



Industrial Energy Efficiency Solutions: Intelligent, Sustainable, Profitable

Australian Microcap Investment Conference Presentation

ASX:GER

21st October 2015



IMPORTANT NOTICE & DISCLAIMER



Summary information - This presentation has been prepared by Greenearth Energy Limited (ACN 120 710 625) ("Greenearth or "Company"). This presentation contains summary information about Greenearth and its subsidiaries and their activities current as at the date of this presentation. The information in this presentation is a general background and does not purport to be complete. It should be read in conjunction with Greenearth's other periodic and continuous disclosure announcements lodged with ASX, which are available at www.asx.com.au.

Not financial product advice - This presentation is for information purposes only and is not a prospectus, product disclosure statement or other offer document under Australian law or the law of any other jurisdiction. This presentation is not financial product or investment advice, a recommendation to acquire Greenearth securities or accounting, legal or tax advice. It has been prepared without taking into account the objectives, financial or tax situation or needs of individuals. Before making an investment decision, prospective investors should consider the appropriateness of the information having regard to their own objectives, financial and tax situation and needs and seek legal and taxation advice appropriate to their jurisdiction. Greenearth is not licensed to provide financial product advice in respect of Greenearth securities. Cooling off rights do not apply to the acquisition of Greenearth securities.

Past performance - Past performance information given in this presentation is given for illustrative purposes only and should not be relied upon as (and is not) an indication of Greenearth's views on its future financial performance or condition. Investors should note that past performance, including past share price performance, of Greenearth cannot be relied upon as an indicator of (and provides no guidance as to) future Greenearth performance including future share price performance. Future performance - This presentation contains certain "forward-looking statements". The words "expect", "anticipate", "estimate", "intend", "believe", "guidance", "should", "could", "may", "will", "predict", "plan" and other similar expressions are intended to identify forward-looking statements. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements, including projections, guidance on future earnings and estimates, are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. The forward-looking statements in this presentation speak only as of the date of this presentation. Subject to any continuing obligations under applicable law or any relevant ASX listing rules, Greenearth disclaims any obligation or undertaking to provide any updates or revisions to any forward-looking statements in this presentation to reflect any change therein. This presentation contains such statements that are subject to various risk factors. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially. No representation, warranty or assurance (express or implied) is given or made in relation to any forward-looking statement by any person including Greenearth. In particular, no representation, warranty or assurance (express or implied) is given that the occurrence of the events expressed or implied in any forward-looking statements in this presentation will actually occur.

Investment risk - An investment in Greenearth securities is subject to investment and other known and unknown risks, some of which are beyond the control of Greenearth, including possible delays in repayment and loss of income and principal invested. Greenearth does not guarantee any particular rate of return or the performance of Greenearth, nor does it guarantee the repayment of capital from Greenearth or any particular tax treatment. Persons should have regard to the risks outlined in this presentation.

Not an offer - This presentation is not and should not be considered an offer or an invitation to acquire Greenearth securities or any other financial products and does not and will not form any part of any contract for the acquisition of Greenearth securities. By accepting this presentation you represent and warrant that you are entitled to receive such presentation in accordance with the above restrictions and agree to be bound by the limitations contained herein.

CORPORATE OVERVIEW



Capital Structure

Ordinary shares on issue (m)	247.0
Unlisted options (m)	32.2
Last close (\$)	0.085 ¹
Market capitalisation (\$m)	21.0

Major Shareholders

	% issued capital
--	------------------

Advance Publicity Pty Ltd	7.0
Hub and Spokes Pty Ltd	6.8
Erdi Fuels Pty Ltd	6.7
Lakes Oil N L	5.6
Top 20	53.6

Board & Key Executives

Robert Annells
Chairman

John Kopcheff
Non Executive Director

Samuel Marks
Managing Director

Philip Zajac
Non Executive Director

Robert Smith
CFO & Company Secretary

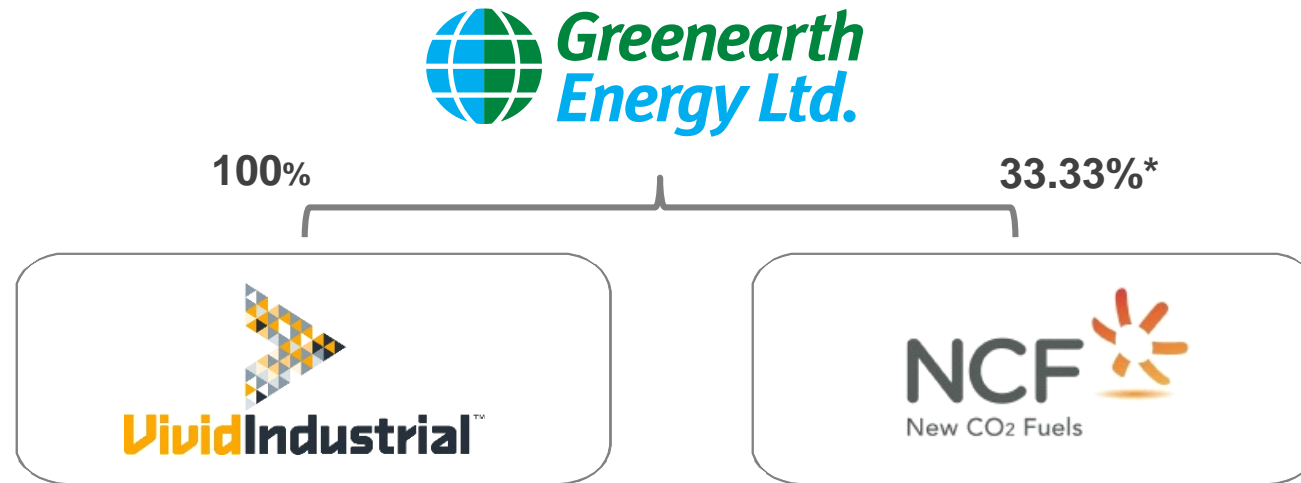
Urbain du Plessis
Chief Operating Officer

