



**ENVIRONMENTAL CLEAN
TECHNOLOGIES LIMITED**

31 January 2022

ASX Limited
Level 4, North Tower, Rialto Towers
525 Collins Street
Melbourne VIC 3000

Lodgement of December 2021 Quarterly Report and Appendix 4C

ECT is pleased to attach the following items for immediate release to the market:

- December 2021 Quarterly Activity Report
- Appendix 4C

Sincerely,

Arron Canicais
Company Secretary



Quarterly Report

December 2021

Highlights during quarter

Projects

- Strategic review adds focus to Coldry project execution
- Coldry project on track to commence commissioning in Q1 CY22
- Full feasibility launched for Net Zero Hydrogen Refinery project (“Headline Project”)
- Federal Govt H2 Hub Implementation grant submission completed showcasing Headline Project, partnered by GrapheneX
- Letters of support for grant submission from Vic State Government, Energy Australia, Coregas, Latrobe City and Federation University (plus others)
- Headline Project “feasibility pack” created to engage project partners, debt providers and equity markets
- Property purchased at Yallourn, Victoria as site for Headline Project.

Finance

- ~AU\$1.968M low interest R&D loan received from InvestVictoria

Corporate

- Delivered Peer-Best-Practice ESG reporting
- Appointed new Joint Company Secretaries
- AGM held with all resolutions passed with >95% majority votes

Highlights subsequent to quarter

Projects

- Carbon credentials of Headline project reviewed against legislation
- GHD engaged to commence approvals and project planning program for Headline Project

Other

- First patent granted for HydroMOR, a process to deliver lower emission, lower cost, metal production
- Wood247 pilot business to be divested after 6-month trial to focus on headline projects

Quarterly Activities Overview

1. Coldry Commercial Demonstration Plant (“Coldry Project”)

Following the Board restructure in September 2021, the new Board then undertook a strategic review to capitalise on the increasing government and industry interest in net zero-emission technologies. Subsequently, at the end of the quarter in October 2021, the Company announced a renewed focus on formalising project partner relationships. As part of the review, the Board also decided to pause works on Phase Two of the Project to enable ECT to better direct capital towards the accelerated and large-scale commercialisation of its proprietary Coldry technology and maximise shareholder value in this fast-evolving sector.

Despite the impact of COVID-19 restrictions in Victoria during the quarter, ECT was able to advance construction activities at its Coldry Project in Bacchus Marsh, with construction progressing, on schedule for commissioning in Q1 CY22.

The Coldry technology is positioned to play an important role in transitioning to a net zero-emission industrial energy sector and provides technology support to associated government policy development. In addition, the pending completion of this facility will enable the Company to demonstrate its unique, low cost, zero-emission Coldry lignite drying technology at a commercial scale to potential downstream partners and support the development of the larger proposed net-zero hydrogen refinery project in Victoria’s Latrobe Valley.

Managing Director Glenn Fozard commented:

“The company is being supported by a dedicated group of staff at our Bacchus Marsh site whom are performing well in the face of significant COVID related headwinds. The current COVID situation, along with supply chain delays and a very tight skilled labour market are presenting serious challenges which are being more than met by our construction and project management team. It’s exciting to see our plant on track for commissioning and we look forward to demonstrating production of our first Coldry pellets from this assembly over the coming months.”

A detailed update will be posted to the Company’s website shortly.

2. Net Zero Emission Hydrogen Refinery (“Headline Project”)

As a result of the strategic review undertaken by the Board in 2021, ECT started full feasibility for a Net Zero Emission Hydrogen Project, using the Federal Government’s H2 Hub Implementation grant as the focal point.

ECT received support from potential partners and stakeholders including Victoria State Government departments, Energy Australia, Coregas, Latrobe City and Federation University, and submitted the grant application jointly with GrapheneX on the 22nd of November 2021.

ECT continued to develop the feasibility program of the Headline Project which also saw the company complete the purchase of a suitable project site at Yallourn, Victoria, in close proximity to Energy Australia’s Yallourn power station and lignite mine as well as the T15/16 outfeed lignite terminal that ECT is co-developing with Energy Australia.

Subsequent to the quarter, the company engaged engineering firm GHD to start the approvals planning process, covering EPA works approvals and licensing, as well as local government planning application requirements. Additionally, GHD will commence process modelling activities in preparation for engineering development works.

ECT will now distribute the project feasibility pack amongst potential debt providers, project and equity partners, as well as investment market professionals.

