

# INVESTOR INSIGHT



**VividIndustrial**

July 2016

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 **Greenearth  
Energy Ltd.**



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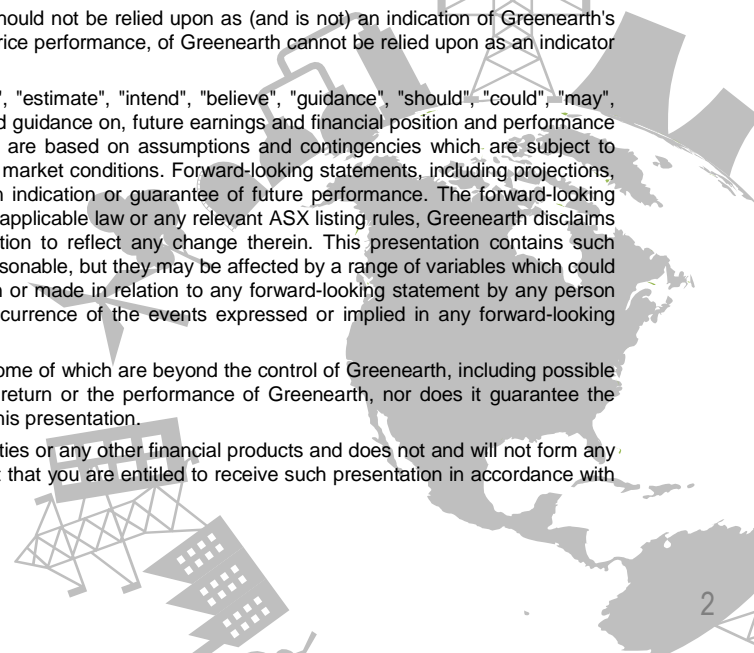
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Lighting accounts for nearly **6%** of global CO2 greenhouse gas emissions

*The Climate Group*

The use of **Big Data** will become a key basis of competition and growth for individual firms

*McKinsey & Company*

The U.S. Department of energy estimates that the widespread adoption of LEDs over the next 20 years will save **\$265 billion**, preventing the need for **40** new power plants

*U.S. Department of Energy estimates*

Smart City technologies will grow to an industry worth **\$27.5 billion by 2023.**

*New Jersey Institute of Technology, The city of the future*

**LED Lighting Market to Reach US\$30.5 billion in 2016**

*LEDinside*

Internet of Things devices will grow to as many as **30 billion** devices by 2020

*McKinsey&Company,*

We recognize that adoption of city wide LED public lighting is one of the most immediate and **actionable solutions** to implement on the way to net zero carbon emissions

*- Jack Mazek, Sustainability Advisor at the Adelaide City Council*

**0.5%** of all data is currently analysed

*MIT technology review*

Sustainable urbanisation requires adaptive infrastructure

The Internet of Things is ground zero for a new phase of **global transformation** powered by **technology innovation**, generating significant **economic opportunities** and reshaping industries.

*Marc Benioff, Chairman and CEO Salesforce.com, USA*



# Company Summary

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## Capital Structure

Share Price (12 July 2016)	[cps]	7.0
Ordinary shares on issue	[m]	299.6
Unlisted options (7.5 - 20.0cps)	[m]	47.7
Market capitalisation	[\$m]	21.0
Cash <sup>1</sup>	[\$m]	0.9
Debt <sup>1</sup>	[\$m]	0.0

<sup>1</sup> as at 31<sup>st</sup> March 2016

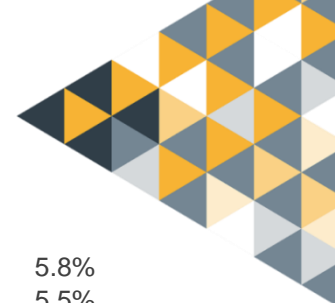
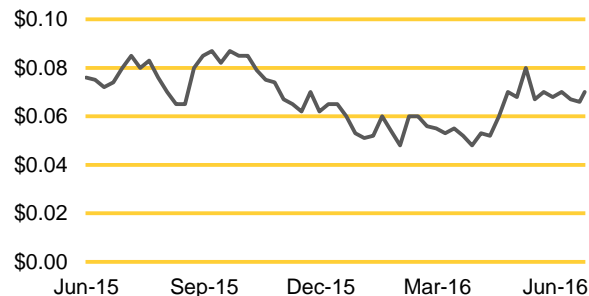
## Management & Board

Charles Macek	Chairman
Samuel Marks	Managing Director
Robert Annells	Non-Executive Director
Leslie Butterfield	Non-Executive Director
John Kopcheff	Non-Executive Director
Philip Zajac	Non-Executive Director
Robert Smith	CFO & Company Secretary
Urbain du Plessis	COO – Vivid Industrial
Mark Rutherford	MD – Illum-A-Lite