¹ as at 19th October 2015

Executive Summary



Greenearth Energy - founded in 2006; a clean-technology and renewable energy company with interests in:



Vivid Industrial

- The Internet of Lights, world leading technology.
- Industrial technology, fast growing opportunity pipeline & accelerating revenue growth

NewCO2Fuels

- Independently validated & globally awarded technology.
- Recognised global game changer now in the commercialisation phase

* GER commenced 33.33% investment in NCF with balance to be completed October 2015

VALUE PROPOSITION

Two world leading energy efficiency technology businesses...



- Our proprietary IP and products are providing innovative, intelligent, cloud based lighting solutions to the Industrial and Commercial market segment in Australia and globally
- Our value proposition is the delivery of world leading energy savings to our clients of 80%+
- Our technology is being deployed with key blue chip customers globally
- Technology enabling the development of “Lighting-As-A-Service” a high margin annuity revenue model
- Accelerating customer adoption and building pipeline of sales opportunities



- Greenearth Energy has a 33.33% investment in NewCO2Fuels
- NewCO2Fuels uses extreme heat to convert carbon dioxide and water into synthetic gas which is converted into fuel, chemicals or used to generate electricity with a world leading efficiency rate 40%+
- Technology will achieve significant financial and environmental benefits for customers
- \$1.1 trillion market opportunity of both heat and solar-based options, saving over 1 billion tonnes of CO₂ emissions

MANAGEMENT TEAM



Samuel Marks

Managing Director

- Coopers & Lybrand (PwC) in the Middle Market team, followed by Arthur Andersen (now KordaMentha) in their advisory / insolvency team.
- Prior to founding an advisory firm in 2009, Mr Marks completed 7 years within General Electric based in Australia and the United States.
- Experience includes strategy reviews, acquisitions, integrations, re-structures and divestments ranging in enterprise value from \$1 million to \$3 billion.
- Chartered Accountant, Bachelor of Business (Distinction), Six Sigma qualified GE.



Robert Smith

Chief Financial Officer

- Senior finance professional with a diverse skill set gained from financial and advisory roles.
- Experience across industries and sectors, including funds management, energy, private equity, commodities, manufacturing, imports, wholesale, logistics and franchising.
- Corporate finance and mergers/acquisitions experience encompassing acquisitions, integrations, restructures and divestments.
- CA / Grad. Dip. CA (ICAA), B. Bus (Acc)



Urbain du Plessis

Chief Operating Officer

Vivid Industrial

- Created the non-automotive lighting division for the Hella Group; initially focussed on the mining industry, later expanded into airport lighting, as well as roadway and general industrial applications.
- Developed a web delivered global visualisation business - sold to NVIDIA.
- Designed and commissioned lighting for several Olympic venues and over 1,000 lighting products for Zumtobel, Thorn, Staff, Erco, Sill, Hella.



Samuel Redmond

Head of Business Development

Vivid Industrial & NewCO2 Fuels

- 13+ years of technical, commercial and advisory experience, technical and technological solutions in aerospace sector including Airbus, Boeing, Lockheed Martin and Northrop Grumman.
- Founded Engineers Without Borders Australia.
- Principle of a Melbourne based firm producing policy for State Government and COAG as well as developing strategy for business and NGO clients.
- Graduate of a double degree in Aerospace Engineering and Business



Shane Lewis

General Manager - Sales

Vivid Industrial

- 18 years business unit management experience based in Australia, Asia Pacific and the UK, in Electronic Monitoring and Control Systems, Capital Equipment and Engineering Services.
- 2011, established a consulting firm whose major clients included Honeywell, with focus on the US market in product innovation and commercialization.
- B.Bus, double major Mkt (Distinction).



