,500 (including interest accrued and capitalised, and management fees capitalised to the loans to 30 July 2019). The value of security held is $4,195,116 (based on a 0.4c share price). The loans in respect of the ESIOA and ESIOB options are scheduled to expire on 30 July 2020, and the loans in respect of the unlisted options are due to expire on 31 July 2021. Interest rates across each of the loans can vary according to payment methods. For accounting purposes pursuant to accounting standards, the ELF loans and the related shares issued are not recognised but are treated as the issue of options (refer to notes 22 and 23 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.

(vii) **Expiry 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 846,088,751 ECTOC options with an exercise price of $0.045 and expiry date of 31 July 2019. These options expired on 31 July 2019.

(viii) **India project**

The Company announced on 26 June 2019 that it had rescinded the offer to NMDC Limited (NMDC) and NLC India Limited (NLCIL) to extend the memorandum of understanding that had been initially signed in May 2018. The decision to rescind the offer followed NMDC's unwillingness to proceed with the project. The Company will continue to work with NLCIL and is seeking an alternative partner to NMDC.

Financial results:

The reportable loss for the consolidated entity was higher at $8,903,015 compared to the prior year loss of $5,133,685. This result represents an increase in total recorded income and an increase in expenses. Cash expenses decreased year on year, driven largely by decreases in Bacchus Marsh plant activity and upgrades, and India project preparation works. Non-cash expense items also decreased.

The most significant expense was the recognition of a $4,800,000 impairment in relation to the Coldry intellectual property (IP).

The Coldry IP is the most advanced of all the Company's technologies and while the asset has been fully impaired in order to comply with relevant accounting standards, the Company is of the view that this IP remains of significant importance and commercial value to the Company. Coldry is currently in the early stages of commercialisation and test product is being manufactured and sold. Coldry is also the cornerstone precursor of all other technologies that the Company is developing such as Matmor, HydroMOR and COHgen. The Company expects, after further research and development, that Coldry will also provide the pivotal integration pathway for commercialising of the recently acquired waste-to-energy technology.

The recognition and value of the Coldry IP, being an intangible asset, must be considered annually in accordance with the requirements of AASB 136 'Impairment of Assets'. An impairment test must be conducted if there are indicators of impairment, in which case the entity shall estimate the recoverable amount of the asset. The recoverable amount shall be the higher of the fair value less cost of sale and value in use. It was determined that the significant drop in the Company's share price subsequent to the ending of the voluntary trading suspension on 10 July 2019 (as compared to the share price at 30 June 2018), the withdrawal of NMDC Limited from the India project and the Company's decision to subsequently terminate the memorandum of understanding were indicators of impairment.

The Company has also recognised an increase in the liability associated with the expected payment of the deferred consideration in relation to the Coldry consideration. This increase in liability results from greater confidence of expected future income (represented by a lower discount rate of 32% (2018: 34%) - refer Note 2) occurring within a shorter timeframe than prior periods, hence reducing the impact of applied discount rates.

Sales of by-products from the consolidated entity's research and development activities increased by $74,732 as sales of Coldry test product from the high volume test facility at Bacchus Marsh increased as a result of the Company supplying test product to its first 'steam and boiler package' customer.

The 'Other Income' category of $1,524,227 (2018: $1,699,766) 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 expenditure.

Total operating costs (excluding impairment expense and remeasurement of financial liabilities) decreased by $579,296. Finance costs increased by $62,156.

Depreciation and amortisation recorded a year on year decrease of $276,940. 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 a net reduction in the combined liabilities resulting in a gain on remeasurement for the year.

Significant changes in the state of affairs

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

Matters subsequent to the end of the financial year

On 2 July 2019, the consolidated entity entered into an Asset Sale Agreement to acquire waste-to-energy (WTE) technology known as the Catalytic De-Polymerisation Process (CDP) capable of producing automotive diesel from a range of inputs including various waste streams, such as construction wood-waste and end-of-life plastics. Completion date for the acquisition was 8 July 2019. The new technology provides direct exposure to the waste-to-energy sector through existing project opportunities and potential integration with the Company's Latrobe Valley Coldry project.

The total purchase price for the portfolio of intellectual property acquired was $227,501 (inclusive of GST) and has been financed by a partial redraw of the securitised loan provided by Challenge Roofing and Bricks. The assets have been acquired by a subsidiary company set up for this purpose, ECT Waste-to-Energy Pty Ltd.

As part of James Blackburn's remuneration package, a limited recourse loan was provided to support the acquisition of fully paid ordinary shares (refer 'Details of Remuneration' in the Directors' Report). On 27 July 2019 a margin call was made by Equity First Holdings ('EFH') on these shares for additional shares or cash to be provided as additional security for the loan. As the share price at the time did not support the contribution of additional security by Mr Blackburn, the margin call was not met and the shares were forfeited back to EFH.

On 31 July 2019 the Company's ECTOC options expired. Quotation of these securities ceased on 25 July 2019.

On 2 August 2019 the Company announced a 6-month interest free period for the holders of ELF loans for the period 31 July 2019 to 30 January 2020.

On 2 August 2019 the Company announced that its Chairman, Glenn Fozard, would direct 100% of his ECT Limited executive contract remuneration (as opposed to his remuneration as a director) to the repayment of his ELF loans for the period 1 August 2019 to 31 January 2020.

On 27 August 2019 the Company signed a new loan agreement for a 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 2020 on the same terms as the previous facility. The loan facility allows for the provision of funding to the Company of up to

$3.6 million. The Company's research and development tax rebate to be received represents the security for the facility.

On 3 September 2019 the Company entered into a loan agreement with Challenge Roofing and Bricks Pty Ltd for $150,000. The loan is secured by the Company's research and development tax rebate.

On 11 September 2019 the Company appointed James Blackburn and Ashley Moore as directors. On the same date Barry Richards resigned as a director.

No other matter or circumstance has arisen since 30 June 2019 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 remains one of the consolidated entity's primary objectives despite the withdrawal of NMDC as mentioned above. To that end the consolidated entity will continue to pursue its India strategy to establish a partnership with leading Indian government public sector undertakings (PSU's).

The project will aim 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.

The consolidated entity also continues to evaluate and consider the prospects and merits of a commercial demonstration plant in Victoria to scale up existing technologies including the development of the recently acquired waste-to-energy technology. Production at the HVTF is likely to increase to meet demand for the solid fuel market for utility heating requirements in a range of industries.

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	B.Bus (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; 42,000,000 ordinary shares held as security under the ELF
Interests in options	Nil

Name	Barry Richards
Title	Non-Executive Director (resigned 11 September 2019)
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 over 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. 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	James Blackburn
Title	Executive Director (appointed 11 September 2019)
Qualifications	BAppSci, GradDip. (Governance)
Experience and expertise	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 January 2016 assuming core responsibility for ECT operations and corporate services and over the past 3 years has fulfilled the role as Chief Operating Officer and Chairman of the ECT Finance Limited board. James continues provide executive and operational leadership of the Company.
Other current directorships	None
Former directorships (last 3 years)	None
Special responsibilities	Chief Operating Officer and a member of the Audit and Risk Committee
Interests in shares	Nil
Interests in options	Nil

Name	Ashley Moore
Title	Executive Director (appointed 11 September 2019)
Qualifications	BEng(Chem), MIEAust, CPEng, NER, APEC Engineer, IntPE(Aus), MAICD
Experience and expertise	Ashley is a seasoned chemical industry professional with extensive experience in all facets of manufacturing, supply chain, sales and industrial marketing. He holds an honours degree in chemical engineering from the University of Melbourne and has more than thirty years of industry experience in Australia and internationally. His career started with global specialty chemical manufacturing firm Cabot Corporation in Australia and proceeded to include assignments in various parts of the manufacturing field in the U.S.A., U.K., Japan, Indonesia and Malaysia. He covered roles ranging from plant operations & engineering, design & construction and commissioning, and later included marketing and technical sales. In 2005, he joined Delta EMD, a global specialty chemical firm in the downstream minerals sector responsible for sales, marketing and supply chain. Ashley joined ECT in 2009 as Business Manager, was appointed to the role of Chief Operating Officer in 2011, Managing Director in 2013, and later Chairman of one of ECT's subsidiaries.
Other current directorships	
Former directorships (last 3 years)	Director of Environmental Clean Technologies Limited from 17 July 2011 to 16 October 2017
Special responsibilities	Group Chief Engineer
Interests in shares	81,212,842 ordinary shares, 972,223 ordinary shares held as security under the ELF
Interests in options	Nil

'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. Martin resigned as an employee of the Company effective 15 November 2019. He will continue to perform some of his current duties as a part time consultant after this date, including that of Company Secretary.

