

ASX Release | ClearVue Technologies Limited (ASX: CPV)

# Technical Update: ARUP Power Performance Model & Warwick Grove Shopping Centre Demonstrator Trial

# Highlights:

ClearVue and ARUP continue to work together to refine Power Performance Model.

Based on key assumptions the Power Performance Model demonstrates yearly energy of 55,870 kWh which can contribute to power and lighting, supplementary air conditioning and automated window blinds.

The Company will be undertaking work at the Warwick Grove Shopping Centre Trial demonstrator site during the month of April 2019 - the work will remove the external bypass diodes which through testing have been unable to support the voltage generated by the ClearVue panels.

**28 March 2019:** Smart building materials company ClearVue Technologies Limited (ASX:CPV) ("*ClearVue*" or "*the Company*") is pleased to release the following update:

# Power Performance Modelling

The Company refers to the Investor Presentation released to market on 19 March 2019 and the indicative power performance modelling undertaken by global consulting engineering group ARUP (<u>www.arup.com</u>).

We are pleased to advise that ARUP have now further refined their modelling based on the following assumptions:

- 25,000 sqm "test building";
- Building broken down into 10 floors;
- Each floor is 2,500 sqm;
- Each floor has views facing N, E, S, W;
- The N, E and W are modelled with ClearVue windows resulting in 315sqm of 125 ClearVue IGU panels per floor (equivalent of 1,250 ClearVue IGU panels total); and
- Results based on 365 days use a year (earlier model based on 260 business days only).

The refined modelling demonstrates:

- a Peak Daily Energy of 254 kWh;
- an Average Daily Energy of 153 kWh; and
- Yearly Energy of 55,870 kWh.

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The Company notes, based on the modelling that the generated electricity can contribute to the power and lighting, supplementary air conditioning, automated window blinds and IOT equipped accessories.

The model ignores:

- the approximate 40% energy savings in the building due to the ClearVue glass being triple glazed and low-e.
  Initial indicated numbers from ARUP (based on data in their model) estimate that a 40% saving on a typical floor's annual electricity bill (separate from power generated) would be roughly 61,000kWh;
- the significant additional benefits that will flow to a building owner from the contribution made by ClearVue's windows towards the building's NABERS and GreenStar ratings. These rating tools aggregate the energy and environmental features of a building and can increase its marketability to prospective tenants;

the greater efficiencies that the panels can produce at high angles of incidence;

the spandrel gaps between floors ie. ClearVue PV glazing could also be deployed in the space between floors to significantly increase the overall system size and consequent power output.

ARUP have advised that their model is conservative and realistic and that with further investigation may result in higher outputs.

# Warwick Grove Shopping Centre Demonstrator Trial Update

The Company refers to the ASX announcement of 30 January 2019 regarding the commercial demonstrator trial at Warwick Grove Shopping Centre.

The Company is pleased to advise that the initial testing met power output expectations achieving between 2.5 and 3.14 kWh per day.

The Company wishes to advise that as part of its ongoing trial and testing of the demonstrator site, the Company will be undertaking work at the demonstrator site during the month of April 2019. The work will remove the external bypass diodes used in the installation, which through testing by the Company has identified that the diodes have been unable to support the voltage generated by the ClearVue panels. The bypass diodes are accessory products and are not part of the ClearVue IGU glass panel or ClearVue technology.

The Company looks forward to being able to update the market on the progress of the trial in the following months.

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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 and agricultural industries, specifically glass and building surfaces, to provide renewable energy. ClearVue has developed advanced glass technology that aims to preserve glass transparency to maintain building aesthetics whilst generating electricity.

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 spectral 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.