## Shareholders

Advance Publicity Board	5.8%
Hub and Spokes	5.5%
Erdi Fuels	5.6%
Illum-a-Lite vendors	5.2%

## Share price chart





# Group Structure



## Provides energy efficient lighting systems to industrial, commercial and infrastructure businesses

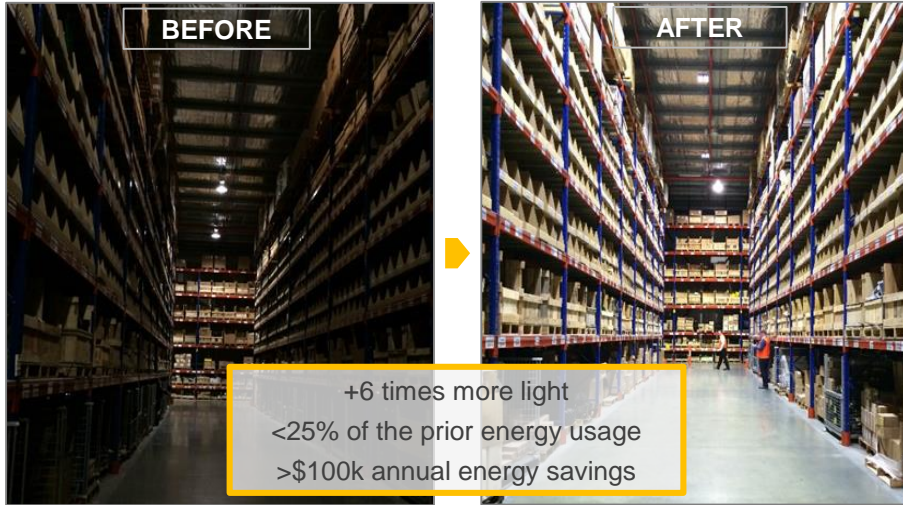
- ▶ World leading technology company, achieving energy savings of >80%
- ▶ Being deployed by key blue chip customers in Australia & overseas
- ▶ Enabling development of high margin recurring revenue
- ▶ Australian Industrial & Commercial lighting replacement cycle generates ~\$1bn of turnover annually

- ▶ NewCO<sub>2</sub>Fuels has an independently validated and globally awarded technology that converts CO<sub>2</sub> into fuel using solar or waste heat as the energy source
- ▶ Now in commercialisation phase
- ▶ Externally managed (passive) investment
- ▶ Greenearth Energy Ltd has a 33.33% economic stake in NewCO<sub>2</sub>Fuels

# Our Capability



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- ▶ Vivid Industrial has developed a world leading, proprietary, end-to-end lighting system, which provides more light, using less energy.
- ▶ The system includes a comprehensive energy reporting and management tool and can be installed on greenfield sites or retrofitted.
- ▶ Vivid Industrial offers clients both an upfront capex sales model, or opex sales models under finance and a “Save & Share” model.

Existing Lighting

Metal Halide highbay	1760W
Average Lux	20
Avg. operating load	1.8kW

Vivid Industrial Installation

Matrixx System	850W
Average Lux	426
Avg. operating load	0.4kw



System reporting software tools

All photos taken at the same site, same time, with the same camera and exposure settings and no post processing applied.

# Vivid Industrial Overview



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## COMPANY BACKGROUND

- ▶ Established in 2011 Vivid Industrial is a technology developer, manufacturer and installer of energy efficient solutions with its main focus lighting for commercial & industrial customers.
- ▶ In 2015, Vivid Industrial launched its proprietary and internationally acclaimed Matrixx range of lighting systems, which is optimised for large warehouses and distribution centres.

## OPPORTUNITY

- ▶ Vivid Industrial currently has an established blue-chip customer base with focus on multi-site repeat opportunities.
- ▶ The current annual revenue in Australia alone for Vivid Industrial's market segment is estimated at \$1bn.
- ▶ Vivid Industrial recently launched the unique "Save & Share" offer which allows customers to upgrade to our leading lighting system and enjoy significant reduction in energy costs without any investment capex.

## EXECUTION

- ▶ Increased interest and conversation across Commercial and Industrial clients, wanting to benefit from cost savings and emissions reductions, enabled by intelligent energy management systems.
- ▶ Proven technology and business model, with early adopter and trial upgrades, now into multi-site rollout discussions.
- ▶ Targeting strong revenue growth in FY17 based on current sales pipeline

# World Leading Matrixx Lighting System



- ▶ Matrixx records and maintains full operational history for the entire system, offering analytics of every light, on every site, in real time, to any device.
- ▶ Energy cost savings of over 80%, through propriety low cost energy efficient design and automated analysis of motion and ambient light sensing.
- ▶ Vivid Industrial systems can deliver savings equivalent to 8% of typical annual rent (eg >\$6/m<sup>2</sup> saved in warehousing).