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 2019, 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	11	13	4	4	-	-
David Smith	13	13	-	-	5	5
Barry Richards	13	13	4	4	-	-

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 2018 AGM of the Company, Barry Richards was 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 are 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:

- 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 non-executive director. Any engagement of a non-executive director to provide those additional services must be unanimously approved by all directors (other than the non-executive director providing services);
- The non-executive director must report in writing to the Board at the completion of the additional services in

such form as the Board may reasonably require;

- All amounts paid to non-executive directors in respect of providing those additional services will be disclosed in the annual financial statements of the Company; and
- The above policy also applies to entities associated with a director, where the additional services of the non-executive director are provided through that entity.

Executive remuneration

The Remuneration, Nomination and Governance Committee is responsible for determining remuneration and nomination policies in respect of KMP. In establishing such policies, the Committee is guided by external remuneration surveys and industry practices, commensurate with the scale and size of the Company's operations. The 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 comprise an executive's total remuneration:

- base pay and non-monetary benefits;
- consulting fees;
- share-based payments; and
- 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.

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 2019 the consolidated entity, through the Nomination, Remuneration and Governance Committee, engaged the Remuneration Strategies Group at a cost of $3,000 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 2018 Annual General Meeting ('AGM')

At the 2018 AGM, 97.9% of the votes received supported the adoption of the remuneration report for the year ended 30 June 2019. 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.

The Board, and the Remuneration, Nomination and Governance Committee, have taken a number of steps recently 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 2019 to reflect and respond to changes in core functions and responsibilities of these roles. These will be reviewed again in the following financial year.
- The Company, under guidance of the Board, periodically reviews 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 2019, 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 2019.

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
- David Smith - Non-Executive Director
- Barry Richards - Non-Executive Director (resigned 11 September 2019)
- Martin Hill – Chief Financial Officer & Company Secretary
- James Blackburn – Chief Operating Officer (appointed Executive Director from 11 September 2019)
- Ashley Moore (appointed 11 September 2019)

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	
2019	**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	50,000	-	-	-	-	-	50,000
Executive Directors							
Glenn Fozard [a]	75,000	216,200	7,560	-	-	-	298,760
Key Management Personnel							
Martin Hill	134,370	-	-	24,721	-	-	159,091
James Blackburn [b]	174,109	-	48,590	16,435	-	106,399	345,533
	488,274	**216,200**	**56,150**	**46,361**	**-**	**106,399**	**913,384**

[a] Glenn Fozard's remuneration consists of a fixed director's fee, consulting fees for other services to a maximum of 198 hours per month at $100 per hour, and a 2% discount on his ELF loans.

[b] 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.

2018	Short-term benefits Cash Salary $	Consulting fees $	Non-monetary $	Post-employment benefits Super-annuation $	Long-term benefits Leave benefits $	Share-based Payments Equity-settled $	Total $
Non-executive Directors							
David Smith	54,795	-	-	5,205	-	-	60,000
Barry Richards	58,333	-	-	-	-	-	58,333
Executive Directors							
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 Personnel							
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 Equity Lending Facilities

[b] Represents Ashley Moore's remuneration as director up to date of resignation as a director of the Company and cessation as KMP.

[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 was to 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.

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

Name	Fixed Remuneration 2019	Fixed Remuneration 2018	At risk LTI 2019	At risk LTI 2018
Non-executive Directors				
Barry Richards	100%	100%	-	-
David Smith	100%	100%	-	-
Executive Directors				
Glenn Fozard	100%	100%	-	-
Ashley Moore	-	100%	-	-
Other Key Management Personnel:				
Martin Hill	100%	100%	-	-
James Blackburn	70%	70%	30%	30%

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	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 2019.

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 2019 are summarised below:

	2019 $	2018 $	2017 $	2016 $	2015 $
Income	1,760,773	1,838,563	2,392,705	2,400,899	1,691,785
EBITDA	(8,065,329)	(4,052,141)	(1,273,462)	(548,691)	(712,630)
EBIT	(8,666,333)	(4,930,085)	(3,971,071)	(3,579,708)	(2,605,844)
Loss after income tax	**(8,903,015)**	**(5,133,685)**	**(4,357,282)**	**(4,238,067)**	**(3,716,176)**

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

	2019 $	2018 $	2017 $	2016 $	2015 $
Share price at financial year end ($)	0.013	0.012	0.012	0.010	0.018
Basic earnings per share (cents per share)	(0.250)	(0.151)	(0.154)	(0.160)	(0.155)

* at reporting date, trading in shares of the Company was voluntarily suspended. Share price represents the last traded price on 12 March 2019. The voluntary suspension ended 10 July 2019.

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
Martin Hill	1,900,000	-	-	-	1,900,000
James Blackburn (b)	25,000,000	-	-	-	25,000,000
	76,900,000	**-**	**-**	**-**	**76,900,000**

(a) A total of 50,000,000 shares were issued under the ELF on exercise of ESIOA and/or ESIOB options. 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 were made in the previous financial year which resulted in 8,000,000 shares being released as security.

(b) 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:

	Balance at the start of the year	Issued	Exercised	Expired/ forfeited/ other	Balance at the end of the year
Options over ordinary shares					
Martin Hill	150,000	-	-	-	150,000
	150,000	-	-	-	150,000

* The above table does not include the in-substance issue or holding of options related to the ELF.

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 $nil (2018: $72,000). Interest paid during the year was $nil (2018: $13,146). Movements in the loan balance during the year consisted of interest and management fees incurred. Interest was payable on the outstanding balance at a rate of 7.39% calculated daily.

Other loans

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 (as amended) was subject to settlement at the end of the loan period, with such settlement deemed to occur when Mr Blackburn fulfilled his employment over the duration of 3 years and 3 months. 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 repaid following the completion of the loan period (on 30 September 2019). The loan was provided on an interest free basis. The shares issued were subject to lock-up from the date of issue (1 December 2016) for a term of 3 years and 3 months, 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 (2018: $106,399) 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. On 27 July 2019 a margin call was made by Equity First Holdings ('EFH') on these shares for additional shares or cash to be provided as additional security for the loan. As the share price at the time did not support the contribution of additional security by Mr Blackburn, the margin call was not met, and the shares were forfeited back to EFH.

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 $87,599 (2018: $169,873).

This concludes the remuneration report, which has been audited.

Shares under option

Unissued ordinary shares under option 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

In the previous financial year, shares were issued that were financed by the ELF of ECT Finance Ltd. The details of this facility are disclosed within the Annual Report (refer to notes 22 and 23 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 in the previous financial year, 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, 309,241,137 (2018: 28,436,003) shares have since been released to the shareholders on the basis that the shareholder's ELF debt was repaid. An amount of 280,805,134 shares were released during the year.

As at the date of this report, there are therefore 1,048,779,136 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.

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
24 September 2019
Melbourne

BDO

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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 2019, I declare that, to the best of my knowledge and belief, there have been:

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

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

Wai Aw
Partner

BDO East Coast Partnership

Melbourne 24 September 2019

Contents

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 24 September 2019. The directors have the power to amend and reissue the financial statements.

