

Powerhouse Ventures Limited

HALF YEAR REPORT

FOR THE HALF YEAR ENDED 31 DECEMBER 2017



ASX Announcement
Powerhouse Ventures Limited
(ASX Code: PVL)

28 February 2018

HALF YEAR ACTIVITIES REPORT
FOR THE HALF YEAR ENDED 31 DECEMBER 2017



Portfolio Update

- ▲ Invert Robotics has completed a \$6.3m capital raising to fund European dairy inspection business expansion and further develop the aircraft fuselage inspection opportunity. Further opportunities in aircraft maintenance and petrochemical inspection have arisen.
- ▲ ArcActive sold for \$1.9m representing 4x uplift on original investment. This follows the sale of Syft for 10x uplift earlier in 2017.
- ▲ Upstream Medical Technologies is currently raising capital from New Zealand, Australian and European investors. Powerhouse anticipates a substantial valuation upgrade in 2H18.
- ▲ Following the successful IPO of Croplogic in September, the company continues to execute on strategic initiatives although its share price remains under pressure.
- ▲ Governance changes in Motim have resulted in a firm offer for the purchase of assets for up to USD5m in scrip and cash. Previously written down loans and convertible notes amounting to \$428k are now recognised at full value. Significantly more value will be realised in due course if plans are fully executed.
- ▲ Interim injunction granted in favour of PVL and Solarbright to protect Solarbright IP and facilitate sale negotiations. Loans, interest and other receivables amounting to \$802k written down to nil to ensure prudent treatment applies.

Exciting new companies added to the portfolio include:

- ▲ Hot Lime Labs - CO2 capture
 - ▲ 2.2 GForce - Seismic stabilisation
 - ▲ Silventum - Active dental materials
 - ▲ Orbis - In-line milk assessment
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See appendix for details of portfolio companies featured in this release.

ASX: PVL

Issued Capital:

28.986m Fully Paid Shares

Key Personnel:

Mr Paul Viney

Chief Executive Officer

Mr Russell Yardley

Chairman

Mr Stuart Whitham

CFO / Joint Company Secretary

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www.powerhouse-ventures.co.nz

Corporate Operational Highlights

- Disciplined cost control and stringent cash supervision pending significant planned liquidity events within the Portfolio (see below).
- Restructuring completed in December resulting in significantly reduced costs and reduced headcount, with new costs run-rate to benefit reported expenses in the second half of YEJ 18.
- Measured investment activity with focus on analysis of Australian deal-flow and securing university and CSIRO engagement and cooperation.
- Convertible Notes were issued in December resulting in cash inflows of NZ \$818k.



Results Summary for Half Year

	1H18	1H17
Fair Value changes in portfolio (statutory) (\$m)	(1.88)	2.34
Total revenues (statutory) (\$m)	(0.91)	3.36
Net profit / (loss) after tax (statutory) (\$m)	(4.35)	(0.33)
Net profit / (loss) after tax (underlying) (\$m)	(1.89)	0.08
Earnings per share (statutory) (cents)	(15)	(2)
Earnings per share (underlying) (cents)	(6)	0
Interim dividend per share	Nil	Nil
NTA per share	NZ\$0.53	NZ\$1.06

Fair Value Changes in the Period

Portfolio Company	Fair Value Change Recorded (\$m)	Powerhouse Carrying Value as at 31 December 2017 (\$m)	Powerhouse Ownership Interest
ArcActive	0.37	n/a - off model disposal	n/a - off model disposal
Auramer	0.02	0.29	18.9%
Croplogic (ASX Code: CLI)	(1.73) *	1.89	14.9%
Hi-Aspect	0.15	0.30	63.2%
Invert Robotics	0.25	4.33	23.0%
SolarBright	(0.54)	nil	30.3%
Veritide	(0.40)	0.40	19.7%
Total	(1.88)		
Total in cents per share	(6.5)		

* CLI post ASX listing share price reduction

Underlying Profit Analysis

The following adjustments to the statutory loss are required to arrive at underlying loss for the period under review:

	1H18
	(\$m)
Statutory profit / (loss) [reviewed]	(4.35)
Adjustments	
Croplogic ASX listed share price reduction (Listed at A\$0.20. Closing price of A\$0.094 as at 31 December 2017)	1.73
Impairment of financial assets	0.73
Underlying profit / (loss)	(1.89)

The main adjustment to the statutory loss is from the market based reduction in Croplogic's (ASX Code : "CLI") share price, which is valued based on the quoted price on the Australian Securities Exchange. Whilst the share price fall is disappointing, Powerhouse anticipates that Croplogic will continue to execute in accordance with its strategic objectives as set out in its Prospectus from September 2017. An improved valuation in 2H18 is anticipated.