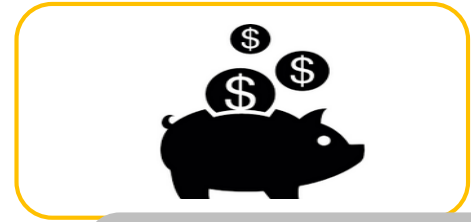
## Plug & Play Installation

- End to end propriety system
- Wireless connectivity
- Industrial "Internet of Things"
- Unlimited scale



## Monitoring & reporting

- Real time
- Cloud based
- Whole of site
- Complete analytics



## Substantial savings

- Short paybacks for customer e.g. <2 yrs
- >80% energy cost savings
- Option of Save & Share with no Capex from the customer



# Compelling proposition for all parties

The Matrixx lighting solution has been developed from the ground up, rethinking industrial lighting from: components, to installation, to energy management, to client reporting and analytics

## Customer Example

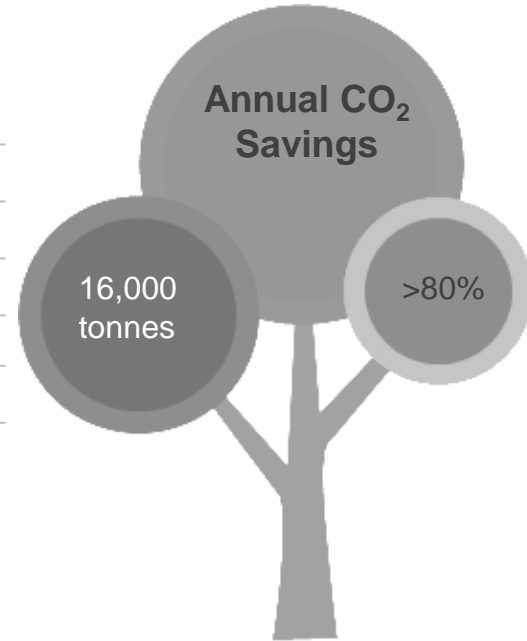
Portfolio Footprint (m <sup>2</sup> )	500k
Installation Cost	\$7.0m
Less: State/Federal Rebates	\$1.5m
Net cost to customer	\$5.5m

## Site Economics

Annual avg savings per m <sup>2</sup>	\$6.00
Annual avg rent per m <sup>2</sup>	\$75.00
Savings as a % of rental cost	8.0%

## Compelling Customer Economics

Annual electricity savings	\$2.3m
Annual maintenance savings	\$0.7m
<b>Total annual savings</b>	<b>\$3.0m</b>
Total \$ savings 10 year Life	\$30.0m
Implied customer IRR	55%
Customer Pay Back (years)	1.8