Statement of profit of loss and other comprehensive income

For the year ended 30 June 2019

		Consolidated	
	Note	2019 $	2018 $
Revenue	4	207,472	133,271
Other income	5	1,524,227	1,699,766
Interest revenue calculated using the effective interest method		29,074	5,526
Total income		1,760,773	1,838,563
Expenses			
Remeasurement of financial liabilities	6	342,538	(186,626)
Corporate costs		(1,198,057)	(1,571,937)
Legal costs		(345,275)	(315,495)
Employee benefits expense	7	(1,437,160)	(1,399,517)
Sales and marketing		(101,964)	(78,956)
Depreciation and amortisation expense	7	(601,004)	(877,944)
Impairment of assets	7	(4,800,000)	-
Engineering and pilot plant costs		(1,755,900)	(1,996,900)
Occupancy expense		(239,748)	(120,080)
Travel and accommodation		(261,462)	(221,193)
Finance costs	7	(265,756)	(203,600)
Total expenses		(10,663,788)	(6,972,248)
Loss before income tax expense		**(8,903,015)**	**(5,133,685)**
Income tax expense	8	-	-
Loss after income tax expense for the year attributable to the owners of Environmental Clean Technologies Limited	**24**	**(8,903,015)**	**(5,133,685)**
Other comprehensive income for the year, net of tax		-	-
Total comprehensive income for the year attributable to the owners of Environmental Clean Technologies Limited		**(8,903,015)**	**(5,133,685)**

		Cents	Cents
Basic earnings per share	37	(0.250)	(0.151)
Diluted earnings per share	37	(0.250)	(0.151)

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 2019

				Consolidated	
			Note	2019 $	2018 $
Assets	Current Assets	Cash and cash equivalents	9	387,224	611,751
		Trade and other receivables	10	1,711,375	1,801,759
		Other	11	49,735	75,811
		Total current assets		2,148,334	2,489,321
	Non-cureent Assets	Investments accounted for using the equity method		-	1
		Property, plant and equipment	12	238,520	238,790
		Intangibles	13	-	5,280,000
		Total non-current assets		238,520	5,518,791
		Total assets		2,386,854	8,008,112
Liabilities	Current Liabilities	Trade and other payables	14	558,747	454,041
		Borrowings	15	2,069,859	1,245,713
		Derivative financial instruments	16	186,654	-
		Provisions	17	66,391	152,948
		Other financial liabilities	18	1,043	491,573
		Total current liabilities		2,882,694	2,344,275
	Non-current liabilities	Borrowings	19	55,449	84,379
		Provisions	20	73,247	1,480
		Other financial liabilities	21	1,397,310	1,249,318
		Total non-current liabilities		1,526,006	1,335,177
		Total liabilities		4,408,700	3,679,452
		Net (liabilities)/assets		(2,021,846)	4,328,660
Equity		Issued capital	22	73,686,351	70,244,766
		Reserves	23	444,005	1,333,081
		Accumulated losses	24	(76,152,202)	(67,249,187)
		Total (deficiency)/equity		(2,021,846)	4,328,660

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

Statement of changes in equity

For the year ended 30 June 2019

Consolidated	Issued Capital $	Reserves $	Accumulated losses $	Total equity $
Balance at 1 July 2017	**63,371,602**	**3,876,010**	**(62,552,980)**	**4,694,632**
Loss after income tax expense for the year	-	-	(5,133,685)	(5,133,685)
Other comprehensive income for the year, net of tax	-	-	-	-
Total comprehensive income for the year	**-**	**-**	**(5,133,685)**	**(5,133,685)**
Transactions with owners in their capacity as owners:				
Share-based payments (note 38)	106,398	-	-	106,398
Expired options (note 23)	-	(437,478)	437,478	-
Premium received on ELF options (note 23)	-	197,061	-	197,061
Shares issued on exercise of options (note 22)	4,125,002	-	-	4,125,002
Transfer option premium (exercised options) net of adjustments	2,302,512	(2,302,512)	-	-
Shares issued on repayment of ELF loans	339,252	-	-	339,252
Balance at 30 June 2018	**70,244,766**	**1,333,081**	**(67,249,187)**	**4,328,660**

Consolidated	Issued capital $	Reserves $	Accumulated losses $	Total deficiency in equity $
Balance at 1 July 2018	**70,244,766**	**1,333,081**	**(67,249,187)**	**4,328,660**
Loss after income tax expense for the year	-	-	(8,903,015)	(8,903,015)
Other comprehensive income for the year, net of tax	-	-	-	-
Total comprehensive income for the year	**-**	**-**	**(8,903,015)**	**(8,903,015)**
Transactions with owners in their capacity as owners:				
Share-based payments (note 38)	332,399	-	-	332,399
Premium received on ELF options (note 23)	-	2,220,110	-	2,220,110
Shares released on repayment of ELF loans	1,973,166	(1,973,166)	-	-
Transfer unlisted option premium (exercised options) net of adjustments	1,136,020	(1,136,020)	-	-
Balance at 30 June 2019	**73,686,351**	**444,005**	**(76,152,202)**	**(2,021,846)**

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

Statement of cash flows

For the year ended 30 June 2019

		Consolidated	
	Note	2019 $	2018 $
Cash flows from operating activities			
Receipts from customers (inclusive of GST)		168,906	191,685
Research and development offset		1,673,978	2,047,139
Payments to suppliers and employees		(4,911,426)	(6,403,889)
Other income		-	87,956
Interest received		1,004	5,526
Interest and other finance costs paid		(190,773)	(263,127)
Net cash used in operating activities	**35**	**(3,258,311)**	**(4,334,710)**
Cash flows from investing activities			
Payments for property, plant and equipment		(120,734)	(181,097)
Proceeds from disposal of property, plant and equipment		-	25,000
Proceeds/(payments) from/(of) security deposits		(548)	6,129
Proceeds from loan repayments		-	14,000
Net cash used in investing activities		**(121,282)**	**(135,968)**
Cash flows from financing activities			
Proceeds from issue of shares		1,806,323	4,464,254
Proceeds from issue of options		275,014	197,061
Proceeds from borrowings		3,296,731	1,164,777
Repayment of borrowings		(2,223,002)	(1,332,345)
Net cash from financing activities		**3,155,066**	**4,493,747**
Net (decrease)/increase in cash and cash equivalents		(224,527)	23,069
Cash and cash equivalents at the beginning of the financial year		611,751	588,682
Cash and cash equivalents at the end of the financial year	**9**	**387,224**	**611,751**

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

Notes to the financial statements

30 June 2019

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.

The adoption of these Accounting Standards and Interpretations did not have any significant impact on the financial performance or position of the consolidated entity.

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

AASB 9 Financial Instruments

The consolidated entity has adopted AASB 9 from 1 July 2018. The standard introduced 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 that are solely principal and interest. A debt investment shall be measured at fair value through other comprehensive income if it is held within a business model whose objective is to both hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest as well as selling the asset on the basis of its fair value. All other financial assets are 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 or contingent consideration recognised in a business combination) in other comprehensive income ('OCI'). Despite these requirements, a financial asset may be irrevocably designated as measured at fair value through profit or loss to reduce the effect of, or eliminate, an accounting mismatch. For financial liabilities designated at fair value through profit or loss, 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 use an 'expected credit loss' ('ECL') model to recognise an allowance. Impairment is measured using 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. For receivables, a simplified approach to measuring expected credit losses using a lifetime expected loss allowance is available.

AASB 15 Revenue from Contracts with Customers

The consolidated entity has adopted AASB 15 from 1 July 2018. The standard provides a single comprehensive model for revenue recognition. The core principle of the standard is that an entity shall recognise revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard introduced a new contract-based revenue recognition model with a measurement approach that is based on an allocation of the transaction price. This is described further in the accounting policies below. Credit risk is presented separately as an expense rather than adjusted against revenue. Contracts with customers are 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. Customer acquisition costs and costs to fulfil a contract can, subject to certain criteria, be capitalised as an asset and amortised over the contract period.

Impact of adoption

The group has adopted Accounting Standards AASB 9 and AASB 15 for the year ended 30 June 2019. The Accounting Standards were adopted from 1 July 2018 using transitional rules that allow for comparatives not to be restated. There was no change in the carrying amounts on adoption of the standards and there was no impact on opening accumulated losses.

The adoption of these Accounting Standards and Interpretations resulted in the following adjustments:

- interest revenue is now shown separately on the face of the Statement of profit or loss and other comprehensive income.