Industrial lighting solutions the internet of lights



Customised, Intelligent, Cloud Based Energy Efficient Lighting & Monitoring Systems

INDUSTRIAL LIGHTING SEGMENT

Vivid Industrial provides customised intelligent & energy efficient lighting solutions to industrial & infrastructure businesses

Retail 'large format'



Logistics & Cold Storage



External Lighting



Port, Road, Rail



Sporting



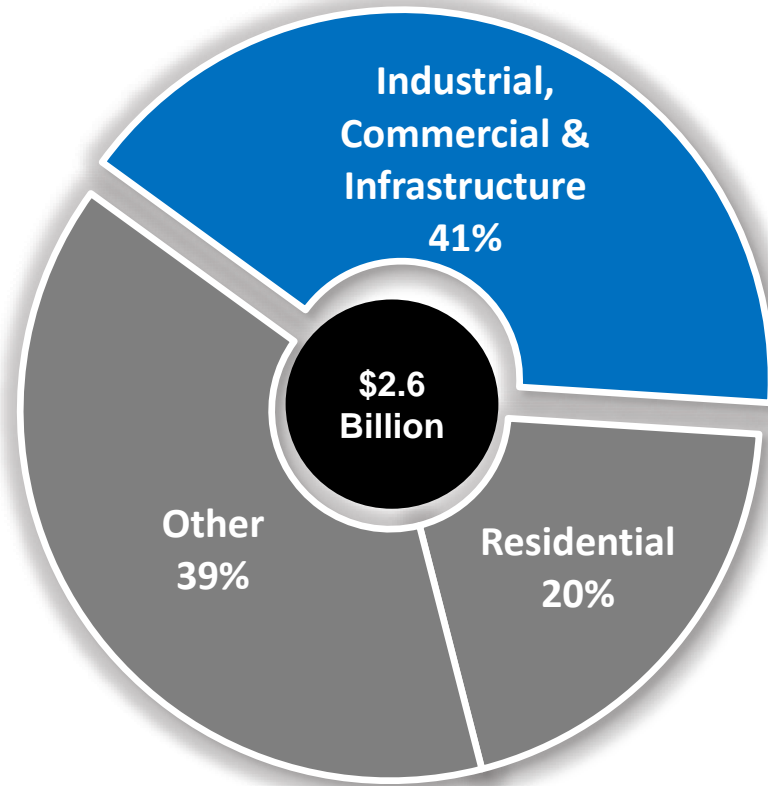
Mining



INDUSTRIAL LIGHTING MARKET OPPORTUNITY

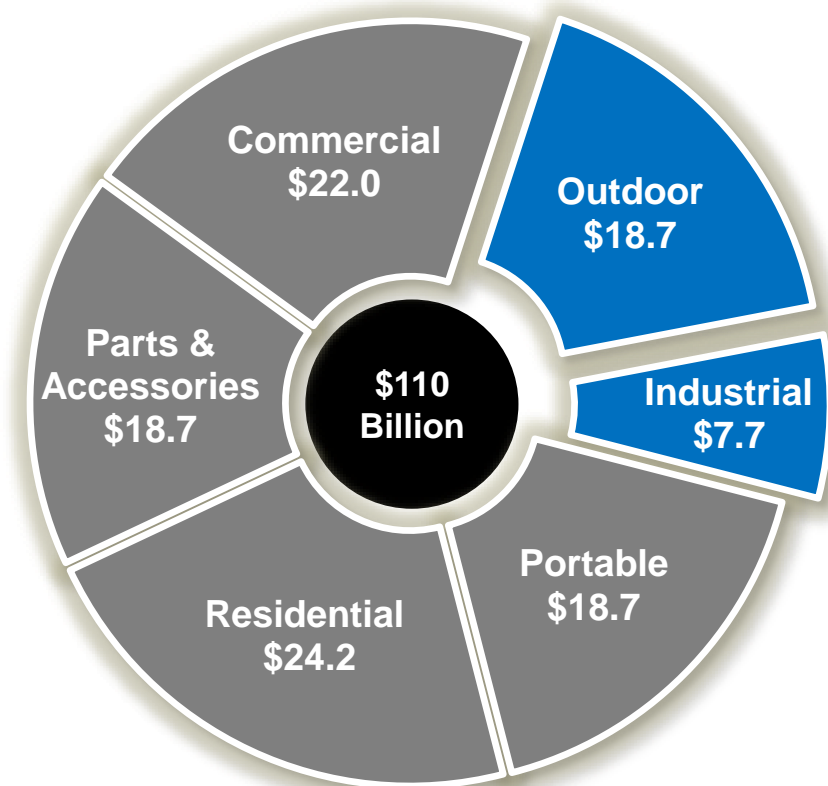
Very large and addressable market

Australian Annual Lighting Market (AU\$billion)



Source: Source McKinsey, IBIS and Comp Estimates

Global Lighting Market Annual Revenues (AU\$billion)



Source: Freedonia Research

MARKET & INDUSTRY DRIVERS



Technology

- Internet of Things
- Smart Lighting / Grid



Energy

- Energy Costs / Security / Volatility
- Efficiency / Corporate Profitability



Environment

- Sustainability
- Corporate Branding



Regulation

- Stricter Regulation / Standards
- Fines / Governance



Population

- Growing Population
- Changing Demographics



Logistics

- Global Trade / Parcels
- Connectedness / Internet

OUR PRODUCT & SERVICE MODEL IS WORLD LEADING



Technology & Service

**Innovative Proprietary Energy
Efficient Lighting Systems**

“Plug and Play”