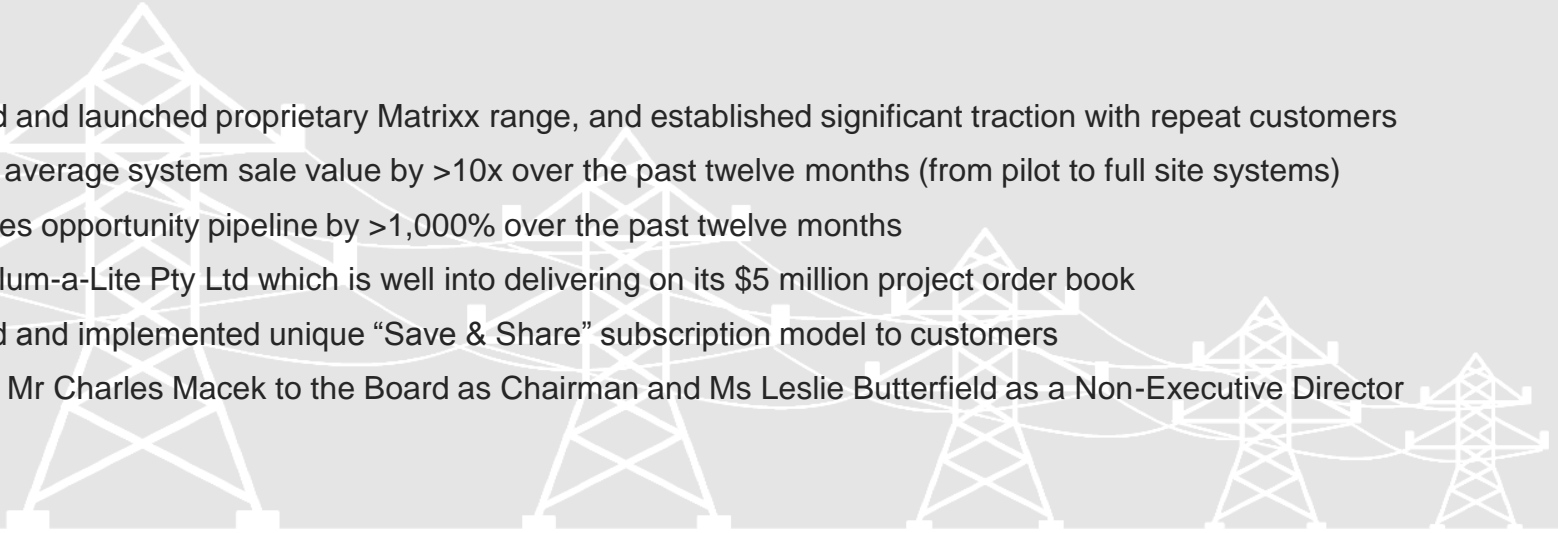


# Vivid Industrial Key Highlights



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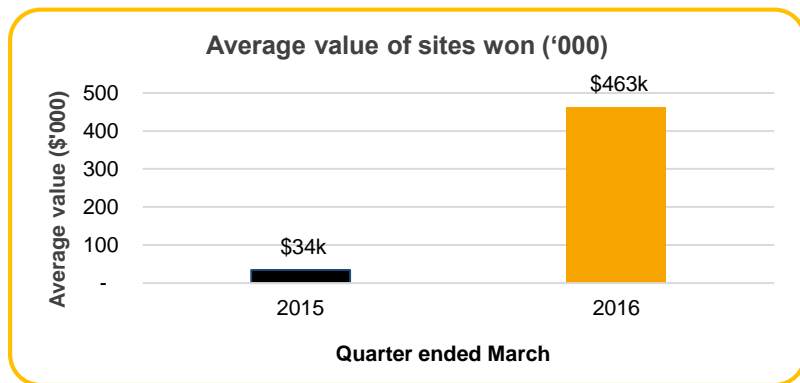
- ▶ Developed and launched proprietary Matrixx range, and established significant traction with repeat customers
- ▶ Increased average system sale value by >10x over the past twelve months (from pilot to full site systems)
- ▶ Grown sales opportunity pipeline by >1,000% over the past twelve months
- ▶ Acquired Ilum-a-Lite Pty Ltd which is well into delivering on its \$5 million project order book
- ▶ Developed and implemented unique “Save & Share” subscription model to customers
- ▶ Appointed Mr Charles Macek to the Board as Chairman and Ms Leslie Butterfield as a Non-Executive Director



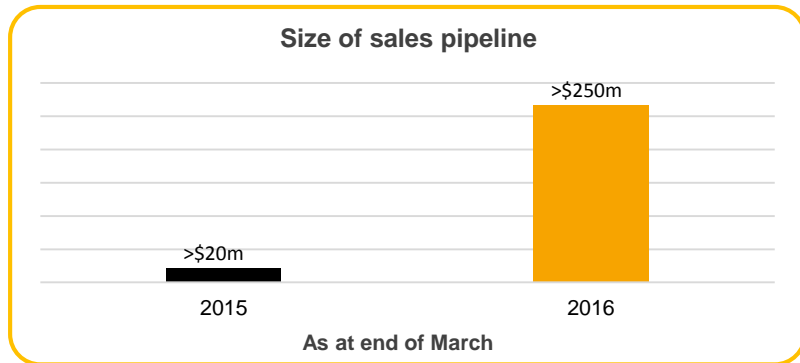
# Strong revenue and pipeline growth



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- ▶ Over the last 12 months Vivid Industrial has made a decisive move from pilot phase deployments to commercial roll-outs, with a commensurate increase in contract size.



- ▶ Sales pipeline opportunity has grown by >1,000% during that time.
- ▶ The order book (at 31 March 2016) is larger than the aggregate of total sales for the last three financial years.

