

First Growth Funds Limited ASX CODE FGF | ABN 34 006 648 835

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September 4<sup>th</sup> 2017

### **COMPANY UPDATE**

First Growth Funds (FGF) is pleased to provide the following update.

Management have been very actively recently reviewing possible transactions for FGF. The board has actively reviewed several deals in the emerging markets of *blockchain technology*, conversion of *energy to currency* and the use of *crypto currencies* to fund these initiatives. Furthermore, we are reviewing possible transactions in traditional sectors of technology and resources.

Management has recently been selling down the listed portfolio of stocks to ensure we are cash ready if we find a suitable transaction.

The two larger private investments are moving closer to a liquidity event and these are described below.

#### **Pearl Global**

Pearl global is the first and only entity in Australia to be approved by the Environmental Protections Act (EPA) to commercially process ELT's (End of Life Tyres) into fuels, char and steel.

FGF is a convertible note holder in Pearl Global.

Pearl Global is currently marketing an IPO at 20c that closes on the 8<sup>th</sup> September. FGF invested \$350,000 which will convert to shares upon successful ASX listing approval at 16c.

#### **Cloud Lumen**

Cloud Lumen is a next generation lighting and sensor network company with a mission to be the global leader in the IoT connected commercial LED lighting industry. They are capitalising on the conversion cycle from both traditional lighting to LED lighting and from LED lighting to Connected Lighting Networks (IoT).

Cloud Lumen are in Australia this week road showing their business with a view to progressing an ASX listing 1<sup>st</sup> Qtr 2018. The Cloud Lumen investor presentation follows this release.

FGF made an investment of \$350,000 by way of convertible note. Upon successful listing of Cloud Lumen FGF will own approximately 18.5% of the company.

By Order of the Board



# CloudLumen

Investor Presentation 2017

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# Who is Cloud Lumen & What do we do?

Cloud Lumen is a next generation lighting and sensor network company with a mission to be the global leader in the Internet of Things (IoT) connected commercial LED lighting industry. We are doing this by capitalizing on the conversion cycle from both traditional lighting to LED lighting and from LED lighting to Connected Lighting Networks (IoT)

Cloud Lumen was born out of a partnership between two companies



Innovative and proprietary outdoor commercial IoT networking company



Energy efficient, customizable and complimentary LED lighting fixture technology



# Investor Highlights

### **Proprietary Technology**

All technology is 100% proprietary owned and developed in house

#### **End-to-end solution**

Manufacturing all the way to data analytics

#### First Mover to market

First to deliver reliable industrial IoT network based on FOG Computing

### Large addressable market

Total addressable market of US\$780bn

### **Blue-Chip clients**

Large multinational clients in place with secure contracts

### Strong revenue growth

Strong revenue and fast growth in Smart projects

### **Strong Management Team**

Management and sales history at Philips, Soraa, Cooledge and Sansi

### **Full compatibility**

Build to form synergies with all types of commercial and industrial lighting and control devices

### **Industry positioned for Growth**

Commercial LED is positioned for growth due to the integration of IoT

### **Proven business history**

Sales history of 3+ years and recognized as the industry leaders in recent tradeshow

### **Founder funded company**

Board and management structure is setup for success

### System as a Service

SaaS recurring revenue model ensures predictable cashflow for future operations



# The Management Team

### Yan Zhang, PhD CEO & Executive Director

15+ years experience in product development, operation and sales channel growth in LED markets. Yan was a key engineer & manager in leading LED vendors including; Philips, Soraa, Cooledge and Sansi. Yan is a proven entrepreneur who has built a series of profitable businesses in short time frames.

### Wayne Lloyd, CFA CFO & Executive Director

5+ years experience in startup business and strategy. Wayne previously worked as a fund manager and has developed a proven track record for adding value thru developing investment strategies at YTG Capital Management.