Monitoring & Control

Cloud based analytics



Cost Benefits

**80%+ energy + cost savings to
customers**



.....WITH A BROAD RANGE OF INTELLIGENT INDUSTRIAL LIGHTING TECHNOLOGIES

Office



Industrial

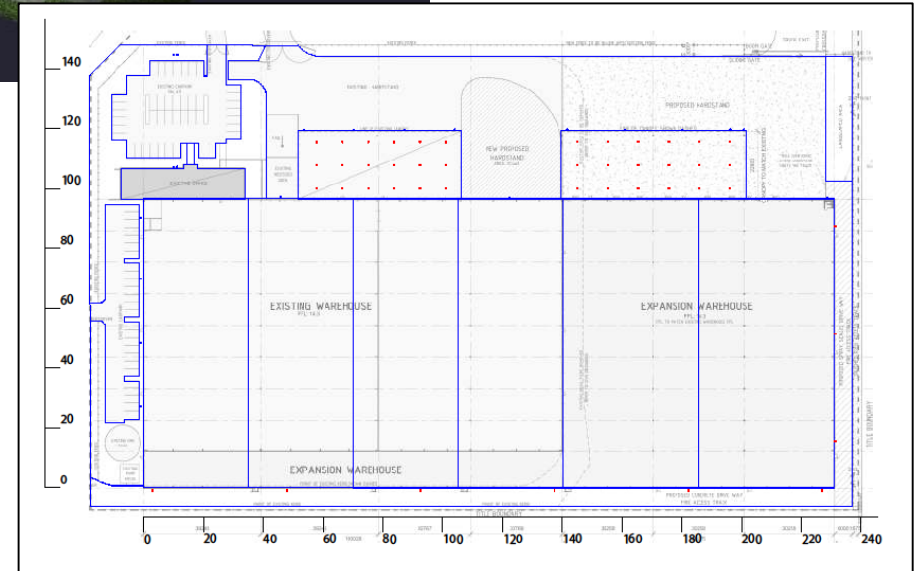
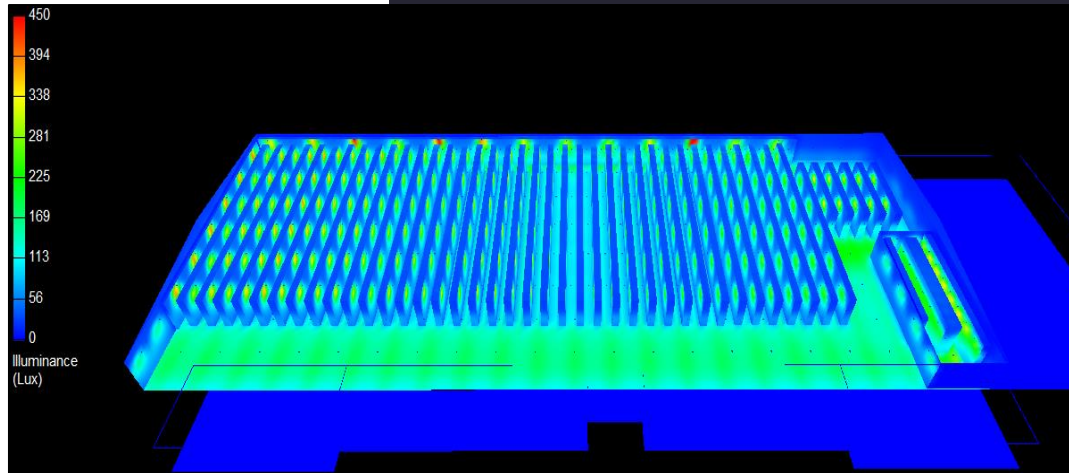
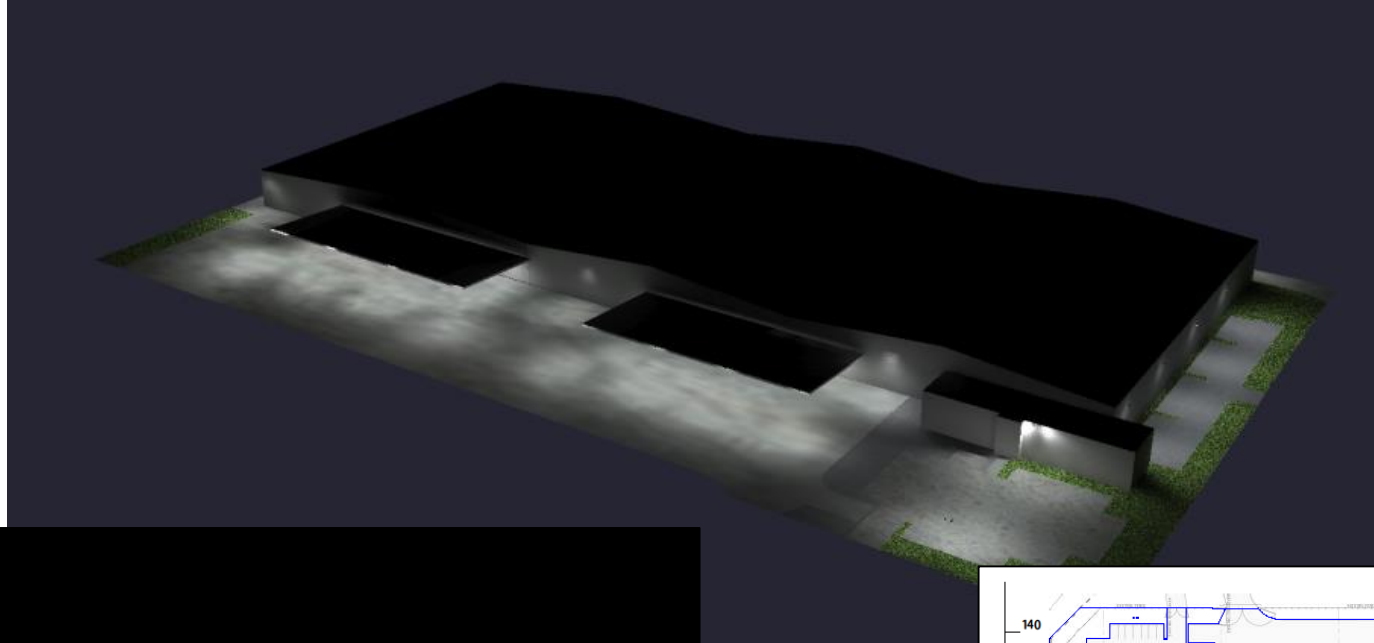