More broadly, bipartisan support from state and federal governments to develop Australia's domestic and export hydrogen capability continues to gain momentum with a range of initiatives intended to position Australia as a future leader in hydrogen exports. ECT's participation in the Gippsland Region Hydrogen Cluster (GRHC), as well as its membership of the Heavy Industry Low-carbon Transition Cooperative Research Centre (HILT-CRC) and the Future Energy Exports Cooperative Research Centre (FEnEx-CRC), increases industry and government awareness of the Company's net zero-emission technologies. In addition, it has the potential to open numerous downstream opportunities for ECT.

The Company continues to investigate opportunities to access government support and industry partnerships.

Group Engineer, Ashley Moore commented:

"Following the submission to Government of our grant proposal, we performed detailed assessment of the project against 'National Greenhouse and Energy Reporting' (NGER) protocols. This resulted in a net-negative CO₂ emissions position, which is a great place to build from. We expect to see further improvement in the emissions profile once the benefits of AgChar on soil health, productivity and atmospheric carbon absorption are considered. ECT is very excited about this project and its potential."

3. Corporate & Finance

As part of the corporate restructure undertaken in the prior quarter, ECT appointed new Joint Company Secretaries on the 13th of October 2021. Mr Arron Canicais and Mr Kian Tan of Small Cap Corporate Pty Ltd were appointed as joint Company Secretaries and replaced Mr Adam Giles, who the Company thanks for his service in this role.

In late December, the Company held their Annual General Meeting, which saw all 22 resolutions passed at greater than 95% votes in support.

During the quarter, the Company established an AU\$1.968M low-interest R&D loan with InvestVictoria with AU\$1.18M drawn in December. The remaining undrawn balance on this facility is AU\$788,000 and is scheduled to be drawn in late February. The Company subsequently finished the quarter in a strong position of \$2.13M with focus shifting from equipment purchase to equipment installation at Bacchus Marsh.

Subsequent to the quarter, the Company made the decision to divest the Wood247 pilot retail business and focus on its headline projects in Bacchus Marsh and Yallorn. The details and background for this decision are outlined in the ASX announcement released on 17 January 2022.

In late January, the Company also received notification of the granting of its first HydroMOR patent in the jurisdiction of Russia, which is due to be issued shortly. The HydroMOR process offers an alternative to conventional CO₂-intensive blast furnace steelmaking, enabling the use of lower-cost, abundant lignite in place of higher-cost coking coal, delivering a lower emission, lower cost, metal production process. The Company remains excited about the potential industrial applications for this technology.

The table below outlines the status of the various international patent applications for HydroMOR.

International Patent Application Status - HydroMOR

Case Ref.	Country	Case Status
35519103	India	Response to Exam Report Filed
35526602	Australia	Exam requested
35526603	Canada	Application filed
35526604	China	Response to Exam Report Filed
35526605	European Patent Office	Response to Exam Report Filed
35526606	Russian Federation	Accepted
35526607	United States of America	Examination report received
35527133	Indonesia	Response to Exam Report Filed
35540529	Hong Kong	Application filed

4. ESG Reporting

ECT continues to be assessed by, and report to, the ESG framework under the World Economic Forum (“WEF”) **Environment, Social and Governance (ESG Metrics)**.

The Company has decided to take a best-of-peer approach to ESG and over the reporting period has initiated the following key developments in support of our continued commitment to the WEF Pillars of Governance, Planet, People and Prosperity, and associated 21 core ESG metrics:

1. ECT has engaged a dedicated ESG Advisor.
2. ECT has set a net-zero target (Scope 1 and 2 Greenhouse Gas (GHG) emissions) for ECT’s corporate offices (plus limited Scope 3 emissions to include staff land and air travel, and waste), with a target completion date of the end of the current financial year (i.e., FY22).
3. To ensure consistency with larger potential partners, ECT is investigating early disclosure of climate risks in alignment with the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD), as it relates to both physical and transition climate risks (and opportunities). In parallel, the Company is continuing to embed key ESG risks measures (especially climate-related risks and opportunities) into the Company’s Enterprise Risk Management (“ERM”) process.

The ESG Dashboard below (provided by ESG technology partner, Socialsuite) provides a snapshot of the Company’s progress from the end of the previous quarter to 31 December 2021.

