

# ASX RELEASE | CLEARVUE TECHNOLOGIES LIMITED (ASX:CPV | OTC:CVUEF)

# ClearVue acquires Lusoco's revolutionary illuminated visual communication IP & assets to boost outdoor ads and signage offering

#### **Highlights**

- ClearVue acquires Lusoco B.V.'s intellectual property (IP) and assets which are complementary to ClearVue's core business, key markets and the broadening application of its technologies
- Lusoco IP and technology is similar to ClearVue's approach for power collection, enhanced by highly fluorescent, high-contrast visible and invisible inks providing off-grid illuminated signage & advertising
- Applications currently include buildings and facades, bus shelters, advertising signs, street and directional signage, with significant growth potential in these and other potential applications
- Strong synergies between Lusoco and Clearvue in terms of technology and products, and the combined business development opportunities presented by this purchase agreement
- Separately, ClearVue has secured the Lusoco founders professional services

17 MAY 2023: Smart building materials company ClearVue Technologies Limited (ASX:CPV OTC:CVUEF) ('ClearVue' or 'the Company') is pleased to announce that it has signed an asset Purchase Agreement ('the Agreement') with Eindhoven, Netherlands-based Lusoco B.V. (Lusoco) to acquire its intellectual property and associated assets.

Lusoco and its founders have developed technology and products using highly fluorescent inks that will revolutionise illuminated visual communication including outdoor advertising and signage. Using similar principles to ClearVue's own technology, this signage is off-grid, autonomous, self-powered and lighted.

Lusoco's IP includes an extensive library of proprietary visible and invisible fluorescent inks that can be printed onto compatible plastics, the PVB interlayer used in glazing (such as that used by ClearVue in its patented PV solar glazed windows), as well as other interlayers and materials for various applications.

Lusoco is a deep tech startup which was established as a spin out from the Eindhoven University of Technology (Technische Universiteit Eindhoven) (*TU/e*) by co-founders Teun Wagenaar and Dr Jeroen ter Schiphorst. To date, it has received over €1 million in funding from a leading startup fund and a national technology organisation in the Netherlands.

The Lusoco technology has multiple applications including: building and glazing façades (for advertising, artwork and directional messaging); public infrastructure (such as bus shelters, road barriers, as well as public art and advertising); automotive (glass and plastics); autonomous self-powered street signs and other directional signage; self-powered safety, security and exit signs; and a range of other signage types.

Lusoco's technology deploys the principles of luminescent solar concentration (hence the name: 'Lu-so-co') to redirect light rays (in all wavelengths) that are efficient for the solar cells attached to the edge of a panel (of glass, acrylic, polycarbonate or other transparent material) for the collection and conversion of solar radiation to power that is stored in a small battery.

Lusoco's technology and system relies upon several elements, namely its highly fluorescent inks which can be visible or invisible and have illuminating properties, the luminescent solar concentration element, a solar photovoltaic strip and a light source.

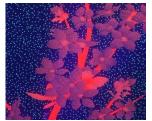
As darkness falls, and as the solar cells stop generating electricity from the redirected light, the system recognises the loss in power generation and then activates the system to send the stored power to low power lighting. The system includes light emitting diodes (LEDs) or other low-power light sources at the edge of the glazing or signage unit. The artificial light from the light source is then applied back into the luminescent solar concentration element where the fluorescent inks then release energy in the form of enhanced, high-contrast fluorescent lighted images or text through excitation of the highly fluorescent inks.

## **Examples of the Lusoco Fluorescent Inks and applications:**

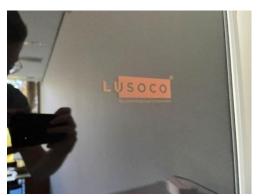


Pattern printed into glass using visible fluorescent inks





Fluorescent inks come to life when edge lighting applied



Pattern printed in invisible fluorescent ink in background of clear glass panel.



The same panel when lighting is applied



Artist's impression of automotive application demonstrating how different coloured invisible fluorescent inks can be selectively activated using different light wavelengths.



Artist's impression of automotive application demonstrating how different coloured invisible fluorescent inks can be selectively activated using different light wavelengths.