Targeted Impending Liquidity Events for "off model" portfolio companies

Investee Company	Current Status	Portfolio Impact	Current Carrying Value
Mars	Powerhouse has commenced a review of its stake in Mars.	This company is "off model" for PVL, as founder-based.	\$0.7m
Motim	Powerhouse is assisting Motim with a global M&A search - an unconditional offer has been received and due diligence is now being finalised. Transaction completion anticipated in 2H 2018.	Motim is well-placed to benefit a strategic acquirer with its augmented reality technology and links to major international customers.	*Nil
SolarBright	Powerhouse is considering liquidity options for its stake - sale discussions are progressing. Transaction anticipated in 2H 2018.	This company is "off model" for PVL, as founder-based. All balances marked to nil so any transaction proceeds will result in uplift.	Nil

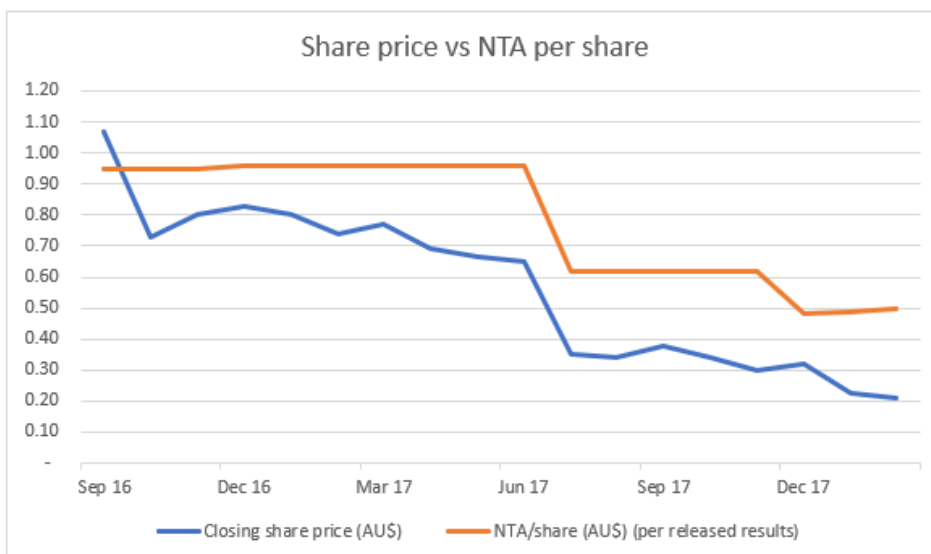
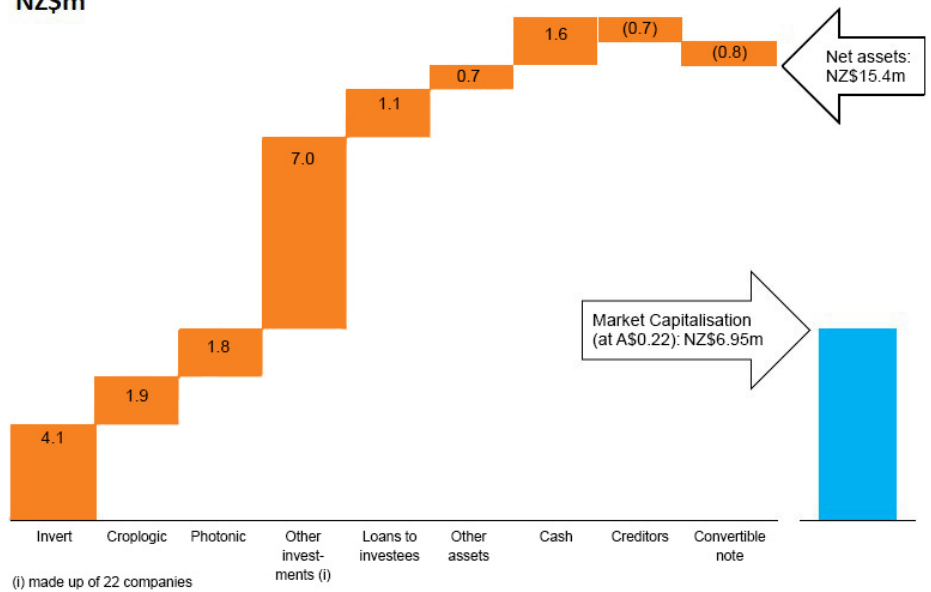
*Motim equity assets carried at \$nil, loan assets carried at 100%