Environmental Clean Technologies (ASX:ECT)

ESG Go Dashboard	Period 1, Jul-Sep 2021					Period 2, Oct-Dec 2021							
	DISCLOSURE	MATURITY					DISCLOSURE	MATURITY					
		A1	A2	A3	A4	A5		A1	A2	A3	A4	A5	
Governance													
GO-01-A Setting purpose	V	V	V	V	V	V	V	V	V	V	V	V	V
GO-02-A Governance body composition	D	D	D	R	R	R	D	D	D	V	V	V	V
GO-03-A Material issues impacting stakeholders	D	D	D	D	D	D	D	D	D	D	D	D	D
GO-04-A Anti-corruption practices	R	R	R	R			R	V	D	D			
GO-04-B Mechanisms to protect ethical behaviour	R	R	R				R	V	D				
GO-05-A Integrating risk and opportunity into business process	D	D	D	D	D	D	D	D	D	D	D	D	D
Planet													
PL-01-A GHG emissions	D	D	D	D			D	V	D	V			
PL-01-B TCFD implementation	D	D					D	V	D	D			
PL-02-A Land use and ecological sensitivity	D	D					D	V	E	E	E	E	E
PL-03-A Water consumption	E	E					E	E	E	E	E	E	E
People													
PE-01-A Diversity and inclusion	D	D	D	D	D	D	D	D	D	D	D	D	D
PE-01-B Pay equality	D	D	D	D	D	D	D	D	D	D	D	D	D
PE-01-C Wage level	D	D	D				D	D	D				
PE-01-D Child, forced or compulsory labour	D	D					D	D					
PE-02-A Health and safety	D	D	D				D	V	D				
PE-03-A Training provided	D	D					D	D	D				
Prosperity													
PR-01-A Rate of employment	D	D	D				R	D	D				
PR-01-B Economic contribution	V	V	V				V	V	V				
PR-01-C Financial investment contribution	V	V	V				V	V	V				
PR-02-A Total R&D expenses	V	V					V	V					
PR-03-A Total tax paid	V	V					V	V					

Powered by Social Suite

Full details of the quarter's ESG progress and achievements are detailed in the Company's report, ESG Highlights Q2FY22, which can also be found on the Company's ESG web page: www.ectltd.com.au/esg.

Managing Director Glenn Fozard commented:

"Given our core business is the delivery of net-zero emissions solutions, we believe it is vital for us to maintain the highest standard practicable for our peer group. To this end, we aim to align our GHG and TCFD to ASX300 standards, as we see this as an inevitable compliance standard into the future. This also helps our larger partners better understand how ECT's principles, values, and enterprise risk management aligns with their own, through transparent and regular disclosure."

"Against the market's claims of 'Net Zero in 2030 or 2050', ECT lives the mantra of 'Net Zero Now', and as such, aims to lead our peers towards a more sustainable future in business and industry."

5. Commentary to Appendix 4C

Approximately \$594K (prior quarter \$943K) was spent on the Coldry Project during the quarter, including property, plant and equipment purchases, as the Company nears the completion of Phase 1 of the Coldry demonstration plant. This figure is down on the prior quarter as the focus turned to installing equipment already purchased in prior quarters.

Research and development costs were significantly down on the prior quarter by \$485K as the preceding quarter included the cost to secure coal supply from EnergyAustralia at the Yallourn coal mine.

The prior quarter included cash receipts of \$3M from the issue of promissory notes, the majority of which have been converted to equity following shareholder approval which was obtained at the Company's AGM in December 2021.

The Company received its 2020/21 income tax return refund, which included the R & D tax incentive of \$1.9M. Approximately \$1.3M of this was used to repay the Company's R & D loan facility.

The Company has a loan facility with Invest Victoria of \$1.968M, of which \$1.18M was drawn down in the December 2021 quarter. Undrawn loan facilities are \$788K. The ability to draw down these funds is dependent on the Company demonstrating that its expected R & D incentive for the year ended 30 June 2022 will be greater than the amount drawn on the loan using a loan to value ratio of 80%.

The Company's cash receipts, manufacturing and advertising costs were all reduced compared to the prior quarter. The majority of these cash inflows and outflows are related to the Wood247 business. In addition, as previously announced, the Company has commenced the process of divesting from this business and as such related activities were reduced.

Payments of \$98k to related parties of the entity include payments for directors' fees to executive and non-executive directors, and payments to executive directors.

Under section 8.5 of the Appendix 4C the Company reported "N/A" for the number of quarters of cashflow remaining, because of the large inflow of \$1.898M from the R&D Tax Incentive refund leading to a positive net operating cash flow. Adjusting for this one-off inflow, the underlying cash burn was \$860k. On that basis there is approximately 3.5 quarters of available cash flow given the total available funding on hand of \$2.92M.

// END //

This announcement is authorised for release to the ASX by the Board.

For further information, please contact:

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About ECT

ECT has been developing net-zero emission and hydrogen technologies for over 15 years.

Our solutions aim to transition today's use of resources to tomorrow's zero-emission future, delivering immediate financial and environmental benefits.