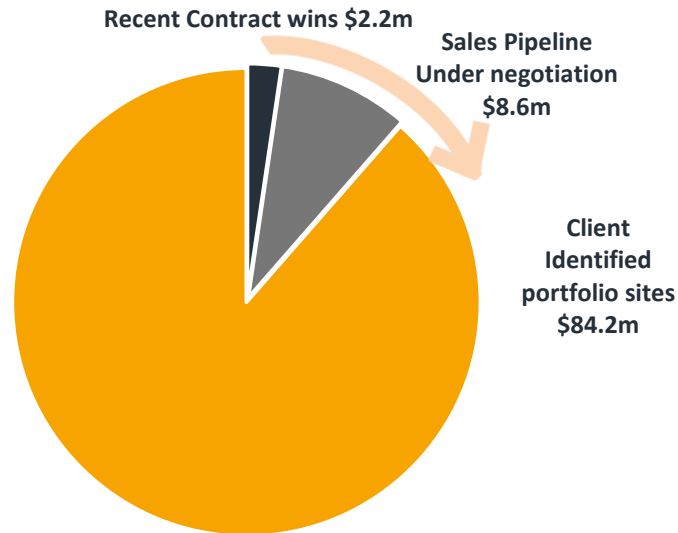
# Moving from trial to commercial roll-out

- ▶ For top six target customers of multi-site strategy, existing multiple sites for current work represents only 2.3% of those portfolio opportunities (2.3% = \$2.2m)

Secured initial system sales for multi-site customers

Secured follow up sales for additional systems with existing multi-site customers

Now in portfolio discussions with multi-site customers

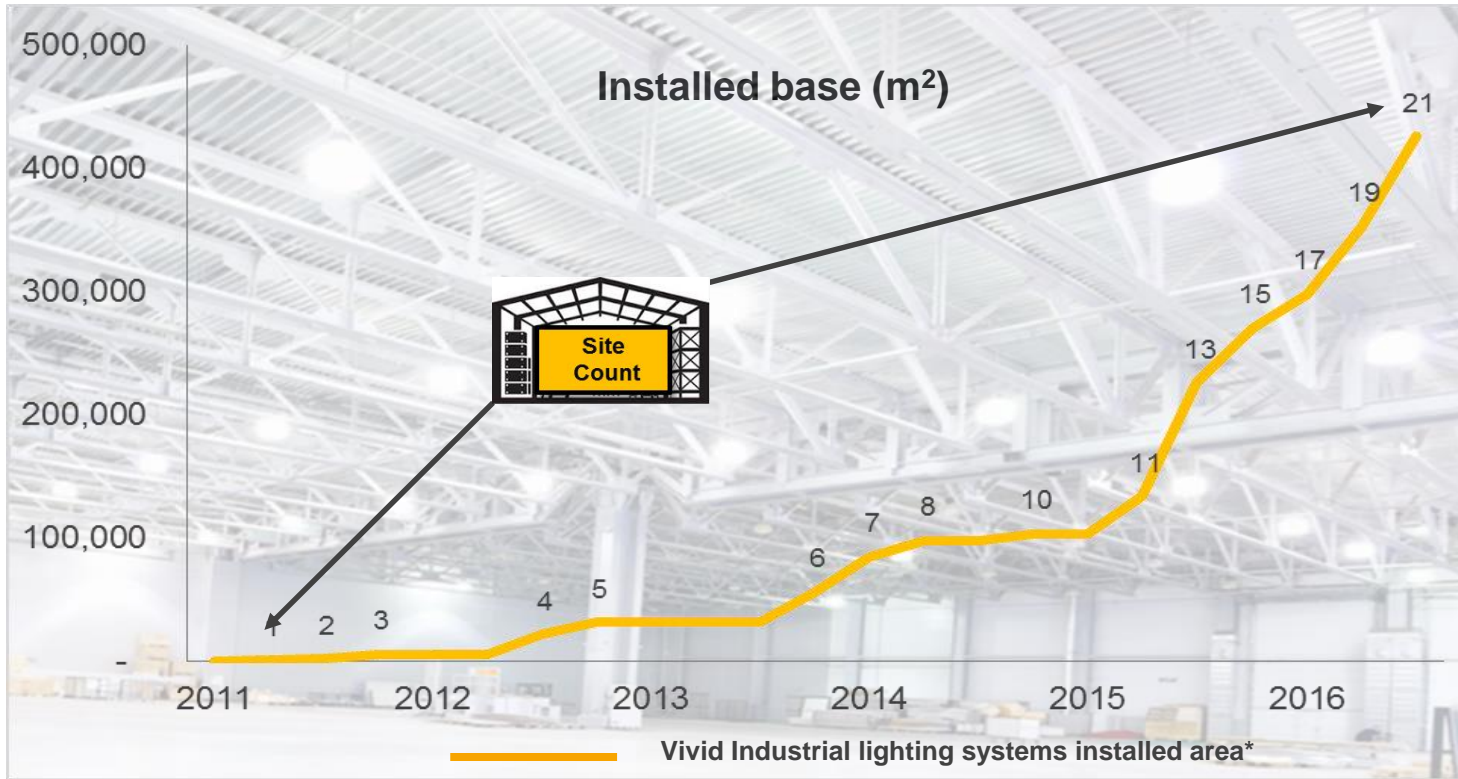


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# Lighting systems – installed area

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# Our Customers:

A combined Industrial & Commercial offering



Building	Logistics	FMCG	Distribution	Ports	Hospitality	Healthcare	Retail	Services	Education

- ▶ Targeting both landlords and tenant companies.
- ▶ A growing base of blue-chip customers who are requesting additional site upgrades across their portfolio.