Infrastructure



A sample of Vivid Industrials Lighting technologies
(In-house designed & Australian Manufactured & distributed for global technology partners)

....TO PROVIDE WHOLE OF SITE SOLUTIONS



....AND WHOLE OF SITE MONITORING TECHNOLOGIES

Quick and effective state of the art technology supporting an ongoing service

1 Snap



- Easy install
- Wireless
- No disruption
- No maintenance
- Unlimited scale

2 Connect



- Plug & Play
- Cellular or WiFi

3 Set Up



- Role definition
- Executive reports and alerts
- Set goals
- Measure benchmarks

4 Start Saving



- Scheduled reports
- Real time alerts
- Online analytics
- Manage chain-wide

Recent installation of a 22,000sqm Distribution Centre completed in under 1 hour

OUR RESULTS SPEAK FOR THEMSELVES

Example: Vivid Industrial system delivered >6 times more light with <25% of the prior energy usage

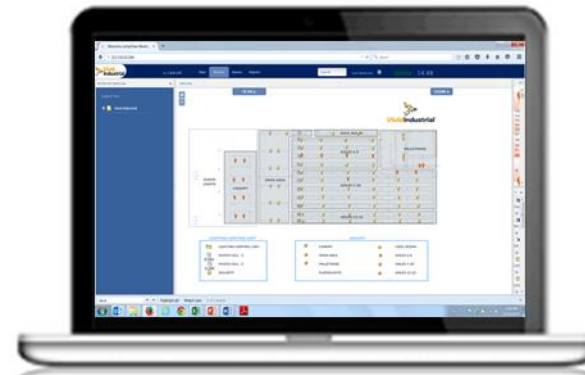


Existing Lighting	
Metal Halide highbay (1760W)	
Average:	20(lux)
Ave operating load:	1.8kW



Vivid Industrial installation	
Matrixx System (850W)	
Average	426(lux)
Average operating load:	0.39kw

Delivering customer interface,
monitoring & reporting
capabilities



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

CASE STUDIES

Proven and validated, with repeat blue-chip customers...



Melbourne Ports F-Appleton Dock

- **> 75% Energy Savings**
- **10 Years Maintenance Free**
- **Increased light levels by > 150%**
- **Reduced spill light into local housing**



>75%
Energy Savings

Luminaire
400w LED Floodlight
800w LED Floodlight

Annual kWh Saved
91,600 kWh;s

Annual CO₂ Saved
119 Tonnes

Total Greenhouse Savings >75%



Linfox QLD Distribution Centre

- **Reduced lighting energy consumption by > 80%**
- **Zero scheduled maintenance for 10 years**
- **Complied with Australian Standards and OH&S lighting requirements**
- **Reduced quantity of light fittings & associated installation costs**



>80%
Energy Savings

Luminaire
Vivid Industrial Matrixx intelligent lighting system

Annual kWh Saved
556,041 kWh's

Annual CO₂ Saved
528,239 Tonnes

Total Greenhouse Savings 80%

RECENT SUCCESS



Continued delivery of significant operating milestones



FY15

- Commercialisation & delivery of new Vivid Industrial product range (Matrixx system)
- New customer verticals (e.g. port lighting & automotive retailing)
- Significant growth in revenue opportunity pipeline
- Establishment of initial overseas distribution partners in key territories
- Customer validation of Vivid Industrials world leading energy and cost savings
- Rolling out complimentary new energy measurement & data tools to customers (recurring revenue)

ONGOING CUSTOMER ADOPTION



During CY15, multiple customer field trials of Vivid Industrials technologies took place, below is a summary of some of the customers and their results:

Company	Results
A ASX top 10	→ July 2015; completed Sep'15; >75% energy saving, #1 of 3
B ASX top 10	→ July 2015; ongoing; Established ~90% savings; final 3 in live trial
C Forbes 100	→ Letter of Intent secured. Site analysis completed on >5 of 165 sites across ANZ
D Forbes 250	→ August 2015; ">6 times the light, <25% of the energy used"
	→ First two installations completed June 2015; 150% increase in light, >75% energy saving
	→ Won competitive trial. Retrofit installation completed September 2015; >80% saving

GROWING CUSTOMER BASE

Adoption of our solutions with repeat customers & a growing blue chip customer base:

Building



Logistics



FMCG



Services



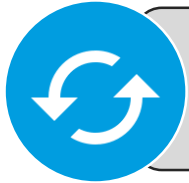
Ports



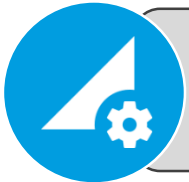
REVENUE DEVELOPMENT

Existing and developing revenue sources

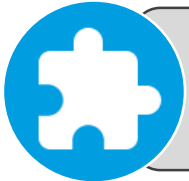
Revenues



Installation Sales

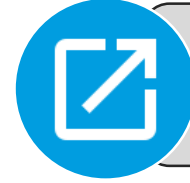


Servicing

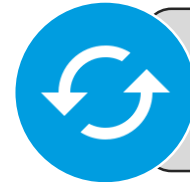


Monitoring & Reporting

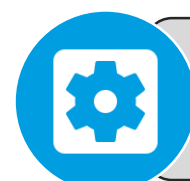
Revenue Accelerators



Financing



Lighting as a Service
(incl. maintenance contracts)



Data & Analytics

INTERNATIONAL COMPARABLES



	Hubbell	Acuity Brands	Digital Lumens	Enlightened	Dialight
Ticker	HUB-A (NYSE)	AYI (NYSE)	Private	Private	DIA (LSE)
Summary	<ul style="list-style-type: none"> - Designs, manufactures, and sells electrical and electronic products in the United States and internationally. It operates through two segments, Electrical and Power. - Headquartered in Shelton, CT. 	<ul style="list-style-type: none"> - Designs, produces, and distributes lighting solutions, components, and services for commercial, institutional, industrial, infrastructure, and residential applications. - Headquartered in Atlanta, GA. 	<ul style="list-style-type: none"> - Developing and implementing next-generation LED lighting solutions, combining LEDs, networking, and software into a single, integrated. - Headquartered in Boston, MA. 	<ul style="list-style-type: none"> - Sensor and analytics platform, provides smart energy solutions for commercial environments. - Headquartered in Sunnyvale CA 	<ul style="list-style-type: none"> -Dialight is a world leader in applied LED technology for industrial, commercial and hazardous areas and no.1 in traffic lights. - Dialight plc is headquartered in the UK.
Products	Electrical Systems, lighting, power systems.	Indoor and outdoor lighting, stand-alone lighting controls for component-based systems, wall dimmers and timers, and systems for controlling large areas.	Intelligent high bay and linear LED alternatives, high-performance fixtures, digital light agents for commercial and industrial environments and intelligent lighting systems.	Digital sensors, room lighting controls, lighting/energy control systems.	LED lighting (for hazardous areas and industrial areas), obstruction signals.
Markets	North America, South America, Europe.	North America, and in Europe and Asia.	North America, Europe and Asia.	North America, Europe and Asia.	North America, Europe and Asia, Middle East.
Valuation	AU\$7.7B	AU\$12.0B	Q4 CY14 - US\$23m Private Round	Q3 CY14 - US\$20m Private Round	AU\$473.91M

LOOKING FORWARD



Accelerate customer wins and installations

FY16

- Accelerate growth of market share and revenue contribution
- Conversion & execution of the current pipeline with new dedicated sales & marketing staff
- Capitalising on initial installed sites with our blue-chip “multi-site” customers; executing into their wider portfolios
- Support revenue contributions from distribution partners (domestic and foreign)
- Roll-out of recurring revenue opportunities

Producing Fuels from CO₂ Using Heat as the Energy Source



Industrial scale production of fuels from CO₂, using heat as the energy source

OVERVIEW

Production of fuels from carbon dioxide & water, using heat as the energy source

Technology Overview

- Commercialising a process for efficiently producing synthesis gas 'syngas' from carbon dioxide (CO₂) and water using high temperature CO₂ dissociation technology.
- New CO₂ Fuels (NCF), internationally award winning company - include World Technology Network winner – Energy Sector, 2014, Australian, USA and Israeli government awards and recognition
- NCF exploits the confluence of 3 global trends in uncertain energy prices, diminishing petroleum oil reserves and international recognition of the alarming increase in CO₂ emissions. Our process remains profitable at low oil prices.
- The NCF technology provides a commercially attractive industrial solution for alternative source of gaseous and liquid fuels and valuable chemicals.