Going concern

For the financial year ended 30 June 2019, the consolidated entity had an operating net loss of $8,903,015 (2018: $5,133,685), net cash outflows from operating activities of $3,258,311 (2018: net cash outflows of $4,334,710), net current liabilities at the reporting date of $734,360 (2018: net current assets of $145,046) and net liabilities of $2,021,846 (2018: net assets of $4,328,660). 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;
- sale of solid fuels produced in the course of execution of the Company's research and development plan;
- drawdowns against existing or new lending facilities;
- principal paid and interest earned from its ELF debt arrangements (treated as capital injections);
- drawdowns against a new loan facility 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 proposed project in India should this project proceed; and
- issuance of the Company's securities under ASX Listing Rule 7.1.

Based on the above information 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 financial assets and liabilities at fair value through profit or loss, 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 32.

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 2019 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

The consolidated entity recognises revenue as follows:

Revenue from contracts with customers

Revenue is recognised at an amount that reflects the consideration to which the consolidated entity is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the consolidated entity: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts received that are subject to the constraining principle are recognised as a refund liability.

Sale of goods

Revenue from the sale of goods is recognised at the point in time when the customer obtains control of the goods, which is generally at the time of delivery.

Rendering of services

Revenue from a contract to provide services is recognised over time as the services are rendered based on either a fixed price or an hourly rate.

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 eligibleexpenses.

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 non-current.

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

The consolidated entity has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue.

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.

Derivative financial instruments

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

Derivatives are classified as current or non-current depending on the expected period of realisation.

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 (3 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.

Where there is an unconditional right to defer settlement of the liability for at least 12 months after the reporting date, the loans or borrowings are classified as non-current.

The component of the convertible notes that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs. Where the conversion feature gives rise to the possibility of issue of a variable number of equity instruments, such feature is treated as a derivative financial liability and accounted for separately from the underlying debt instrument.

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.

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 non-vesting 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 2019. 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 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 short-term 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. Straight-line 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. The Company has conducted calculations based on adopting a modified transitional approach as at 1 July 2019 and estimates that a right-of-use asset and corresponding lease liability of approximately $528,000 will be recognised.

New Conceptual Framework for Financial Reporting

A revised Conceptual Framework for Financial Reporting has been issued by the AASB and is applicable for annual reporting periods beginning on or after 1 January 2020. This release impacts for-profit private sector entities that have public accountability that are required by legislation to comply with Australian Accounting Standards and other for-profit entities that voluntarily elect to apply the Conceptual Framework. Phase 2 of the framework is yet to be released which will impact for-profit private sector entities. The application of new definition and recognition criteria as well as new guidance on measurement will result in amendments to several accounting standards. The issue of AASB 2019-1 Amendments to Australian Accounting Standards – References to the Conceptual Framework, also applicable from 1 January 2020, includes such amendments. Where the Group has relied on the conceptual framework in determining its accounting policies for transactions, events or conditions that are not otherwise dealt with under Australian Accounting Standards, the Group may need to revisit such policies. The Group 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 32% (2018: 34%). 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 February 2023 using a discount rate of 21% (2018: 12%). The projections used in calculating the liability include consideration of events as disclosed at Note 21 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	
	2019 $	2018 $
Sales revenue		
Sales Product	207,472	83,545
Other Revenue		
Management Fees	-	49,726
Revenue	**207,472**	**133,271**

Disaggregation of revenue

The disaggregation of revenue from contracts with customers is as follows:

	Consolidated	
	2019 $	2018 $
Major product lines		
Coldry	207,472	83,545
Geographical regions		
Australia	207,472	83,545
Timing of revenue recognition		
Goods transferred at a point in time	207,472	83,545

Note 5. Other income

	Consolidated	
	2019 $	2018 $
Net gain on disposal of property, plant and equipment	-	(25,000)
Research and development tax incentive *	1,524,227	1,636,536
Other income	-	(38,230)
Other income	**1,524,227**	**1,699,766**

* The Company has recognised a receivable related to the research and development tax incentive of $1,486,785 at 30 June 2019 (2018: $1,636,536) which relates to eligible expenditure. Additional tax incentive was also received and recognised as income in the current year that related to eligible research and development expenditure of the prior year.

Note 6. Remeasurement of financial liabilities

	Consolidated	
	2019 $	2018 $
Remeasurement of deferred consideration for Matmor assets	(468,794)	93,256
Remeasurement of Coldry earn-out provision	126,256	93,370
	(342,538)	**186,626**

Note 7. Expenses

	Consolidated	
	2019 $	2018 $
Loss before income tax includes the following specific expenses:		
Depreciation		
Plant and equipment	119,242	367,170
Fixtures and fittings		14,111
Office equipment	1,762	16,663
Total depreciation	**121,004**	**397,944**
Amortisation		
Intellectual property - Coldry	480,000	480,000
Total depreciation and amortisation	**601,004**	**877,944**
Impairment		
Intellectual property - Coldry (note 13)	4,800,000	-
Finance costs		
Interest and facility costs	265,756	203,600
Rental expense relating to operating leases		
Minimum lease payments	156,244	110,059
Employee benefits expense		
Defined contribution superannuation expense	96,226	95,171
Share-based payments expense	332,399	106,399
Other employee benefits	1,008,535	1,197,947
Total employee benefits expense	**1,437,160**	**1,399,517**

Note 8. Income tax expense

	Consolidated	
	2019 $	2018 $
Income tax expense		
Deferred tax assets attributable to temporary differences	(1,401,463)	(123,157)
Deferred tax assets attributable to carried forward tax losses	(439,802)	(639,362)
Deferred tax assets attributable to movement for prior periods	23,080	(10,167)
Total deferred tax assets not recognised	1,818,185	772,686
Aggregate income tax expense	**-**	**-**
Numerical reconciliation of income tax expense and tax at the statutory rate		
Loss before income tax expense	**(8,903,015)**	**(5,133,685)**
Tax at the statutory tax rate of 27.5%	(2,448,329)	(1,411,763)
Tax effect amounts which are not deductible/(taxable) in calculating taxable income:		
Legal expenses	42,206	-
Research and development	536,461	584,545
Options issued	91,410	29,260
Sundry items	168	869
	(1,778,084)	**(797,089)**
Current year tax losses not recognised	439,806	639,362
Current year temporary differences not recognised	1,338,278	123,157
Adjustment recognised for prior periods	(23,080)	10,167
Deferred tax movement not recognised	23,080	24,403
Income tax expense	**-**	**-**

Note 8. Income tax expense (continued)

	Consolidated	
	2019 $	2018 $
Tax losses not recognised		
Unused tax losses for which no deferred tax asset has been recognised	24,971,985	23,519,815
Potential tax benefit at 27.5% (2018: 27.5%)	6,867,296	6,467,949

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	
	2019 $	2018 $
Deferred tax assets not recognised		
Deferred tax assets not recognised comprises temporary differences attributable to:		
Employee benefits	38,400	42,468
Accrued expenses	8,085	5,603
Plant and equipment	246,623	259,225
Finance costs	52,496	76,535
Intangible assets	2,213,924	743,221
Provision for earn-out (Coldry)	80,830	169,267
Matmor liability	(186,476)	(57,558)
Total deferred tax assets not recognised	**2,453,882**	**1,238,761**

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	
	2019 $	2018 $
Cash at bank	387,224	611,751

Note 10. Current assets - trade and other receivables

	Consolidated	
	2019 $	2018 $
Trade receivables	-	24,099
Other receivables	224,590	141,124
Research and development tax incentive receivable	1,486,785	1,636,536
	1,711,375	**1,777,660**
	1,711,375	**1,801,759**

The full amount of the research and development tax incentive receivable as at 30 June 2018 was subsequently received in October 2018.

Allowance for expected credit losses

There were no impaired receivables recognised during the financial year.