- ▶ Targeting large property owners and operators, including tenants.
- ▶ Proven ability in large scale, geographically diverse infrastructure upgrades

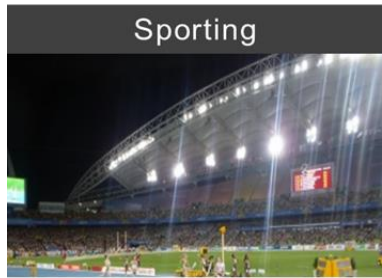
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# A combined large and growing addressable market



- ▶ Vivid Industrial provides customised intelligent & energy efficient lighting solutions to industrial, commercial & infrastructure businesses



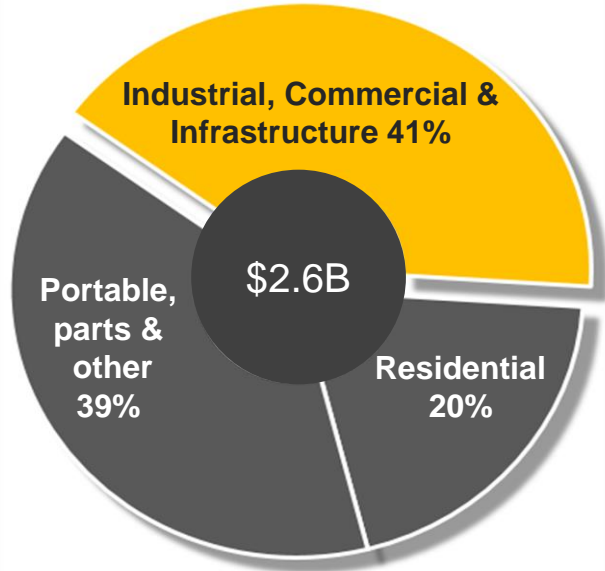
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# Australian Industrial & Commercial Lighting Market Opportunity



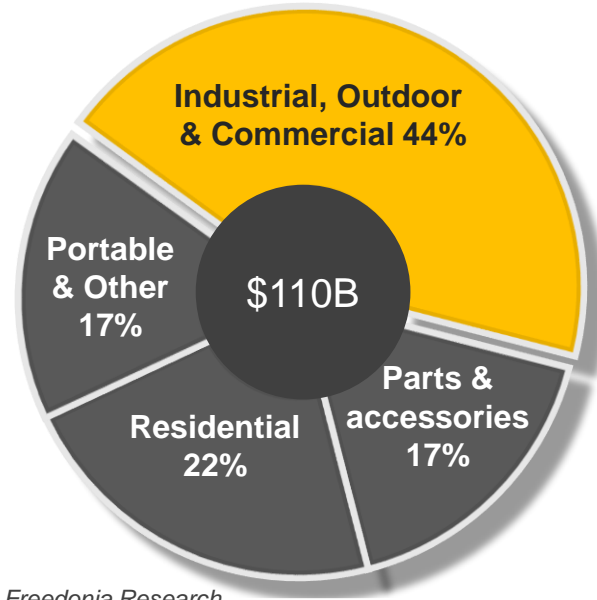
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Australian Annual Lighting Market (AU\$billion)