#### Gernot Abl Non-Executive Director

Gernot brings the necessary experience in managing an ASX listed company. After the completion of his law degree Gernot worked in management consulting at Deloitte and now boasts 15+ years experience in the legal and corporate finance industries

### Nigel Batters Chairman

Nigel is an Assurance and Advisory Partner in a large National Accounting Firm and is a Chartered Accountant. Nigel brings 20+ years of experience across advisory, assurance and risk management, including extensive experience working with Ernst & Young globally. Most recently he has worked with several growth organisations as they transition from private companies to listing on the ASX in addition to working with other traditional lighting providers in Australia, USA and Asia and technology based organisations on the ASX.



# Global Smart Cities in 2025

More than 25 global cities will be smart cities by 2025, of which more than 50% will be from North America and Europe. These cities are expected to be:

### **North America**

New York
Boston
Toronto
Seattle
San Francisco
Los Angeles
San Diego

## Europe

Oslo
Glasgow
London
Paris
Barcelona
Luxembourg
Vienna
Berlin
Helsinki
Stockholm

## **Asia-Pacific**

Delhi
Chengdu
Wuhan
Tianjin
Seoul
Shenzhen
Singapore
Jakarta
Sydney



# Market Opportunity – The IoT Smart City

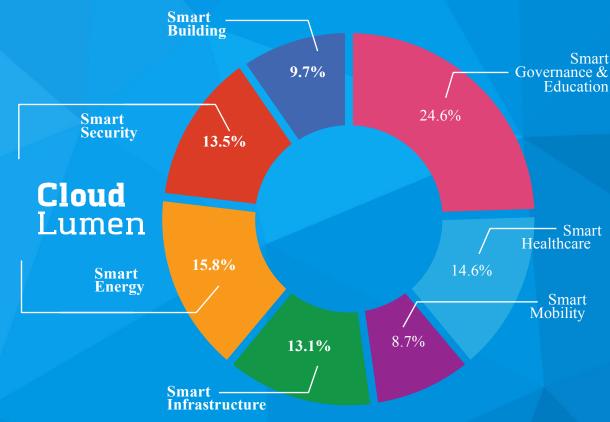
Smart cities are cities built on *Smart* and *Intelligent* solutions and technology that will lead to the adoption of at least 5 of the 8 following parameters – **smart energy, smart building, smart mobility, smart healthcare, smart infrastructure, smart technology, smart governance and smart education** 

\$1.5tn

Anticipated **Smart City** total addressable market size by 2020

\$780bn

Cloud Lumen IoT opportunity across smart building, security, energy and infrastructure





# Commercial LED Market Size

The market is on a clear transition path from traditional lighting technologies to LED lighting as regulation across the globe has become more stringent, fueling the penetration of more energy efficient light sources such as LED's. Mckinsey's Global Lighting Market Model calculates the LED share in general lighting at 45% in 2016 and almost 70% in 2020



# 1 solution 1000+ LED manufactures face

Commercial LED companies have fallen badly behind the technology curve because they have not made IoT a core part of their strategy. The speed of market uptake is moving faster than LED companies can achieve scale and natural consolidation. Our products plug small-to-medium manufacturers directly into the smart city boom while integrating their existing product lines.



- Provide IoT to all LED lighting manufacturers
- Big data analytics solution by Cloud Lumen with revenue sharing
- Additional services can be added to the network
- Focus on continuously providing leading edge IoT solutions
- Leverage extensive sales channel and overseas supply network to create efficiencies



# First Generation – Smart Municipal Lighting

A complete lighting control solution that deploys in minutes. MeshSmart networking products provide robust, secure, real time connectivity out of the box. Our MeshSmart node attaches to an LED and connects to the gateway with instant compatibility to the management application

### MeshSmart Node



Measures the input of power of the unit and controls the light output and colour

### MeshSmart Gateway



Communicates with over 500 control nodes wirelessly via proprietary secured network

# Connectivity

- ✓ NB-IoT
- ✓ Lora
- ✓ Zigbee
- ✓ Wi-Fi
- **✓** Bluetooth
- ✓ Z-Wave



# Second Generation – Decentralized IoT Smart Network

Our second generation IoT Smart Wiring technology uses a de-centralized infrastructure, is compatible to first generation products but provides great system reliability, improved user experiences and additional features.



