

ASX Release | ClearVue Technologies Limited (ASX: CPV)

Appendix 4C & Quarterly Activities Report

31 July 2020: Smart building materials company ClearVue Technologies Limited (ASX:CPV) (*ClearVue* or the *Company*) provides its quarterly cash flow and activities summary for the period ending 30 June 2020.

Quarterly Activities Report

Quarter Highlights

- ***Strategic Review***
- ***Key appointments - CEO, Lead Scientist***
- ***Product Development – Improved power conversion***
- ***Showcase projects***

Operational Update

In the Company's March Quarterly update, the Company updated the market on its response to the rapidly evolving global health and economic conditions posed by the COVID-19 pandemic. Further to that update the Company is pleased to confirm that at this stage its operations have only been mildly affected in some areas when dealing with third parties outside of Australia - but otherwise the Company has continued to operate largely unaffected with sales and licensing efforts continuing to progress globally with the Company's concentrated focus being on the key markets of Australia, Europe and the US.

In the context of the pandemic after the end of the quarter the Company announced that it was undertaking a number of initiatives including a strategic review of priorities to ensure the Company can come through the pandemic delivering maximum value to shareholders as global markets start to re-open.

The strategic review entails a reset of strategy to better manage the challenges posed by the pandemic including the inability to travel, potential impacts that may continue to be experienced with the Company's suppliers, distributors and other licensees, as well as disruptions in global trade relations.

The review has laser focussed the Company's efforts on its Tier 1 Jurisdictions of Northern Europe and the US for sales opportunities into commercial high-rise buildings as well as for protected cropping/greenhouse agriculture. Northern Europe and the US have an immediate product need for ClearVue's innovative solar PV and energy efficient glazing solution – the need in these regions is already established, understood, and represents an immediate path to sales for the Company.

Appointments

In line with, and as a part of this strategic reset, the Company was pleased to announce the appointment of Mr Kenan (Ken) Jagger as its Interim CEO after the end of the quarter. Mr Jagger brings 17 years' experience in sales and finance to the Company – skills critical to the Company at this point in its journey (see ASX Announcement of 23 July 2020¹ for more information).

In addition to the appointment of Mr Jagger, ClearVue further expanded its team during the quarter with the addition of:

- Dr Mikhail Vasiliev as its Lead Scientist;
- Mr Christopher Cole as its Mechatronic Engineer.

Dr Mikhail Vasiliev has an extensive science and technology background, from developing fibre-optic sensors and laser interferometers back in the 1990's, to the design of solid state lasers in early 2000's, followed by 15 years of experience as Senior Research Fellow at Edith Cowan University, where he concentrated on nanotechnology and materials science projects and still supervises PhD students.

Dr Vasiliev has contributed to the design and development of ClearVue's core components and technologies, including its advanced low-e coatings, glazing systems, luminescent/diffractive interlayers, and solar window systems. He is a multi-skilled expert in the fields of optical physics, optical engineering, photonics, nano-engineered functional materials and also in scientific software development. Dr Vasiliev has a PhD (Physics), Victoria University (Melbourne, Australia), awarded in 2002, and has co-authored multiple (> 50) high-impact research articles published in international peer-reviewed journals.

Mr Christopher Cole is a recent graduate of Sydney University with a degree in Mechatronic Engineering (first class honours), Mr Cole has a background installing sensing equipment on solar and wind farms and was introduced to ClearVue through the work he was doing through Arup for ClearVue.

Mr Cole has been instrumental in the design, development, construction, programming and testing of ClearVue's Smart Façade prototypes, and brings a knowledge of integrated software, hardware and AI systems to the team.

Dr Vasiliev and Mr Cole apart from working on the Company's product and technology pipeline are also working to assist the ClearVue team on the technical support instrumental in progressing sales opportunities for at-scale projects that the Company is pursuing.

Board

During the quarter, the Company's Board numbers were reduced with the resignation of Mr Ivan Wu. The Company has an active process of board renewal and is looking to expand the depth and breadth of director skills and expertise and will look to do this in the coming quarters in the context of the Company's focus outlined above.