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

ECT's business plan is currently focusing on two major projects:

- 1) Zero-Net Emission Coldry Commercial Demonstration at Bacchus Marsh, Victoria, Australia
- 2) Zero-Net Emission Hydrogen Refinery Project at the Latrobe Valley, Victoria, Australia

About our Technology Suite

Coldry

Coldry is the gateway enabler of higher-value applications for waste biomass and lignite.

These streams are a rich source of valuable hydrocarbons. However, they suffer from high moisture content that must be reduced to enable higher-value upgrading and conversion to solid fuels, liquid or gaseous hydrocarbons.

Drying is easy. However, drying efficiently, cost-effectively and with a low emissions footprint has been the challenge. Coldry meets this challenge through a combination of "substrate densification" and waste heat utilisation, delivering the world's first low temperature, low pressure, low cost, zero CO₂ emissions drying process.

HydroMOR

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

HydroMOR is a simple, low cost, low emission, hydrogen-driven technology that enables low-value feedstocks to produce primary iron. HydroMOR is the transition solution to a "green steel" future.

COHgen

The COHgen process has the potential to deliver a lower cost, lower emission method for hydrogen production from lignite and other waste biomass streams.

COHgen is currently advancing through fundamental laboratory development intended to form the basis for a patent application ahead of scale-up and commercialisation.

COHgen aims to decouple hydrogen production from CCS, accelerating the race towards <\$2/kg production costs, with little to no emissions.

CDP-WTE

The catalytic depolymerisation-based waste-to-energy process converts' low-value resources into higher-value diesel and other valuable by-products.

CDP-WTE can be deployed as a standalone solution or integrated with the Coldry process to deliver higher-value, lower-emission energy solutions to lignite resource owners.

Forward-Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of ECT, are or may be, forward-looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Therefore, actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Environmental Clean Technologies Limited

ABN

83 000 362 596

Quarter ended ("current quarter")

December 2021

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	55	274
1.2 Payments for		
(a) research and development	(125)	(735)
(b) product manufacturing and operating costs	(185)	(278)
(c) advertising and marketing	(26)	(121)
(d) leased assets		
(e) staff costs	(105)	(197)
(f) administration and corporate costs	(475)	(975)
1.3 Dividends received (see note 3)		
1.4 Interest received	3	4
1.5 Interest and other costs of finance paid	(2)	(6)
1.6 Income taxes paid		
1.7 Government grants and tax incentives	1,989	1,991
1.8 Other (provide details if material)		
1.9 Net cash from / (used in) operating activities	1,129	(43)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities		
(b) businesses		
(c) property, plant and equipment	(594)	(1,537)
(d) investments		
(e) intellectual property		
(f) other non-current assets		

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2 Proceeds from disposal of:		
(a) entities		
(b) businesses		
(c) property, plant and equipment		
(d) investments		
(e) intellectual property		
(f) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
2.6 Net cash from / (used in) investing activities	(594)	(1,537)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)		
3.2 Proceeds from issue of convertible debt securities		2,905
3.3 Proceeds from exercise of options	1	1
3.4 Transaction costs related to issues of equity securities or convertible debt securities		(13)
3.5 Proceeds from borrowings	1,180	1,180
3.6 Repayment of borrowings	(1,341)	(1,373)
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
3.10 Net cash from / (used in) financing activities	(160)	2,698

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	1,757	1,014
4.2 Net cash from / (used in) operating activities (item 1.9 above)	1,129	(43)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(594)	(1,537)

Appendix 4C
Quarterly cash flow report for entities subject to Listing Rule 4.7B

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(160)	2,698
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	2,132	2,132

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,132	1,757
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,132	1,757

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	98
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

Quarterly cash flow report for entities subject to Listing Rule 4.7B

7. Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1 Loan facilities		
7.2 Credit standby arrangements		
7.3 Other (please specify)	1,968	1,180
7.4 Total financing facilities	1,968	1,180
7.5 Unused financing facilities available at quarter end		788
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
The Company has a lending facility with Invest Victoria for \$1.968M which has an interest rate of 0.265%, matures 31 October 2023 and is secured by the Company's R & D Tax Incentive (incentive). Further drawdowns of the facility are dependent upon the Company demonstrating that its expected incentive for the year ended 30 June 2022 will be greater than the amount drawn on the loan using a loan to incentive amount ratio of 80%.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	1,129
8.2 Cash and cash equivalents at quarter end (item 4.6)	2,132
8.3 Unused finance facilities available at quarter end (item 7.5)	788
8.4 Total available funding (item 8.2 + item 8.3)	2,920
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	N/A
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: -	
8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: -	
8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: -	
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>	

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2022

Authorised by: Board of Directors
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.