Financial Position

- Improved liquidity: Cash balance as at 31 December 2017 of NZ\$1.6m.
- Further sales of off-model portfolio investments will improve liquidity on completion.
- PVL share price is significantly below published NTA

Net Assets waterfall analysis

As at 31 December 2017
before revaluation and audit adjustments
NZ\$m



- Current share price represents approximately 56% discount to published NTA.
- Significantly deeper discount compared to peer stocks listed on the ASX.

Outlook

Directors advise that the recent reduction in operating costs, combined with proposed “off model” asset realisations has resulted in an improved funding position in the period, as well as a leaner and more targeted organisation and portfolio focus.

Careful management of cash resources continues to be an important objective for the Board. This will be achieved through continued cost control together with proceeds from realising value through the sale of off-model investments.

Powerhouse has sharpened its business model during H1FY18. This means that as portfolio companies and their underlying technologies mature, profit generation should accelerate.

Key outlook targets:

- Continued asset realisations to further bolster financial position in this coming half year.
- A return to profitability in 2H18 with an uplift in portfolio value and resultant NTA per share.
- Acceleration of Australian expansion with focus on University engagements and investigations into the use of side-car or ring-fenced funds going forward.
- Significant Letter of Intention to work with Powerhouse in commercialising IP has been received from one CRI, with similar University sourced initiatives imminent.
- Powerhouse is preparing to become a significant Australasian technology incubator and early stage company accelerator in the 2017/18 financial year. To support this Australian expansion opportunity, an operational staffing initiative is under active consideration.
- Salary costs have been significantly reduced in the recent restructuring as summarised in the following table:

	1H18 Actual Monthly Average NZ\$	2H18 Estimated Monthly Average NZ\$
Cash Salary Costs	170,000	115,000

In its IPO Prospectus of October 2016, PVL stated that an important part of the business model for investors to note was that profit was likely to be unpredictable. The following diagram indicates the recent history of portfolio uplifts and the Company’s view of likelihood of fair value uplifts in the portfolio:

2015	Calender 2016		Calender 2017		2018
1HFY16	2HFY16	1HFY17	2HFY17	1HFY18	2HFY18

Forward Looking Statements

All statements other than statements of historical fact including, without limitation, statements regarding projections, future plans and objectives of PVL, are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'anticipate', 'believe', 'could', 'estimate', 'expect', 'future', 'intend', 'may', 'opportunity', 'plan', 'in principle', 'potential', 'project', 'seek', 'will' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its Directors and Management of PVL that could cause PVL's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by these forward-looking statements will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. PVL does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained above, except where required by applicable law and securities exchange listing requirements.

For further information, please visit the Company's website at www.powerhouse-ventures.co.nz



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Appendix

Portfolio Companies Featured in this Announcement

For details of portfolio companies not included below, please refer to Portfolio Reports regularly posted to the ASX Announcements Platform (Powerhouse's ASX Code: "PVL").

CropLogic



High-volume crop growers and processors have significant challenges ahead in order to meet rising food-demand. Growers need to optimise resources and processors need to plan to ensure efficient processing. CropLogic delivers specialist agronomy services to growers using technology developed over 30 years at The New Zealand Institute for Plant & Food Research. CropLogic brings together crop science, environmental data and agronomic expertise to offer input for daily decision making that improves on typical "rule of thumb" recommendations. In addition to its expert system, CropLogic provides the telemetry required to gather field data.

