ASX Announcement – 29 October 2021

ASX Release | ClearVue Technologies Limited (ASX: CPV)

Appendix 4C & Quarterly Activities Report

29 October 2021: 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 September 2021.

Quarterly Activities Report

Quarter Highlights

- **First Order from Japanese Distributor**
- **Expansion of Team and Board**
- **Intellectual Property**
- **New Strategic Initiatives**
- **Single and Double Glazed Products**
- **Sydney Park Project**

Operational Update

In addition to its focus on securing sales and sales leads in its key target markets of Europe and the US, the September quarter has seen the company strengthening its team and board as well as continuing its work on various (previously announced) ongoing projects such as: the plant science trials being conducted in its greenhouse at Murdoch University; development work on its single and double glazed product designs with D2 Solar in California; its research work on quantum dots with UNSW and Exciton CRC collaborators; as well as continuing its negotiations on the establishment of a joint venture in the Netherlands with eLstar Dynamics Holdings BV.

The company has also been undertaking a number of new strategic initiatives during the quarter focused on its future growth including:

- Strengthening its in-house simulation capabilities;
- Archetype Modelling of a net zero building;
- Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD) preparation for its products;
- Strategic IP Strategy Review; and
- a Specific Patent Landscape Analysis and Freedom to Operate Assessment.

More information on activities completed by the Company during the quarter ending 30 September are provided below.

First Order from Japanese Distributor

On 25 August 2021 the Company announced the sale of approximately 333sqm of ClearVue PV glazing to its Tomita Technologies in Japan for deployment into a greenhouse project at a high profile hot springs health and wellness tourism eco-project near Sendai City.

ClearVue's glazing will be deployed into the roof of a strawberry greenhouse which forms part of the 'Aqua Ignis Hot Springs' project in Sendai City, Japan.

ClearVue's PV glazing will contribute to the eco credentials of the Aqua Ignis project with the PV glazing panels on the greenhouse expected to generate approximately 8573 kWh of renewable energy per year based on modelling for that region.

The Aqua Ignis Hot Springs project, centered around a natural sodium chloride / bicarbonate hot spring, is set to become a significant tourist attraction int he region with visitors able to visit the strawberry greenhouse and experience ClearVue's world leading solar PV glazing solution.

The ClearVue products are currently in production and anticipated to be shipped and ready for installation during November 2021.

Expansion of Board and Team

John Downes, Non-Executive Director

After the end of the quarter ClearVue announced on 18 October 2021 the appointment of John Downes to the ClearVue board.

Mr. Downes is currently the Global Head of Façade Supply Chain at LendLease based in its London, United Kingdom office and brings around 30 years' experience in glazing and façade systems and construction project management to the ClearVue board. He has spent nearly 8 of those years with LendLease in different roles within that group with a focus on building façades and is now leading the LendLease Global Façade Unit that supports all façade related aspects of the LendLease business.

In his capacity at LendLease, Mr Downes has a mandate to achieve Net Zero in new construction projects being undertaken by the group globally. Lendlease has a key strategic objective across its business to achieve 'Absolute Carbon Zero' by 2040 and sees the ClearVue technology and solution as a way to assist it in achieving its energy efficiency targets for its construction projects around the globe.

Mr Downes has a MSc Façade Engineering from the University of Bath, is a Fellow of the Society of Façade Engineers and a sponsor's board member of the Centre for Window and Cladding Technology where he chairs the sub-committee on Sustainability in Facades - amongst other relevant qualifications.

Doug Hunt, Business Development Manager

In August, ClearVue enhanced its business development capability with the appointment of Business Development Manager Doug Hunt. Doug's focus is to assist with ClearVue's commercialisation efforts in Australia and in greenhouse agriculture.

Doug is the former Chief Executive of Europcar Asia Pacific and former Regional Director Asia Pacific for Europcar International, responsible for 31 countries in the APAC region. He has extensive international experience, substantial experience in international franchising and licencing and also brings extensive experience in the application and integration of alternative energy solutions, with seven years experience in the renewables industry in the USA and Australia.

Andrew Miles, Head of Investor Relations

Andrew Miles joins ClearVue in early January 2022 as Head of Investor Relations and we are extremely excited about the depth of knowledge and experience he will bring to the management team. Andrew brings over 15 years' experience in equity product client solutions and management. Andrew joins us after 13 years with Macquarie Bank Limited in Sydney where his current role is Senior Vice President, Head of Client Solutions - ETDs. Prior to Macquarie, Andrew was Vice President UBS AG Australia, Head of Client Services – ETDs. Andrew's mandate upon commencement is to focus on engaging with existing shareholders as well as ESG / cleantech / decarbonisation funds .

Intellectual Property Update

Further US and AU patents have recently been granted for technology developed by ClearVue taking the total number of patents granted to the Company globally to over 230 patents across 13 patent families.