Note 11. Current assets – other

	Consolidated	
	2019 $	2018 $
Prepayments	33,533	60,157
Other deposits	16,202	15,654
	49,735	**75,811**

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

	Consolidated	
	2019 $	2018 $
Plant and equipment - at cost	6,989,996	6,877,285
Less: Accumulated depreciation	(6,757,737)	(6,638,495)
	232,259	**238,790**
Fixtures and fittings - at cost	19,885	19,885
Less: Accumulated depreciation	(19,885)	(19,885)
	-	-
Office equipment - at cost	84,996	76,973
Less: Accumulated depreciation	(78,735)	(76,973)
	6,261	**-**
	238,520	**238,790**

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 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
Additions	112,711	-	8,023	120,734
Depreciation expense	**(119,242)**		**(1,762)**	**(121,004)**
Balance at 30 June 2019	**232,259**	**-**	**6,261**	**238,520**

Note 13. Non-current assets - intangibles

	Consolidated	
	2019 $	2018 $
Intellectual property - at cost	9,600,000	9,600,000
Less: Accumulated amortisation	(4,800,000)	(4,320,000)
Less: Impairment	(4,800,000)	-
	-	**5,280,000**

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 2017	**5,760,000**	**5,760,000**
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2018	**5,280,000**	**5,280,000**
Impairment of assets	(4,800,000)	(4,800,000)
Amortisation expense	(480,000)	(480,000)
Balance at 30 June 2019	**-**	**-**

* The intellectual property represents the patented technology related to Coldry acquired by the consolidated entity in 2009.

The Coldry intellectual property (IP) is the most advanced of all the Company's technologies and while the asset has been fully impaired in order to comply with relevant accounting standards, the Company is of the view that this IP remains one of the Company's most valuable assets. Coldry is currently in the early stages of commercialisation and is being manufactured and sold. Coldry is also the cornerstone of all other technologies that the Company is developing such as Matmor, HydroMOR and COHgen. The Company expects, after further research and development, that Coldry will also be a pivotal part of the commercialising of the recently acquired waste-to-energy technology.

The recognition and value of the Coldry IP, being an intangible asset, must be considered annually in accordance with the requirements of AASB 136 'Impairment of Assets'. An impairment test must be conducted if there are indicators of impairment, in which case the entity shall estimate the recoverable amount of the asset. The recoverable amount shall be the higher of the fair value less cost of sale and value in use. Assessments performed under AASB 136 using a value-in-use model did not support the carrying value of the Coldry IP. It was determined that the significant drop in the Company's share price subsequent to the ending of the voluntary trading suspension of the Company's shares on 10 July 2019 (as compared to the share price at 30 June 2018), the withdrawal of NMDC Limited from the India project and the Company's decision to subsequently terminate the memorandum of understanding were indicators of impairment.

Assessments of the Coldry IP fair value less cost of sale and the value in use will be conducted in future accounting periods. Should these assessments warrant a reversal of the impairment loss recognised in this accounting period, a revaluation increase will be recognised in accordance with relevant accounting standards.

Note 14. Current liabilities - trade and other payables

	Consolidated	
	2019 $	2018 $
Trade payables	379,666	272,138
Other payables	179,081	181,903
	558,747	**454,041**

Refer to note 25 for further information on financial instruments.

Note 15. Current liabilities - borrowings

	Consolidated	
	2019 $	2018 $
Innovation Structured Finance Co. (Brevet Capital) loan	1,028,806	1,179,283
Securitised loan payable	408,141	-
Convertible notes	603,982	-
Equipment finance	28,930	66,430
	2,069,859	**1,245,713**

Refer to note 25 for further information on financial instruments.

Innovation Structured Finance Co. (Brevet Capital) loan

The Brevet Loan balance relates to a facility agreement that provides for tranches of up to $3.6 million in value to be drawn by the Company. Each drawdown is made in line with the terms of the facility and is based on the accrued value of the anticipated AusIndustry Tax Incentive program for the respective financial year. 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.

Securitised loan payable

During the period, ECT Finance Ltd (ECTF) obtained a debt facility of $1 million from Challenge Bricks & Roofing Pty Ltd secured by granting a security interest over the ELF loans which are in the legal form of limited-recourse loans in the accounts of ECTF. Interest amounting to $166,843 was prepaid during the period and settled through the extinguishment of the ELF loan that was owed by the debt provider. The loan was fully drawn by January 2019 and a $500,000 repayment was made in February 2019. The unamortised prepaid interest has been deducted from the carrying amount at reporting date to present an amortised cost balance. The loan has a term of 12 months and incurs interest at the rate of 16.6%p.a.

Convertible notes

The lender has issued ECTF a 12 month $800,000 debt instrument by way of a convertible note. Interest on this facility for the 12-month period from the first Drawdown Date to the Repayment Date will be paid 3 months in advance by ECTF. The convertible note is secured via a 2nd ranking secured position using a registered General Security Deed (GSD) on the Personal Properties Security Register (PPSR).

An amount of approximately $30,000 has been paid to the Lender's nominated bank account within 48 hours of receiving the full $800,000. Interest is calculated on a daily basis at the rate of 15% per annum on the outstanding balance. The loan will be automatically repaid from Equity Lending Facility (ELF) repayments that ECTF receives over the loan term after repaying the 1st ranking secured lender (Challenge Bricks and Roofing Pty Ltd), unless agreed otherwise by the Lender. The proceeds will be used by ECTF towards repayment of the wholesale loan owed to ECT Limited. The Lender will have the option to convert the loan amount into fully paid Environmental Clean Technology (ECT) ordinary shares at any time of their choosing prior to expiry. The rate of conversion will be at the lesser of: 1.5 cents per ECT share; and a 20% discount to the 30-day volume weighted average price (VWAP) of ECT shares prior to requesting to convert the loan.

The conversion feature represents a derivative financial liability on the basis that it may give rise to the issue of a variable number of ordinary shares in ECT should the debt convert based on a 20% discount to the 30 day VWAP. The conversion feature is separated from the host debt for accounting purposes and is measured at fair value on the basis that its economic characteristics are not closely related to those of the host instrument. The residual value is assigned to the host debt instrument recognised in this note. The effect of this is that for the convertible note, the host loan will be accounted for at amortised cost with an embedded derivative liability being measured at fair value with changes in value being recorded in profit or loss. Refer to notes 16 and 25 for details of the derivative instrument.

Equipment finance

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%.

	Consolidated	
	2019 $	2018 $
Total facilities		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	3,600,000	4,000,000
Securitised loan payable	1,000,000	-
Convertible notes	800,000	-
	5,400,000	**4,000,000**
Used at the reporting date		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	1,028,806	1,179,283
Securitised loan payable	500,000	-
Convertible notes	800,000	-
	2,328,806	**1,179,283**
Unused at the reporting date		
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	2,571,194	2,820,717
Securitised loan payable	500,000	-
Convertible notes	-	-
	3,071,194	**2,820,717**

Note 16. Current liabilities - derivative financial instruments

	Consolidated	
	2019 $	2018 $
Conversion derivative in convertible note	186,654	-

Refer to note 25 for further information on financial instruments.

The above derivative represents the fair value of the conversation feature of the convertible note recognised at Note 15.

The valuation of the derivative has been made having regard to the probabilities associated with the conversion of the note to ordinary shares at either the lower of $0.015 or a 20% discount to the 30-day volume weighted average price (VWAP) of ECT shares prior to the time of requesting conversion of the loan. Such probabilities were determined having regard to historical price movements of the share price as at reporting date. The value of the derivative has been determined as the sum of weighted components based on the aforementioned probabilities. The first component of the valuation reflecting a conversion at $0.015 uses a probability of 32% and is based on a Black Scholes option pricing model. The second component of the valuation reflecting a conversion below $0.015 uses a probability of 68% and under this scenario the issuer would book a gain of $200,000 having regard to the 20% discount to the 30-day VWAP. Reasonably probable movements in such inputs would not materially impact the carrying value of the derivative.

Note 17. Current liabilities - provisions

	Consolidated	
	2019 $	2018 $
Annual leave	66,391	86,559
Long service leave	-	66,389
	66,391	**152,948**

Note 18. Current liabilities - other financial liabilities

	Consolidated	
	2019 $	2018 $
Earn-out provision - Coldry	1,043	1,315
Deferred consideration - Matmor	-	490,258
	1,043	**491,573**

Refer to note 21 for further details.