¹ <https://www.asx.com.au/asxpdf/20200723/pdf/44kry6lkrydp10.pdf>

Sales Progress Update

ClearVue's sales and tendering pipeline grows each month (with projects varying from commercial to residential). A new website, new digital content and a new digital sales campaign (launch expected September/October 2020) will aim to grow awareness of the ClearVue brand and product to:

- position ClearVue Technology as an innovative global brand;
- promote the financial payback & environmental benefits; and
- use the content to persuade decision makers to conduct a ClearVue 'feasibility analysis'.

The sales focus has been to target multinational architects, façade engineers and developers that have sustainability teams with a publicised and active stance against climate change. The Company has prioritised its resources to the countries and regions likely to deliver orders and sales as quickly as possible.

Specifically, sales prioritisation is factoring in country utility prices, available government incentives, local climate and geography, regulation on high performance glazing, market size, ease of conducting business, local environmental stewardship, adoption of the European Commission (or other similar) plans for 'net zero' construction etc.

With ClearVue showcase buildings commencing construction in the upcoming quarter(s), the company looks forward to sharing the success of these projects to assist with closing sales opportunities (see further comments below under Showcase Projects Update).

Manufacturers and Suppliers Update

- **New Manufacturer and Distributor Appointed in US - Insulsteel Building Sciences LLC**

After the end of the quarter ClearVue signed a new Manufacturing and Distribution Agreement with leading energy efficient design-build firm Insulsteel Building Sciences LLC ahead of large potential sales opportunities emerging in the US.

Insulsteel will effectively be its own end customer and will initially purchase ClearVue PV IGUs from ClearVue until such time as Insulsteel has established its own manufacturing plant for supply to itself of ClearVue's IGU's. The IGU's will be factory installed into Insulsteel's wall panels for delivery to site for high-speed assembly and construction.

Insulsteel has been operating for 20 years in the US market selling its building system and EPS/steel panels in the Southern US States of Georgia and South Carolina. Insulsteel is in the process of expanding its manufacturing and distribution footprint from one location in Charleston to a further twenty (20) factories across US states.

Further information on the Agreement is contained in the Company's 6 July 2020 ASX Announcement².

- **OEM Manufacturers - YY Windows & Rocky Windows**

Despite some delays due to the pandemic ClearVue's OEM manufacturers are continuing to fabricate ClearVue's IGU products for use in ClearVue's various showcase projects (discussed below) and for supply of samples as required.

² <https://www.asx.com.au/asxpdf/20200706/pdf/44k817tbdbtjm6.pdf>

- **OEM Supplier - BeyondPV of Taiwan**

BeyondPV have continued production of the solar PV strips required for making the ClearVue IGU product. BeyondPV continues to work with ClearVue on product and design improvement with a view to increasing power performance and reducing costs.

Product Development Update

- **Power Increase**

During the quarter the Company was very pleased to announce a major milestone when the Company confirmed it has been able to demonstrate a 33% increase in power to 40 per sqm peak output in a new prototype solar PV IGU design – an uplift in power from 30w per square metre peak.

The uplift in power was achieved through ongoing research and development work carried out over the last 6 to 12 months prior to the announcement. The increase in power performance by 10w per square metre in our standard ClearVue PV IGU has come without changing the fundamental structure or underlying technology in any material way. The Company anticipates that further research and development works currently under way will further improve upon this performance (for further information please see the 7 May 2020 ASX Announcement).³

- **Collaboration Agreement with eLstar Dynamics BV**

Further to the company's Announcement of 14 April 2020 the Company is pleased to confirm that it has been able to supply its IGU's to eLstar Dynamics who received delivery of the Company's sample IGUs and, despite lockdown conditions due to COVID-19, has already completed preliminary testing work of the ClearVue IGU in conjunction with their own electrophoretic dynamic glazing technology.