Ownership Structure

- In June 2014, Greenearth Energy Ltd (Greenearth) negotiated an option to acquire up to 33 percent of NewCO₂Fuels Israel (NCF) for up to US\$3m. The investment is subject to partial claw-back should less than USD\$3m be ultimately invested by Greenearth, with the maximum possible clawback resulting in an ownership of 24%. Completing the full 33.33% would require an additional US\$800k from Greenearth.
- On completion of the investment, our co-investor, Erdi Fuels Pty Ltd of Australia (Erdi Fuels) and Greenearth will be equal shareholders in NCF at 33.33 percent each and the remaining percentage of NCF Shares will continue to be held by founders, current staff and Yeda Research & Development Co. Ltd. (Yeda), based at the Weizmann Institute in Israel. Erdi Fuels and Greenearth intend to combine their respective 33.33% holdings into a single 66.67% holding (with the investment entity to be owned 50/50 by Greenearth and Erdi Fuels). This will enable future growth opportunities in Australia and overseas.
- Technology supported by The Weizmann Institute of Science in Israel, one of the worlds preeminent research institutes, with unparalleled track record in commercialization of its intellectual property. Ongoing R&D provided by an experienced team of Weizmann's scientists and PHD students under a technology license agreement with NCF.

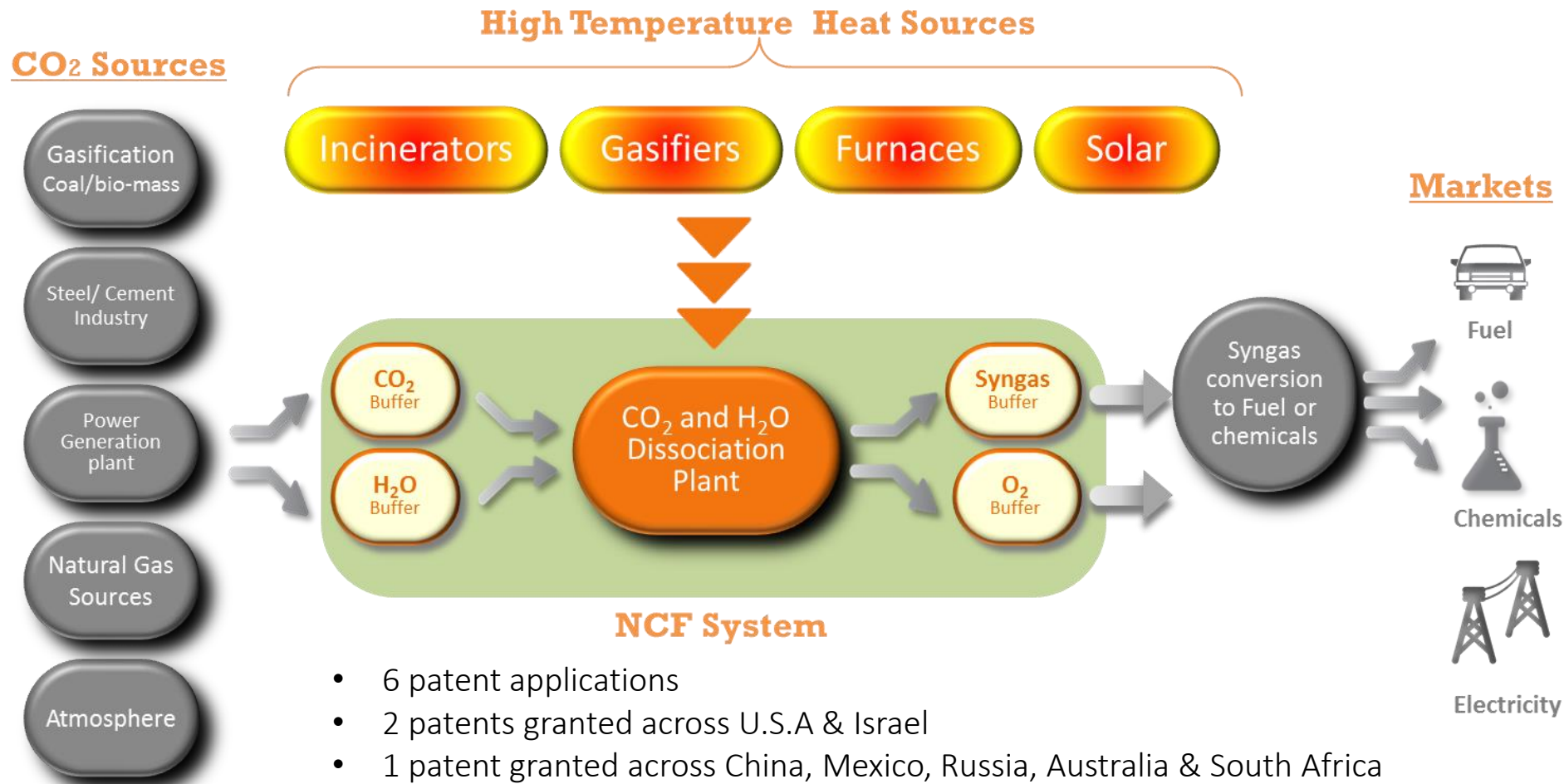
Technology	NCF uses high temperature heat sources, (e.g. solar concentrators, excess heat from from gasifiers/furnaces), to efficiently dissociate CO ₂ and H ₂ O into two separate streams; Syngas (a mixture of H ₂ and CO) and Oxygen.
Product	A modular plant, comprising a cluster of basic reaction units that are bundled together to accommodate the specific heat source and CO ₂ availability, gas conditioning, heat collection devices and power generation.
Conversion Efficiency	Proven a 40% conversion efficiency from the energy of the heat source to the chemical energy in the Syngas. This is the highest efficiency known compared to alternative technologies globally, ensuring low production cost and high profitability. Global Engineering Consulting firms, Technip & Worley Parsons, have both independently reviewed and verified this performance.
The End Product	Industrial scale plants will be sold, comprising multiple NCF reactors. The customer will have the flexibility to configure the end product, produced from the Syngas, using available proven technologies.