Note 19. Non-current liabilities - borrowings

	Consolidated	
	2019 $	2018 $
Equipment finance	55,449	84,379

Refer to note 25 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 20. Non-current liabilities - provisions

	Consolidated	
	2019 $	2018 $
Long service leave	73,247	1,480

Note 21. Non-current liabilities - other financial liabilities

	Consolidated	
	2019 $	2018 $
Earn-out provision - Coldry	740,729	614,201
Deferred consideration - Matmor	656,581	635,117
	1,397,310	1,249,318

Note 21. Non-current liabilities - other financial liabilities (continued)

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

(d) $500,000 on the Matmor Pilot Plant operations achieving an agreed steady state as well as conversion targets

(e) $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 (2018:$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.

Earn-out provision - Coldry

The earn-out provision represents deferred consideration payable 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 32% (2018: 34%). The total consideration payable is $3,000,000 plus applicable interest at the Reserve Bank of Australia cash rate.

Note 22. Equity - issued capital

	2019 Shares	2018 Shares	2019 $	2018 $
Ordinary shares - fully paid	3,726,737,257	3,445,932,123	73,186,354	69,851,168
Deferred share capital	25,000,000	25,000,000	499,997	393,598
ELF share capital	1,048,779,136	1,159,584,270	-	-
	4,800,516,393	**4,630,516,393**	**73,686,351**	**70,244,766**

Movements in ordinary share capital

Details	Date	Shares Issued	Issue price	$
Balance	**1-Jul-17**	**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
Release of shares on exercise of ELF options (b)	year to 30 June 2018	28,436,004	$ 0.012	339,253
Transferred premium from options reserve on exercised options	year to 30 June 2018	-	$ -	2,302,512
Balance	**30 June 2018**	**3,445,932,123**		**69,851,168**
Transferred premium from options reserve on exercise of unlisted options	year to 30 June 2019	-	$ -	1,136,020
Release of shares on exercise of ELF options (c)	year to 30 June 2019	16,000,000	$ 0.010	166,844
Release of shares on exercise of ELF options (d)	year to 30 June 2019	95,000,000	$ 0.005	452,298
Release of shares on exercise of ELF options (e)	year to 30 June 2019	149,805,134	$ 0.009	1,354,024
Release of shares on exercise of ELF options (f)	year to 30 June 2019	20,000,000	$ 0.011	226,000
Balance	**30 June 2019**	**3,726,737,257**		**73,186,354**

Movements in deferred share capital

Details	Date	Shares	Issue price	$
Balance	**1-Jul-17**	**25,000,000**		**287,200**
Share based payment allocation		-	$0.00	106,398
Balance	**30-Jun-18**	**25,000,000**		**393,598**
Share based payment allocation		-	$0.00	106,399
Balance	**30-Jun-19**	**25,000,000**		**499,997**

Movements in ELF share capital

Details	Date	Shares	Issue price	$
Balance	**1-Jul-17**			**-**
Issue of ELF shares (a)	year to 30 June 2018	(1,188,020,273)	$0.00	-
Release of shares on settlement of ELF facilities (b)	year to 30 June 2018	(28,436,003)	$0.00	-
Balance	**30-Jun-18**	**1,159,584,270**		**-**
Issue of ELF shares (d)	10-Jul-18	170,000,000	$0.00	-
Release of shares on settlement of ELF facilities (c)	6-Dec-18	(16,000,000)	$0.00	-
Release of shares on settlement of ELF facilities (d)	31-Dec-18	(95,000,000)	$0.00	-
Release of shares on settlement of ELF facilities (e)	19 February to 1 March 2019	(149,805,134)	$0.00	-
Release of shares on settlement of ELF facilities (f)	25-Jun-19	(20,000,000)	$0.00	-
Balance	**30-Jun-19**	**1,048,779,136**		**-**

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 were 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 value of share capital is not recognised for accounting purposes and has 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.

(c) There were 16 million shares released from a trading lock following settlement of an ELF loan. These shares were released as part of an arrangement with a debt provider (Challenge Bricks & Roofing Pty Ltd) who provided a $1m debt facility to the consolidated entity during the year, $500,000 of which was drawn down at period end.

(d) During the period, 170 million unlisted options were exercised pursuant to the ELF program. Of this amount, as a result of settlement of ELF loans, 95 million shares were released from a trading lock. An amount of 75 million shares (of the 170 million shares issued during the period) remain held within the ELF program whereby shareholders do not have unrestricted access until ELF loan accounts are settled.

(e) During the period a partial loan discount was offered to the holders of ELF loans as an incentive to make repayments.

(f) On 25 June 2019, the Company released 20,000,000 shares which were held as security for an ELF loan. The shares were released as consideration for services provided to the Company.

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 23. Equity - reserves

	Consolidated	
	2019 $	2018 $
Options reserve	444,005	1,333,081

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 had an exercise price of 1.5 cents and expiry date of 31 July 2018. There were no units (2018: 170,000,000 units) on issue as at 30 June 2019 with a recognised value of $nil (2018: $1,136,020). All options were exercised during the year and the related share premium was transferred to share capital.
- 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 in 2018.
- 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 in 2018.
- ECTOC options were issued to shareholders during the previous year as a bonus issue (nil consideration). The number of ECTOC options on issue at 30 June 2019 was 846,088,751 (2018: 846,088,751). The recognised value of ECTOC options at 30 June 2019 was $nil (2018: $nil)
- ELF options: refer below

Equity Lending Facility options (ELF Options)

The consolidated entity's subsidiary, ECT Finance Ltd, has entered into limited recourse loans with option-holders allowing them to obtain finance to exercise 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 $13,386,069 (2018: $13,809,261) and interest accrued on such loans is $2,578,456 (2018: $1,256,734).

As at reporting date there are 1,048,779,136 (2018: 1,159,584,270) shares held as security against these loans (ELF Shares) and therefore 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 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**
Receipt of premium	-	2,220,110	-	-	-	2,220,110
Exercise of options	-	-	(1,136,020)	-	-	(1,136,020)
Current year share based payments expense	332,399	-	-	- - 332,399		
Transfer to partly paid share capital	(106,399)	-	-	- - (106,399)		
Transfer to share capital	(226,000)	-	-	- - (226,000)		
Transfer release ELF shares to share capital	-	(1,973,166)	-	-	-	(1,973,166)
Balance at 30 June 2019	**-**	**444,005**	**-**	**-**	**-**	**444,005**

Note 24. Equity - accumulated losses

	Consolidated

	2019 $	2018 $
Accumulated losses at the beginning of the financial year	(67,249,187)	(62,552,980)
Loss after income tax expense for the year	(8,903,015)	(5,133,685)
Transfer from options reserve	(437,478)	
Accumulated losses at the end of the financial year	**(76,152,202)**	**(67,249,187)**

Note 25. 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.

The consolidated entity has adopted a lifetime expected loss allowance in estimating expected credit losses to trade receivables through the use of a provisions matrix using fixed rates of credit loss provisioning. These provisions are considered representative across all customers of the consolidated entity based on recent sales experience, historical collection rates and forward-looking information that is available.

Generally, trade receivables are written off when there is no reasonable expectation of recovery. Indicators of this include the failure of a debtor to engage in a repayment plan, no active enforcement activity and a failure to make contractual payments for a period greater than 1 year.

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:

	2019 $	2018 $
Innovation Structured Finance Co., LLC loan ('Brevet Loan')	2,571,194	2,820,717
Securitised loan payable	500,000	-

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 - 2019	Weighted average interest rate %	1 year or less $	Between 1 and 2 years $	Between 2 and 5 years $	Over 5 years $	Remaining contractual maturities $
Non-derivatives						
Non-interest bearing						
Trade payables	-	379,666	-	-	-	379,666
Other payables	-	179,081	-	-	-	179,081
Deferred consideration (Matmor)	-	-	208,274	448,307	-	656,581
Interest-bearing - variable						
Earn-out provision (Coldry)	1.50%	1,043	14,756	317,036	408,937	741,772
Interest-bearing - fixed rate						
Convertible notes payable	15.00%	603,982	-	-	-	603,982
Equipment finance	6.00%	33,731	33,731	30,919	-	98,381
Innovation Structured Finance Co. Loan	12.21%	1,028,806	-	-	-	1,028,806
Securitised loan payable	16.60%	500,000	-	-	-	500,000
Total non-derivatives		**2,726,309**	**256,761**	**796,262**	**408,937**	**4,188,269**
Derivatives						
Convertible note derivative	-	186,654	-	-	-	186,654
Total derivatives		**186,654**	**-**	**-**	**-**	**186,654**

	Consolidated

Remaining contractual maturities (continued)

Consolidated - 2018	Weighted average interest rate %	1 year or less $	Between 1 and 2 years $	Between 2 and 5 years $	Over 5 years $	Remaining contractual maturities $
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**

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 21% (2018: 12%) in determining recognised carrying values within the financial statements.