Initial testing was conducted with a small 50cm x 50cm panel of ClearVue PV IGU powering 2 small (25 x 33cm) eLstar electrophoretic test modules. Further preliminary testing was completed on 4 small electrophoretic test modules as well as being used to power eLstar's drive board that operates and controls the electrophoretic switching state demonstrating that the ClearVue IGU will be able to not only switch, but also apply the full range of control required for eLstar's electrophoretic dynamic switching and tinting.



Photographs from preliminary testing conducted in Eindhoven, The Netherlands.

³ <https://www.asx.com.au/asxpdf/20200507/pdf/44hmk0nfbfshst6.pdf>

eLstar Dynamics will now work on developing a larger array of test modules to be integrated with the ClearVue product for display on a section of a building in the Netherlands and for an upcoming European trade show.

eLstar's technology is a world-leading dynamic/switchable glazing technology that combines electrophoretic responsive inks, transparent electrophoretic interlayer substrates, and proprietary control software and hardware to offer unprecedented contrast ratio's (removing the need for blinding systems), fast switching, dimmability and low-power demands compared against other switchable glazing solutions that are on the market.

- **ARUP collaboration on Smart Façade Products**

Since the Company's December 2019 Quarterly update the Company is pleased to confirm delivery at the end of March to its headquarters in Western Australia of all the finished and fully functional prototype smart façade modules.

The Company has been undertaking its own in-house testing and demonstration of the modules over the quarter and is pleased with the performance of the demonstration units that have all performed as expected.

Showcase Projects Update

- **Villa at Hebei Province China - Jinmao Green Building Technology Co. Ltd**

Further to the Company's ASX Announcement of 23 April 2020 where the company announced that it had signed a Letter of Intent (**LOI**) with Beijing Jinmao Green Building Technology Co. Ltd (a subsidiary of Fortune 500 Sinochem) (**Jinmao Green Building**) the Company is pleased to announce that construction of the villa where ClearVue's products are to be trialed has largely now been constructed at Desheguncun, Zhangei County, Zhangjiakou, Hebei province, China (中国河北省张家口市张北县德胜村).

The site was selected by Jinmao Green Building as part of a larger village project that may be used to support the Beijing 2022 Winter Olympics that will take place in Beijing and in towns throughout Hebei province in China. The Winter Olympics currently remain scheduled for 4 to 20 February 2022.

The site itself is now currently closed due to the pandemic but is ready to receive various designs of ClearVue's self-powered SmartVue™ smart façade glazing. ClearVue is currently in the process of designing and producing the glazing modules to suit the project.



Photographs of villa in Hebei province China.

- **Mirreco – Hemp based Mini-home – Knutsford Precinct, Western Australia**

Work on the mini-home project is continuing. ClearVue’s solar PV IGUs have been manufactured during the quarter and are ready to be shipped to Australia with delivery expected in coming weeks.

- **CRC-P Funded Greenhouse – Murdoch University**

Further to the Company’s March 2020 Quarterly update the Company is pleased to confirm that ClearVue’s glass IGU panels have now been shipped and delivered to site and are being stored at Murdoch University in preparation of construction commencing in coming weeks. Final commercial documentation is being finalised



- **ROOTS Israel – Trial Greenhouse**

Due to the COVID-19 coronavirus progress on this project has been delayed.

- **Aquagen – Waste Treatment Greenhouse, Cape Cod MT, USA**

Due to the COVID-19 coronavirus progress on this project has been delayed.

Corporate & Financial

As 30 June 2020 the Company had a cash balance of approximately AUD \$920,000. Please refer to the quarterly cashflow report (Appendix 4C **attached**) for further information.

Pursuant to Listing Rule 4.7C.2 the Company notes that since the Company’s admission to ASX’s official list in 2018, the Company had increased spends on marketing and promotion including costs in relation to trials and associated activities, additional patent family filings and trade mark registrations in key jurisdictions, as well as increased staffing requirements including a US-based engineer. The Company had also secured additional funding not included in the Company’s Prospectus, through a share purchase plan in 2019.