Source: Source McKinsey, IBIS and Comp Estimates

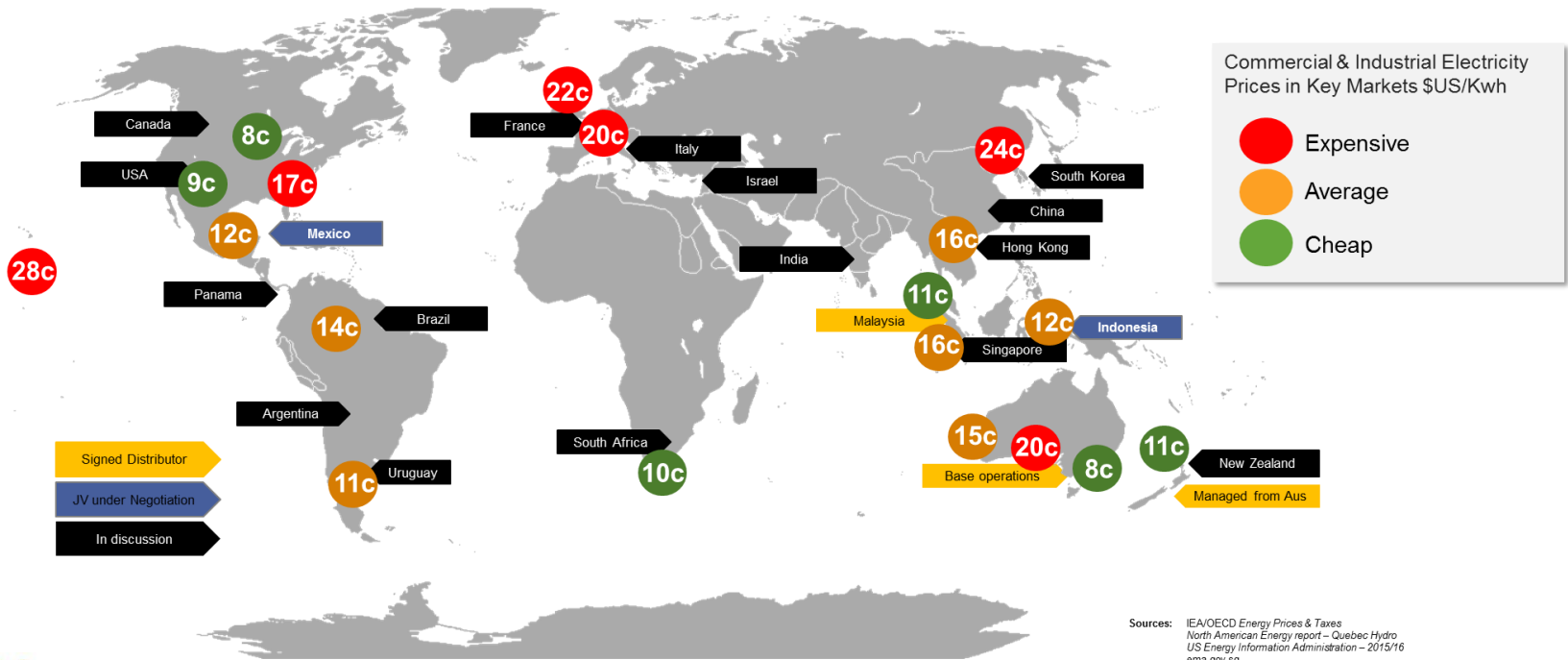
Global Lighting Market Annual Revenues (AU\$billion)



Source: Freedonia Research

# International growth opportunities

Over the last 12 months the company has signed 2 global distribution partners and 2 Joint Venture partners



Sources: IEA/OECD Energy Prices & Taxes  
 North American Energy report – Quebec Hydro  
 US Energy Information Administration – 2015/16  
 ema.gov.sg  
 Tenaga Nasional  
 mbie.govt.nz  
 en.wikipedia.org/wiki/Electricity\_pricing  
 Australian data internal company analysis

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# Illum-a-Lite Acquisition

Commercial energy efficient lighting



## Acquisition structure:

- ▶ Acquisition completed effective 31 March 2016
- ▶ Consideration based on FY16 EBIT, expected to total approximately \$3m across 2 tranches with a combination of cash and new GER shares at 8 cents per share
- ▶ Co-founder & CEO to continue in current role, with 24 month escrow on equity component of consideration
- ▶ Expected to make positive EBIT contribution to group FY16 results
- ▶ Illum-a-Lite currently delivering on its \$5+ million project order book

## Strategic rationale:

- ▶ Increases Vivid Industrial's customer count & diversifies revenue base
- ▶ Large Commercial customers include Honeywell, Newcastle Airport, Macquarie University, RMIT University, Northern NSW Local Health District
- ▶ Improving capabilities to leverage broader product offering
- ▶ Provides immediate Sydney operating footprint



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# Illum-a-Lite overview

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## COMPANY BACKGROUND

- ▶ For 20 years Illum-a-Lite has been at the forefront of lighting energy efficiency
- ▶ The company pioneered a number of new energy efficiency products and successfully took them to world markets.
- ▶ Since 2010 as LED lighting became technically and commercially viable the Company has been a leader at introducing high performing and high quality LED solutions to commercial users both business and government

## OPPORTUNITY

- ▶ Illum-a-Lite brings vast experience in commercial lighting and LED lighting upgrades that deliver outstanding returns for customers.
- ▶ Skills in project management and logistics makes the company highly efficient at delivering large scale industrial projects anywhere in the country.
- ▶ The combined client base of Illum-a-Lite and Vivid Industrial offers great opportunities to expand and deliver first rate solutions to our customers.