Note 26. 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 - 2019	Level 1 $	Level 2 $	Level 3 $	Total $
Liabilities				
Deferred consideration - non-current - Matmor assets	-	-	656,581	656,581
Earn-out provision - current - Coldry IP	-	-	1,043	1,043
Earn-out provision - non-current - Coldry IP	-	-	740,729	740,729
Conversion derivative in convertible note	-	-	186,654	186,654
Total liabilities	**-**	**-**	**1,585,007**	**1,585,007**

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**

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 and/or option pricing models. 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:

	Deferred consideration Matmor assets $	Earn-out provision Coldry IP $	Conversion derivative in convertible note $	Total $
Balance at 1 July 2017	**1,542,110**	**522,146**	**-**	**2,064,256**
Gains 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
Additions	-	-	186,654	186,654
(Gains)/losses recognised in profit or loss	(468,794)	126,256	-	(342,538)
Balance at 30 June 2019	**656,581**	**741,772**	**186,654**	**1,585,007**

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

Description	Unobservable inputs	Potential range	Sensitivity
Coldry earn-out provision	Discount rate	37% - 27% (32% used)	A change in this rate of 5% would have an effect of: +5%: decreasing the carrying value of the liability by $152,605 (and decreasing the loss); and -5%: increasing the carrying value of the liability by $202,554 (and increasing the loss).
	Timing of production to discharge liability	July 2020 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 $289,022.
Matmor deferred consideration	Discount rate	16% - 26% (21% used)	A change in this rate of 5% would have an effect of: +5%: decreasing the carrying value of the liability by $129,615 (and decreasing the loss); and -5%: increasing the carrying value of the liability by $493,574 (and increasing the loss).
	Timing of significant trigger events	July 2020 to February 2023	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 $115,101.

Reasonably possible changes in inputs used in calculating the derivative liability would not produce a materially different valuation.

Note 27. 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	
	2019 $	2018 $
Short-term employee benefits	760,002	812,445
Post-employment benefits	46,361	34,848
Long-term benefits	-	12,763
Share-based payments	106,399	106,399
	912,762	**966,455**

Note 28. 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	
	2019 $	2018 $
Audit services - BDO East Coast Partnership		
Audit or review of the financial statements	66,950	65,012

Note 29. 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 30. Commitments

	Consolidated	
	2019 $	2018 $
*Lease commitments - operating **		
Committed at the reporting date but not recognised as liabilities, payable:		
Within one year	**171,375**	**164,091**
Equipment finance		
Committed at the reporting date and recognised as liabilities, payable:		
Within one year	33,731	73,324
One to five years	64,650	98,381
Total commitment	98,381	171,705
Less: Future finance charges	(14,002)	(20,896)
Net commitment recognised as liabilities	**84,379**	**150,809**
*Patent commitments ***		
Committed at the reporting date but not recognised as liabilities, payable:		
Within one year	42,301	38,171
One to five years	191,515	158,665
More than five years	103,275	40,373
	337,091	**237,209**

* 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.

** Patent commitments represent maintenance payments pursuant to the registered patents of both Coldry, Matmor and HydroMOR.

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.

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 29).

Note 31. Related party transactions

Parent entity

Environmental Clean Technologies Limited is the parent entity.

Subsidiaries

Interests in subsidiaries are set out in note 33.

Key management personnel

Disclosures relating to key management personnel are set out in note 27 and the remuneration report included in the directors' report.

Transactions with related parties

The following transactions occurred with related parties:

	Consolidated	
	2019 $	2018 $
Payment for goods and services:		
Payment for services from other related party *	87,599	169,873
Other transactions:		
Exercise of options for new ordinary shares by key management personnel	-	3,170

* 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

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 $nil (2018: $72,000). Interest paid during the year was $nil 2018: $13,146). 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 nil (2018: 8,000,000) shares to him.

Note 32. Parent entity information

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

Statement of profit or loss and other comprehensive income

	Parent	
	2019 $	2018 $
Loss after income tax	(14,667,865)	(4,257,686)
Total comprehensive income	**(14,667,865)**	**(4,257,686)**

Statement of financial position

	Parent	
	2019 $	2018 $
Total current assets	2,129,384	2,545,881
Total assets	2,367,903	12,384,671
Total current liabilities	4,252,673	2,344,936
Total liabilities	5,778,679	3,680,113
Equity		
Issued capital	76,442,268	73,000,660
Options reserve	639,935	1,529,012
Accumulated losses	(80,492,979)	(65,825,114)
Total (deficiency)/equity	**(3,410,776)**	**8,704,558**

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 2019 and 30 June 2018.

Contingent liabilities

For contingent liabilities of the parent entity, refer to note 29.

Capital and other commitments

The parent entity has operating lease, patent, equipment finance and royalty commitments payable (not recognised as liabilities). Refer to note 30 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 33. 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:

		Ownership Interest	
Name	Principal place of business / Country of incorporation	2019 %	2018 %
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%
ECT Waste-to-Energy Pty Ltd	Australia	100.00%	-

Note 34. Events after the reporting period

On 2 July 2019, the consolidated entity entered into an Asset Sale Agreement to acquire waste-to-energy (WTE) technology known as the Catalytic De-Polymerisation Process (CDP) capable of producing automotive diesel from a range of inputs including various waste streams, such as construction wood-waste and end-of-life plastics. Completion date for the acquisition was 8 July 2019. The new technology provides direct exposure to the waste-to-energy sector through existing project opportunities and potential integration with the Company's Latrobe Valley Coldry project.

The total purchase price for the portfolio of intellectual property acquired was $227,501 (inclusive of GST) and has been financed by a partial redraw of the securitised loan provided by Challenge Roofing and Bricks. The assets have been acquired by a subsidiary company set up for this purpose, ECT Waste-to-Energy Pty Ltd.

As part of James Blackburn's remuneration package, a limited recourse loan was provided to support the acquisition of fully paid ordinary shares (refer 'Details of Remuneration' in the Directors' Report). On 27 July 2019 a margin call was made by Equity First Holdings ('EFH') on these shares for additional shares or cash to be provided as additional security for the loan. As the share price at the time did not support the contribution of additional security by Mr Blackburn, the margin call was not met and the shares were forfeited back to EFH.

On 31 July 2019 the Company's ECTOC options expired. Quotation of these securities ceased on 25 July 2019.

On 2 August 2019 the Company announced a 6-month interest free period for the holders of ELF loans for the period 31 July 2019 to 30 January 2020.

On 2 August 2019 the Company announced that its Chairman, Glenn Fozard, would direct 100% of his ECT Limited executive contract remuneration (as opposed to his remuneration as a director) to the repayment of his ELF loans for the period 1 August 2019 to 31 January 2020.

On 27 August 2019 the Company signed a new loan agreement for a 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 2020 on the same terms as the previous facility. The loan facility allows for the provision of funding to the Company of up to

$3.6 million. The Company's research and development tax rebate to be received represents the security for the facility.

On 3 September 2019 the Company entered into a loan agreement with Challenge Roofing and Bricks Pty Ltd for $150,000. The loan is secured by the Company's research and development tax rebate.

On 11 September 2019 the Company appointed James Blackburn and Ashley Moore as directors. On the same date Barry Richards resigned as a director.