In the quarter ending 30 June 2020 payments totalling approximately AUD \$113,000 were paid in respect of executive director salaries, director’s fees and fees paid to related parties, or associates of a related party, of the Company. Such payments comprised of: corporate advisory fees paid to ICW Capital (a related entity of director, Mr Ivan Wu); company secretarial service fees paid to Ventnor Capital Pty Ltd (a related entity of director, Mr Stuart Carmichael). All such payments to associates of directors were made on arms-length terms.

Authorised by the Board of ClearVue.

For further information, please contact:

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About ClearVue Technologies Limited

ClearVue Technologies Limited (ASX: CPV) is an Australian technology company that operates in the Building Integrated Photovoltaic (BPIV) sector which involves the integration of solar technology into building surfaces, specifically glass and building façades, to provide renewable energy. ClearVue has developed advanced glass technology that aims to preserve glass transparency to maintain building aesthetics whilst generating electricity.

ClearVue's electricity generating glazing technology is strategically positioned to compliment and make more compelling, the increased use of energy-efficient windows now being regulated in response to global climate change and energy efficiency goals.

Solar PV cells are incorporated around the edges of an Insulated Glass Unit (IGU) used in windows and the lamination interlayer between the glass in the IGU incorporates ClearVue's patented proprietary nano and micro particles, as well as its spectrally selective coating on the rear external surface of the IGU.

ClearVue's window technology has application for use in the building and construction and agricultural industries (amongst others).

ClearVue has worked closely with leading experts from the Electron Science Research Institute, Edith Cowan University (ECU) in Perth, Western Australia to develop the technology.

To learn more please visit: www.clearvuepv.com

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 ClearVue Technologies Limited, 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. 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

ClearVue Technologies Limited

ABN

45 071 397 487

Quarter ended ("current quarter")

30 June 2020

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	22
1.2 Payments for		
(a) research and development	(208)	(904)
(b) product manufacturing and operating costs	(18)	(651)
(c) advertising and marketing	(36)	(325)
(d) leased assets	-	-
(e) staff costs	(239)	(754)
(f) administration and corporate costs	(171)	(772)
(g) intellectual property costs	(62)	(425)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	2
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	611*	631*
1.8 Other - Research & Development Tax Offset	-	602
1.9 Net cash from / (used in) operating activities	(123)	(2,574)

*includes GST refunds.

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	-	(33)
(d) investments	-	-
(e) intellectual property	-	-

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Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
	(f) other non-current assets	-	-
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	-	(33)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(183)
3.5	Proceeds from borrowings	-	278
3.6	Repayment of borrowings	-	-
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	-	2,095

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,043	1,432
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(123)	(2,574)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(33)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	0	2,095
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	920	920

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	863	986
5.2	Call deposits	57	57
5.3	Bank overdrafts	-	-
5.4	Other (credit cards)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	920	1,043

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 | 113 |
| 6.2 | Aggregate amount of payments to related parties and their associates included in item 2 | - |

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

Payments comprised:-

- Corporate advisory fees paid to ICW Capital, a related entity of director, Mr Ivan Wu
- Fees paid to Ventnor Capital Pty Ltd, a related entity of director, Mr Stuart Carmichael, for company secretarial services
- Executive director salaries
- Non-executive director fees

All payments to associates of directors were on arms-length terms.

7. Financing facilities

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.

	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)	-	-
7.4 Total financing facilities	-	-

7.5 **Unused financing facilities available at quarter end** -

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.

N/A

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (Item 1.9)	(123)
8.2 Cash and cash equivalents at quarter end (Item 4.6)	920
8.3 Unused finance facilities available at quarter end (Item 7.5)	0
8.4 Total available funding (Item 8.2 + Item 8.3)	920
8.5 Estimated quarters of funding available (Item 8.4 divided by Item 8.1)	7

8.6 If Item 8.5 is less than 2 quarters, please provide answers to the following questions:

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: N/A

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: N/A

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: N/A

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 July 2020

Authorised by: By the Board

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(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.