## EXECUTION

- ▶ Strong history of repeat business from established blue-chip client base.
- ▶ Proven capability in delivering large scale Energy Performance Contract (“EPC”) based projects.
- ▶ Developer of world leading commercially focused energy efficient lighting products and technologies

# Looking Forward



## Business & Financial

- ▶ Accelerate growth in lighting systems installed area
- ▶ Increase penetration across existing multi-site customer portfolios (current opportunity is >100x FY15 revenue)
- ▶ Leverage Ilum-a-Lite acquisition to grow and enhance customer footprint
- ▶ Roll out unique 'Save & Share' sales offering across existing and new customer base
- ▶ Rebrand listed parent in line with renewed focus
- ▶ Current growth strategy is expected to deliver significant revenue growth in FY17 on the back of strong growth in FY16

## Operating and technology

- ▶ Integration and growth of Ilum-a-Lite
- ▶ Review additional inorganic growth opportunities
- ▶ Ongoing development of technology and IP
- ▶ Build marketing presence across the region in key sectors of focus
- ▶ Grow international distribution and partnership model
- ▶ Develop multi-national deployment partners to enable rapid customer uptake and regional roll-out

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# Appendix: Case Studies

## Melbourne Ports F-Appleton Dock



## Arnett's Queensland Distribution Centre



› The left image is an example of a Matrixx element dashboard from Vivid Industrial's cloud based monitoring & control system.



Snapshot			
<b>&gt;75%</b> Energy Savings	10 years maintenance free	<b>150% increase in light levels</b>	Reduction in annual greenhouse gas emissions: 119 t CO <sub>2</sub> -e

Snapshot			
<b>&gt;80%</b> Energy Savings	Matrixx Intelligently controlled LED lighting system	<b>20% less luminaires than traditional system</b>	Reduction in annual greenhouse gas emissions: 528 t CO <sub>2</sub> -e

Both case studies are repeat customers of Vivid Industrial

# Appendix: Biographies



## ▶ Charles Macek (Chairman)

Charles joined the Board in December 2015 and was appointed Chairman in April 2016. He is currently the Chairman of Earthwatch Institute (Australia) and a Director of Vicinity Ltd. since 2011. He had a long executive career in financial services encompassing Australia, New Zealand, UK and Japan. In his non-executive career he has been a Director of Telstra (2001-09) and Wesfarmers (2001-14;) and, is a former Chairman of IOOF and of the Financial Reporting Council; and was Vice-Chairman of the IFRS Advisory Council (2009-14).

## ▶ Samuel Marks (CEO & Managing Director)

Sam is a Chartered Accountant who commenced his career with Coopers & Lybrand (PwC), followed by Arthur Andersen (now KordaMentha) in their advisory / insolvency team. Prior to founding an advisory firm in 2009, Sam completed seven years within General Electric based in Australia and the United States on executive programs.

## ▶ Robert Annells (Non-executive Director)

Robert is a former member of ASX with over forty years experience in the securities industry and is a qualified accountant. During the past seven years Mr Annells has also served as Executive Chairman of ASX listed oil and gas exploration company Lakes Oil NL, Chairman of ASX listed mining company Minotaur Exploration Limited, Non Executive Director of both Gippsland Offshore Petroleum Limited and Rum Jungle Uranium Limited, and Chairman of London based company Xtract Energy PLC

## Appendix: Biographies cont'd...



### ▶ **Leslie Butterfield (Non-executive Director)**

Leslie was CEO of McLachlan Lister, formerly a small consultancy which she joined in 2002 and grew to one of the largest private project management organisations in NSW and QLD prior to its merger in 2010 with NYSE-listed Hill International, a company with offices in over 100 countries. She initiated and oversaw this merger and integration, taking full responsibility for Hill's Australian operations as Managing Director until late 2015. Prior to this role Leslie held various roles across Australia and the United States, including a period as a Group Executive within Lend Lease Corporation.

### ▶ **John Kopcheff (Non-executive Director)**

John was appointed to the Board in July 2006 and is a geologist and geophysicist. John held the position of managing director of Victoria Petroleum N.L until late July 2010 and now holds the role of Advisor to the Board. He is also a director of Great Panther Silver Limited.

### ▶ **Philip Zajac (Non-executive Director)**

Philip was appointed to the Board in September 2014, and has over 30 years of commercial experience in the finance industry. He is currently the CFO and an executive director of the Erdi Group of companies, a director of Erdi Fuels Pty Ltd, and a non-executive director of NewCO2Fuels Ltd (Israel).



# Contact Details



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Industrial Energy Efficiency Solutions: **Intelligent, Sustainable, Profitable**

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