No other matter or circumstance has arisen since 30 June 2019 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 35. Reconciliation of loss after income tax to net cash used in operating activities

	Consolidated	
	2019 $	2018 $
Loss after income tax expense for the year	(8,903,015)	(5,133,685)
Adjustments for:		
Depreciation and amortisation	601,004	877,944
Impairment of non-current assets	4,800,000	-
Finance costs - non cash	74,984	(59,527)
Share-based payments	332,399	106,398
Net gain on disposal of non-current assets	-	(25,000)
Interest received - non cash	(28,070)	-
Change in operating assets and liabilities:		
Decrease in trade and other receivables	90,384	518,743
Decrease/(increase) in prepayments	26,625	(26,127)
Decrease in trade and other payables	(237,832)	(592,784)
Decrease in employee benefits	(14,790)	(672)
Net cash used in operating activities	**(3,258,311)**	**(4,334,710)**

Note 36. Changes in liabilities arising from financing activities

	Innovation Structured Finance Co. (Brevet) $	Securitised loan payable $	Convertible note $	Equipment finance $	Total $
Balance at 1 July 2017	1,332,448	-	-	224,739	1,557,187
Net cash used in financing activities	(153,165)	-	-	(73,930)	(227,095)
Balance at 30 June 2018	1,179,283	-	-	150,809	1,330,092
Net cash from/(used in) financing activities	(150,477)	500,000	790,636	(66,430)	1,073,729
Prepaid interest		-	(91,859)		(91,859)
Balance at 30 June 2019	**1,028,806**	**408,141**	**790,636**	**84,379**	**2,311,962**

Note 37. Earnings per share

	Consolidated	
	2019 $	2018 $
Loss after income tax attributable to the owners of Environmental Clean Technologies Limited	(8,903,015)	(5,133,685)

	Number	Number
Weighted average number of ordinary shares used in calculating basic earnings per share	3,554,562,696	3,402,082,562
Weighted average number of ordinary shares used in calculating diluted earnings per share	3,554,562,696	3,402,082,562

	Cents	Cents
Basic earnings per share	(0.250)	(0.151)
Diluted earnings per share	(0.250)	(0.151)

At 30 June 2019, there were 1,048,779,136 shares held as security which are subject to the repayment of ELF loans. For accounting purposes, these ELF loans and the related shares issued 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 2019:

Loan to James Blackburn

James 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 was 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 and 3 months 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 were subject to a lock-up from the date of issue for a term of 3 years and 3 months, 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 (2018: $106,399) was incurred as a share based payment expense representing the amortisation of the settlement amount for the period. As at reporting date, the accumulated amortisation of the loan amounted to $274,998.

Services received from shareholder

During the year, the Company received services from a shareholder in relation to arranging for the raising of debt capital and other consultative services. The consideration provided was 20,000,000 shares valued using a weighted average share price of $0.0113 each giving total consideration of $226,000.

	Consolidated	
	2019 $	2018 $
Share-based loan expense - J. Blackburn	106,399	106,399
Share raising expenses	226,000	-
Total share-based payment expense	332,399	106,399

Directors Declaration

30 June 2019

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 2019 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
24 September 2019
Melbourne

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Australia

INDEPENDENT AUDITOR'S REPORT

To the members of Environmental Clean Technologies Limited

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Environmental Clean Technologies Limited (the Company) and its subsidiaries (the Group), which comprises the statement of financial position as at 30 June 2019, the statement of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended, and notes to the financial report, including a summary of significant accounting policies and the directors' declaration.

In our opinion the accompanying financial report of the Group, is in accordance with the *Corporations Act 2001*, including:

(i) Giving a true and fair view of the Group's financial position as at 30 June 2019 and of its financial performance for the year ended on that date; and

(ii) Complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the Financial Report* section of our report. We are independent of the Group in accordance with the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

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

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.

Impairment of Coldry Intellectual Property Intangible Asset

Key audit matter	*How the matter was addressed in our audit*
As disclosed in Note 13, impairment charges amounting to $4,800,000 relating to the Group's Coldry Intellectual Property intangible asset have been recognised as at 30 June 2019. Given the quantum of this impairment and the inherent subjectivity in assessing the estimates and judgement used and exercised by management in determining the recoverable amount of the intangible asset, we considered this area to be significant for our audit.	In addressing this matter, we performed a number of procedures including the following: 1. Performing a detailed assessment of the intangible asset to determine if impairment indicators were present which if there were impairment indicators the need to subject it to an impairment test in order to determine its recoverable amount in compliance with Australian Accounting Standard AASB 136 *Impairment of Assets*. 2. Evaluating and challenging management's assumptions, estimates and judgements used in their value in use (i.e. discounted cash flow) model, including those relating to revenue, costs, discount rates and inflation rates to determine the recoverable amount of the asset. 3. Assessing the reasonableness of the forecasts of management by comparing previous forecasts with actual business results. 4. Ensuring that disclosures in relation to the impairment made in the financial statements are in line with the requirements of AASB 136 *Impairment of Assets*.

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

Key audit matter	*How the matter was addressed in our audit*
Refer to notes 18 and 21 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 Intellectual Property 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 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. 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. 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.	In addressing this matter, we performed a number of procedures including the following: • We reviewed the calculations (discounted 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 Australian Accounting Standard AASB 9 *Financial Instruments*. • With assistance from our internal BDO corporate finance experts, we assessed the appropriateness of the discount factors used in the discounted 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.

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

Key audit matter	*How the matter was addressed in our audit*
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 Australian Accounting Standard 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.	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 prepared by management's independent external expert to ensure such calculations have been performed on a reasonable basis. We performed this work in conjunction with our internal BDO indirect-tax experts. • Obtained supporting documentation to confirm the recognition of the R&D Tax Rebate as income is appropriate in accordance with the requirements of AASB *120 Accounting for Government Grants and Disclosure of Government Assistance*.

Other information

The directors are responsible for the other information. The other information comprises the information in the Group's annual report for the year ended 30 June 2019, but does not include the financial report and the auditor's report thereon.

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 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, 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.

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 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 9 to 15 of the directors' report for the year ended 30 June 2019.

In our opinion, the Remuneration Report of Environmental Clean Technologies Limited, for the year ended 30 June 2019, 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

BDO

Wai Aw
Partner

Melbourne, 24 September 2019

Shareholder information

30 June 2018

The shareholder information set out below was applicable as at 27 August 2019.

Distribution of equitable securities

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

Holding Ranges	Holders
1 - 1,000	187
1,001 - 5,000	143
5,001 - 10,000	111
10,001 - 100,000	1,425
100,001 - 9,999,999,999	2,198
Total	**4,064**
Holding less than a marketable parcel	1,981

Equity security holders

Twenty largest quoted equity security holders

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

Holder Name	Number of ordinary shares held	% of total ordinary shares issued
LJ & K THOMSON PTY LTD <LJT & KT SUPER FUND A/C>	255,000,000	5.31%
SUPERIOR COATINGS (AUST) PTY LTD	116,496,292	2.43%
MR GREGORY MILTS	101,130,368	2.11%
A & K MOORE NOMINEES PTY LTD <MOORE SUPERANNUATION A/C>	81,212,842	1.69%
ELGAR PARK PTY LTD <ELGAR PARK SUPER FUND A/C>	81,132,378	1.69%
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 DAVID FAGAN	48,084,750	1.00%
MS KATHY XIAO LIU	48,000,000	1.00%
MS SIHOL MARITO GULTOM	46,207,365	0.96%
BRIAN JOHN MENZIES <MARBRIJEN SUPER FUND A/C>	45,000,000	0.94%
MR CAMERON LLOYD THOMSON	44,500,000	0.93%
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	43,721,558	0.91%
ANID PTY LTD <ANID SUPER FUND A/C>	40,986,392	0.85%
MRS LILY YUCHUN THOMSON	40,000,000	0.83%
CHALLENGE BRICKS & ROOFING PTY LTD	35,458,950	0.74%
THROUGH2 INVESTMENTS PTY LTD <THROUGH2 SUPER FUND A/C>	33,100,000	0.69%
MR STEPHEN GAMBLE	31,330,841	0.65%
Total	**1,318,125,051**	**27.46%**

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)	255,000,000	5.31%

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.

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