Following more than 65,000 acres of field trials in the USA, NZ, Australia and China, CropLogic is embarking on strategic acquisitions of agronomy services companies in target countries. CropLogic listed on the ASX in September 2017 under Code 'CLI'.

Invert Robotics



Within the food-processing industry, food-safety is driven by eliminating bacterial contamination which can be harboured by cracks in industrial vessels such as tanks, dryers and silos. Historically these vessels have been serviced by scaffold or rope-based inspections - a hazardous process which is prone to error.

Invert Robotics provides remote inspection services to global blue chip customers using its proprietary robotics technology. The mobile climbing robot system allows identification, recording and reporting of cracks in mission critical infrastructure. Invert is currently expanding geographically into Europe, following success with inspection of milk silos and dryers in Australasia. A new and exciting world-wide business opportunity has also developed in aircraft fuselage inspection. A petro-chemical tank inspection business is also under consideration.

Hot Lime Labs

Hot Lime Labs is a spin-off from Callaghan Innovation and is developing CO2 capture systems for biomass boilers in order to supply commercial greenhouse growers with low-cost, renewable CO2 which they commonly use to accelerate plant growth and so increase their yields.



Upstream Medical Technologies

A large number of patients present in Emergency Departments (ED) each year with chest pain. One in eight has a life-threatening disease. Causes for this pain are many; heart, lung, gastrointestinal, bone, muscle and nerve problems. ED physicians require rapid and accurate methods to determine which patients require immediate lifesaving medical treatment.

Upstream has a novel technology platform built on years of research which provides a new class of diagnostic test designed for ED use. These tests detect life threatening heart and associated diseases. The lead assay can detect imminent heart attack BEFORE tissue damage occurs. UMT is building a pipeline of tests that enable earlier diagnosis for improved patient recovery. Significant capital-raising is underway in Australia and the UK.



SolarBright

SolarBright is positioned to capitalise on the LED and Solar LED lighting phenomena that are changing the way the world is illuminated. SolarBright is focusing on two innovative business opportunities: - solar street lighting and the further development and manufacture of PATeye, the world's first commercially-available solar-powered ice-detection road stud, now being further developed and deployed for smart city roading opportunities based on IoT technology.

Motim Technologies

The global mobile marketing sector is a high-growth area that is seeing innovation as technology and marketing mix, with consumers becoming increasingly 'connected' and smartphone technology becoming almost ubiquitous in the modern world.

Motim Technologies has developed a range of mobile interaction technologies, based on expertise in computer vision, augmented reality, image recognition and mobile-software development alongside deep creative experience and expertise. Securing direct relationships with major global brands is validation that Motim has a special proposition and the ability to execute and deliver on a global stage.

Silventum

Dental cavities, or decay, is the most common disease in humans, affecting just about everyone. The dental industry's primary solution is to remove the decaying material and replace it with a synthetic one, an industry that is worth over US\$4bn per annum.

However, nearly half of all fillings that are carried out are replacement fillings, required either because the initial restoration failed or because of secondary infection.

A collaboration between the Department of Chemistry and the Faculty of Dentistry at the University of Otago has led to a novel platform that Silventum will use to generate improved dental materials with significantly better mechanical, structural and aesthetic qualities and which can support a reduction in decay.



2.2 GForce

2.2 GForce will deliver certified preventative, predictive and aftershock enduring solutions to manage and monitor the integrity of critical structures and infrastructure following large environmental or external loads, such as earthquakes, storm surge or high wind events.

Strengthening and monitoring structures will enable asset owners and operators to minimise unscheduled inspections, asset downtime and risk of injury or death from structural failure.

Orbis Diagnostics

Orbis Diagnostics is developing in-line milking measurement for protein, fat, somatic cell and progesterone. Dairy farmers need to determine ratios and concentration of milk solids (protein and fat) for which they are paid, detect early signs of bovine mastitis through somatic cell counts and improve reproduction through progesterone monitoring. Orbis' microfluidic technology is expected to measure more parameters, be more accurate and timely than existing practice, providing the farmer with actionable insight for each cow in their milking herd.