In addition, the company has during the last 6 months lodged design applications, further protecting the unique visual aspects of ClearVue's products in numerous countries.

New Strategic Initiatives

Simulation Capabilities & Archetype Modelling

During the quarter ClearVue began working on increasing its in-house simulation capabilities to demonstrate the improvements that the ClearVue product can provide over regular glass across greenhouses, commercial, and residential buildings. Using advanced finite element analysis software, ClearVue created a thermal model of both a 2000m2 greenhouse and a 6-story timber framed office building.

To further this work ClearVue then worked closely with energy modelling and verification specialists Footprint (www.sa-footprint.com) in Canada to measure the performance of ClearVue's product in these models against the "Toronto Green Standard" - one of the World's highest standards for sustainable building design.

The greenhouse modelling has been able to demonstrate that ClearVue glass is able to maintain the building at within 2°C of the desired temperature, while using less energy than a conventional glass or polycarbonate greenhouse would use to keep the temperature within 6°C. This very tight temperature tolerance, with no extra energy cost, allows for a higher crop yield, vastly reducing the ClearVue PV payback period to potentially as low as 1 year. This modelling will support our marketing capability when working with new greenhouse clients.

Additionally, a 6-story timber building in Toronto, Canada was modelled. Toronto was chosen due to its cold climate requiring higher insulation and the generous government grants available for high energy efficiency. The modelling showed that installation of ClearVue PV could provide up to a 40% reduction in energy use of the building. Without taking any other measures in energy efficiency, a developer could simply swap out the regular glass for ClearVue's product and meet all of the Toronto government's current energy use targets. When combined with rooftop solar and high efficiency HVAC, this modelling demonstrates a clear route towards a net-zero building. The addition of a carpark with rooftop solar brings the modelling to Net Zero.

With great results from ClearVue's own preliminary modelling, Toronto based Footprint was engaged to provide highly accurate models of real building designs to compare the difference in building energy use between ClearVue and regular glass.

The ClearVue Archetype modelling to date has demonstrated that by using CPV Insulated Glass Units (which deliver energy but also have excellent thermal insulation properties) in a particular form of building design is able to produce a building that has a Total Energy Use Intensity (TEUI) as defined by the Toronto Green Standard that exceeds Toronto's standard for new construction after 2030.

The Archetype model is for a 15,000m2 building that also meets Toronto's requirements for 2030 in terms of the Thermal Energy Demand Intensity (TEDI) gauge (which measures the thermal envelope performance) and the Green House Gas Emissions Intensity Measure (which looks at total carbon produced by the building). Total carbon emissions of under 4kg per m2 per annum is being demonstrated in the modelling which is approaching net zero performance.

Early modelling has shown that with the integration of rooftop PV on top of the Archetype model building and 40% of the building's car parking (as required by the Toronto construction code) the building will deliver net zero performance, with no net greenhouse gas emissions.

Early modelling shows that the ClearVue technology can deliver this result with a window to wall (fenestration) ratio of 70% glass to 30% wall material.

Data shows a compelling case not only for new construction but in the decarbonisation of existing buildings - a key factor in achieving global carbon reduction targets in the coming years.

Work is continuing on the Archetype modelling with the hope that final results can be announced before year end.

Life Cycle Assessment (LCA) & Environmental Product Declaration (EPD)

During the quarter ClearVue engaged carbon footprinting specialists Pleiades Environmental Accounting who have commenced working on conducting the ClearVuePV window product's Life Cycle Assessment (LCA) to generate an independently verified Environmental Product Declaration (EPD) for the product, for three target markets, Australia, Europe and the US. These documents once produced will become essential tools for selling the ClearVuePV product to sustainability focused end-customers.

Life cycle assessment (LCA) is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service. In the case of ClearVue's IGUs, the environmental impacts are assessed from raw material extraction and processing (cradle), through the product's manufacture, distribution and use, to the recycling or final disposal of the materials composing it (grave).

LCA's are tools used as part of the independent verification process for acquiring an Environmental Product Declaration (EPD).

An EPD is an independently verified document which transparently communicates the environmental performance or impact of any product or material over its lifetime and with carbon targets playing an increasingly important role in the building and construction sector, the demand for them is also growing.

EPD's are also useful tools in gaining additional carbon credits by increasing a building's potential for a green star rating, which is an independent assessment addressing sustainability performance of a building, such that higher rents can be obtained or higher values can be attributed to the building.

Long term, the results of having a green star rated building can bring benefits to building owners such as reduced electricity and water consumption, reduced greenhouse gas emissions and a competitive edge within the market.

ClearVue's product having an EPD will benchmark our product's performance and help the buildings that they are installed in achieve accreditation for green building certifications and schemes such as Leadership in Energy and Environmental Design (LEED) in the US and Building Research Establishment Environmental Assessment Method (BREEAM) across the UN, through the awarding of carbon credits.