What is Syngas: Syngas is a precursor of almost any hydrocarbon. Syngas was chosen as the prime product of the system to provide maximum flexibility to the user, alleviate the possible threat of being tied to a specific end product and to maximise the customer base. Syngas is converted into valuable fuels & chemicals in the market including; gasoline, DME, methanol, synthetic natural gas and a large variety of chemicals & fertilizers.



TECHNOLOGY FLOWSHEET

A modular system, engineered for efficient deployment



- 6 patent applications
- 2 patents granted across U.S.A & Israel
- 1 patent granted across China, Mexico, Russia, Australia & South Africa
- 28 pending applications
- Broad in-house know-how



NCF COMMERCIALISATION

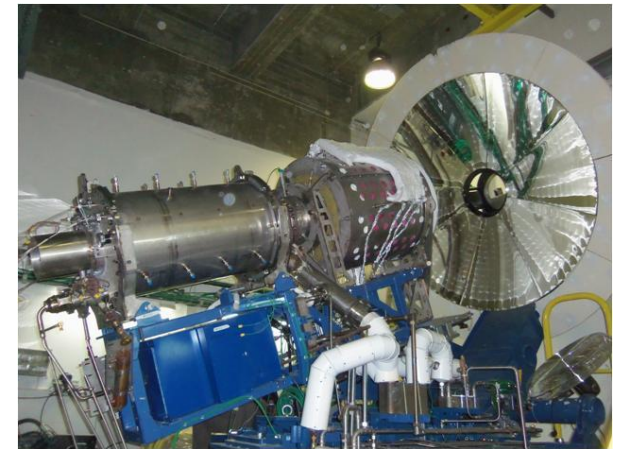
- Currently developing pilot plants and paths to commercialisation on a global scale via:
 1. a 100% renewable solar model utilising a solar tracking unit to convert the CO₂; and
 2. an excess heat model utilising excess heat from industry which will be extracted and convert the CO₂.
- NCF revenues will be derived from reactor sales, system design, control and integration into other system components required for the complete CO₂ to Syngas process. Additional revenue will also be derived from maintenance, servicing and supply and sale of spare parts



NCF reactor unit design



NCF Pilot Facility design



Solar Reactor during Field trials on Level 5 of the Solar Tower - Weizmann Institute, Israel



GLOBAL RECOGNITION

- Awarded the World Technology Network Energy award in New York, joining past winners including, Tesla Motors, Amazon, Apple, Dow Chemical Company, Facebook, Google, IBM, Qualcomm, Skype, Tesla Motors, Toyota, YouTube & The Weizmann Institute of Science.
- Nominated for 2015 WTN Award (Energy sector)
- Awarded a US\$1m BIRD (Bi-national Industrial Research & Development) Foundation Energy program grant by USA and Israeli Governments in partnership with NCF USA technology supplier (Acumentrics).
- Australian Government's Bureau of Resources and Energy Economics (BREE) included NCF as part of their analysis of liquid transport fuels
- United States Department of Energy announced the funding of a collaborative project between Alstom, NCF and the Illinois Clean Coal Institute to develop a concept for the conversion of coal to high-hydrogen syngas for power generation and liquid fuel production
- **WorleyParsons** interim technology assessment in Q4'13 / **Technip** verified and complemented NCFs technology and team in Q4'14



**Australian Liquid Fuels
Technology Assessment 2014**



ALSTOM



LOOKING FORWARD

FY16

- Ongoing design and development of large scale pilot facility already under MOU
- Development of additional pilot plant(s) in USA, EMEA and APAC
- NCF business development focused at future global partners and paths to commercialisation
- Greenearth to maintain its 33% interest in NCF & improve ownership structure to maximise shareholder value



SUMMARY



- Clean-technology & renewable energy company reducing emissions, delivering profits
- Australian listed holding company for Vivid Industrial (100% owned) and NewCO2Fuels (33%* investment)



- The Internet of Lights, world leading technology
- An industrial technology, fast growing opportunity pipeline & accelerating revenue growth



- Independently validated & globally awarded technology
- Recognised global game changer on the cusp of commercialisation

* GER commenced 33.33% investment in NCF with balance to be completed October 2015

CONTACT

Australian Microcap Investment Conference Presentation



Industrial Energy Efficiency Solutions: Intelligent, Sustainable, Profitable

Samuel Marks

Managing Director

samuel.marks@greenearthenergy.com.au

+61-3-9620-7299