In a similar way, ClearVue's own underlying technology relies on nano and micro particles and/or quantum dots in the glazing interlayer that interact with light (invisible infrared and ultraviolet wavelengths, in the case of ClearVue) redirecting that light to the edges of an integrated glazing unit (IGU) for conversion to electricity by photovoltaic strips at the edge of a window or IGU.

Key terms of the transaction include:

- Counterparties: Lusoco B.V. and its founders Teun Wagenaar and Jeroen ter Schiphorst
- Consideration: €200,000
- Conditions precedent: None
- Conditions subsequent: Lusoco B.V. as an entity will be wound up.
- Other: The asset purchase will be funded from ClearVue's existing cash balances / working capital.

The asset purchase further benefits ClearVue via Lusoco's established relationships with a number of globally recognised companies in the areas of outdoor advertising, security, automotive components and glazing.

Additionally, and separately following the asset purchase, Dr Jeroen ter Schiphorst will join ClearVue as Chief of Chemical Technologies through its subsidiary, ClearVue Europe B.V.. Mr Teun Wagenaar will also provide consultancy services to both ClearVue Europe B.V. and ClearVue Technologies Limited after the transaction.

Mr ter Schiphorst will continue to work on progressing the development of the fluorescent ink technologies as well as assisting with trials to integrate the technology with ClearVue's own solar glazing solutions for bus shelters, public advertising and signage applications, and to progress Lusoco's established relationships around a new combined product and technology offering. Mr Wagenaar will support activities to integrate the Lusoco technologies into the ClearVue product suite and to progress trials with third-party collaborators in the outdoor advertising, automotive and architectural areas.

Mr Wagenaar is an industrial designer and serial entrepreneur who was a founder of Peer+ which was sold to Merck KGaA and formed the basis for its Merck Eyrise liquid crystal dynamically switchable glass solution. Dr ter Schiphorst founded Lusoco whilst completing his PhD in Chemical Engineering and Chemistry at TU/e and has expertise in both the characterisation and application of dyes for luminescent solar concentrators and in microfluidics.



Lusoco's artistic impression of its fluorescent inks deployed into a bus shelter application.

Commenting on the acquisition of Lusoco's IP and assets, ClearVue Acting CEO and Executive Director, Jamie Lyford, said:

"The team at ClearVue is delighted to have been able to secure the acquisition of the Lusoco IP and technology into the ClearVue technology stack and product offering.

There is great deal of synergy between Lusoco and ClearVue, not only in terms of the cross-pollination of technology improving upon each other's technology and product offering, but also in terms of new business development opportunities, thereby creating more value for ClearVue customers and shareholders – which is what made this such a valuable and unique opportunity.

In addition to ClearVue being able to add the Lusoco ink and printing solution into its solar facades and IGUs as a new complementary product line, the opportunity and benefits of the solution to the outdoor advertising and signage markets are obvious and wide-ranging.

Public infrastructure such as bus shelters, street furniture and public artwork that use laminated glass or plastic surfaces and that need to be lit at night to be seen are all a target for a combined ClearVue and Lusoco solution. Low-power, high-contrast lighted surfaces and signage that are offgrid and self-powered through use of the ClearVue glazing — or using Lusoco's own solar solution for smaller signs — are all now an option. As Lusoco says in its promotional materials, it is 'revolutionising illuminated visual communication'.

In addition to the architecture, outdoor advertising and automotive markets that Lusoco has already entered into through collaborations, the ClearVue team is also confident that the Lusoco technology may have a place in the greenhouse vertical that ClearVue is also nurturing as a key market in its near future.

Beyond the assets and IP that we have acquired, the biggest value we see in this transaction is in securing the talents of Jeroen and Teun who we are all very much looking forward to working with to maximise this opportunity together."

The Company looks forward to updating the market on future developments regarding integration of the Lusoco technology into the ClearVue technology stack and into its product offerings, and progressing collaborations that flow from Lusoco's existing customers and partners, as these are developed over the coming year.

The board does not consider that the asset purchase will give rise to a significant change, either directly or indirectly, to the nature or scale of the Company's activities requiring notification under Chapter 11 of the ASX Listing Rules. In relation to the financial significance of this transaction to the Company, it is at this stage too early to quantify potential future revenues as a result of the acquisition.

Authorised by the Board of ClearVue Technologies Limited.

#### 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.