Moving forward, ClearVue views the EPD as a critical tool for demonstrating not only the company's commitment to sustainability, but also that of our clients by making it easier for them to choose our low carbon product and comply with embodied carbon legislation within their territories.

Strategic IP Strategy Review

During the quarter ClearVue engaged EverEdge (https://www.everedgeglobal.com/) intangible asset specialists to conduct a strategic review of the ClearVue IP portfolio to identify strategy and protection gaps but also to look at long term portfolio cost management and reduction. This review is still ongoing with expected outcomes due before year end.

Specific Patent Landscape Analysis & Freedom to Operate Assessment

The Company has also during the last quarter undertaken the process of completing extensive patent landscape searches and freedom to operate searches across its various patents and areas of technology and business interest including to identify and analyse existing patents held or filed by others.

Single and Double Glazed Products

Further to the Company's Announcement of 18 May 2021 the single and double-glazed prototype products that have been developed in collaboration with solar specialists D2 Solar in California, are due to arrive in ClearVue's West Perth showroom in November.

These two products are major developments in being able to expand ClearVue's sales opportunities, particularly within the retrofit and transportation markets and where triple-glazed is either not applicable or otherwise not readily accepted currently.

Sydney Park Project

Further to the Company's Announcement of 28 June 2021, ClearVue confirms the project in Sydney for use in a public park is progressing well, with the ClearVuePV products having arrived to site on 23 September 2021. Due to COVID-19 related delays however installation has been rescheduled by the council involved from the middle of October, with the build now expected to be completed around the middle of November 2021. We look forward to updating the market at the time of the project officially opening.

Corporate & Financial

As of 30 September 2021, the Company had a cash balance of approximately AUD $14.95m. The attached Appendix 4C provides details on the cashflows for the quarter ended 30 September 2021. Receipts from customers for the quarter were AUD $0.14m. The Company recorded net operating cash outflows during the quarter of just over AUD $1m (down from AUD$1.255m in the June quarter) including for research and development costs ($0.17m), product manufacturing and operating costs ($0.15m) IP expenses ($0.116m), expenditure on advertising and marketing ($0.06m), staff costs ($0.252m) and administration and corporate costs including interest paid ($0.396m). Please refer to attached Appendix 4C for further information.

In the quarter ending 30 September 2021 payments totaling approximately AUD$116,000 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: company secretarial service fees paid to Ventnor Capital Pty Ltd (a related entity of director, Mr Stuart Carmichael; legal services fees paid to Steinepreis Paganin (a related entity of director, Mr Roger Steinepreis). All such payments to associates of directors were made on an arms-length terms.

Authorised by the Board of ClearVue Technologies Limited.

For further information, please contact:

ClearVue Technologies Limited
Mr Victor Rosenberg
Executive Chairman
hello@clearvuepv.com
+61 8 9220 9020

Citadel-MAGNUS
Michael Weir / Nyomi Horgan
0402 347032 / 0412 415573

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	**Quarter ended ("current quarter")**
45 071 397 487	30 September 2021

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (3 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	139	139
1.2	Payments for		
	(a) research and development	(170)	(170)
	(b) product manufacturing and operating costs	(150)	(150)
	(c) advertising and marketing	(60)	(60)
	(d) leased assets	-	-
	(e) staff costs	(252)	(252)
	(f) administration and corporate costs	(396)	(396)
	(g) intellectual property costs	(116)	(116)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(4)	(4)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other	-	-
1.9	**Net cash from / (used in) operating activities**	**(1,009)**	**(1,009)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(33)	(33)
	(d) investments	(18)	(18)
	(e) intellectual property	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 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**	**(51)**	**(51)**

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	-	-
3.3	Proceeds from exercise of options	12	12
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(21)	(21)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (Subscription funds held on trust)	52	52
3.10	**Net cash from / (used in) financing activities**	**43**	**43**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	15,944	15,944
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,009)	(1,009)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(51)	(51)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	43	43
4.5	Effect of movement in exchange rates on cash held	25	25
4.6	**Cash and cash equivalents at end of period**	**14,952**	**14,952**

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	14,896	15,888
5.2	Call deposits	56	56
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)**	**14,952**	**15,944**

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	116
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:-

- Legal fees paid to Steinepreis Paganin, a related entity of director, Mr Roger Steinepreis
- 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)	(1,009)
8.2	Cash and cash equivalents at quarter end (Item 4.6)	14,952
8.3	Unused finance facilities available at quarter end (Item 7.5)	0
8.4	Total available funding (Item 8.2 + Item 8.3)	14,952
8.5	**Estimated quarters of funding available (Item 8.4 divided by Item 8.1)**	15

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: 29 September 21

Authorised by: By the Board

.....
(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.