To avoid downtime the network is built with FOG computing centers and a Cloud management system



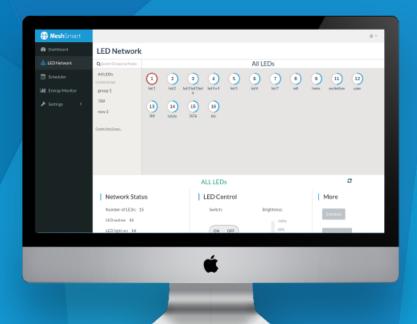
Motion sensors, daylight harvest sensors and additional GEO based services such as parking and traffic management



The FOG computing centers are integrated with breaker box/ remote terminal unit (RTU) & the gateway



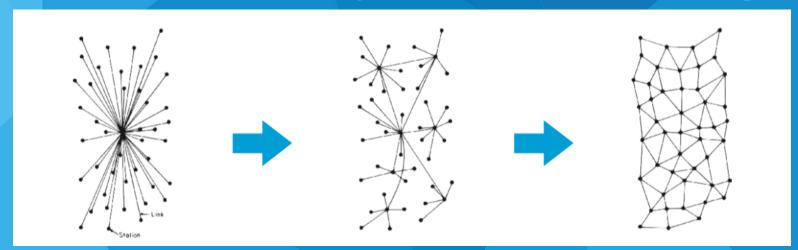
System enables users to sell data generated by network (i.e. energy consumption & heat map of customers)





# Technology Roadmap

Our next generation IoT smart lighting technology will push de-centralization further and help to build an intelligent distributed lighting network. Such network will become the backbone of smart cities and interact with other IoT devices like autonomous driving vehicles, drones, distributed solar panels etc.



Centralized Cloud

De-centralized Cloud / Fog

Distributed Network



# Features & Benefits

Our user friendly technology is intuitive and requires no specialised knowledge.
Users of our technology enjoy the below features as well as real life energy cost savings.

- **✓** Dimming
- ✓ Scheduling Management
- ✓ Light Weather Tuning
- Evacuation path planning and identification
- ✓ Colour Tuning
- ✓ Network Management
- Energy Tracking and Monitoring
- Campus HazardNotification



# Constant lumen output (CLO)

Most lighting fixtures are overrated initially by 20-30%. Customizable high-end trim on group or individual lighting saves 10-15% energy.

#### energy. Better scheduling

Save an additional 5% in energy savings by using an astronomical clock to switch lights on and off. Advanced scheduling system with group and individual control gives the correct amount of light where necessary.

# Programmed and dynamic dimming

Dimming lights during non-peak hours. Adaptive with other sensors.



# MeshSmart Technology

Innovative and proprietary first to market outdoor commercial networking company. MeshSmart technology allows you to control your lights from the web or a mobile central management system. Remote control and monitor all light fixtures in your environment - no matter how big or small. MeshSmart even works with wireless control devices for easy retrofitting and implementation

# Gateway

MeshSmart Control Nodes communicate with Wireless Smart Gateway via proprietary secured wireless network. It can also be flexibly configured to work over standard communication protocols.



### **Control Node**



#### MeshSmart Control Node

measures the input power of the units, controls the light output and color. It can even integrate with other sensing applications like daylight harvesting, motion, chemical detection.

### Management App

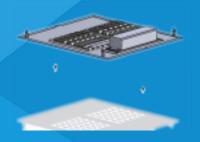


Web and mobile apps allow smooth interaction between the user and LED fixtures. Users can also control lights via handheld wireless dimmers or color tuning devices



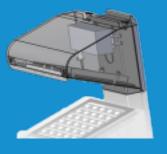
# Daylight Technologies

Daylight Technologies offers customizable and complimentary LED lighting fixture technology that is both intuitive and energy efficient to work with the MeshSmart lighting platform. Daylight manufacturers 4 different types of LED lights which lead to real world energy savings of 30-70%.









# DL-SR Retrofit Product Line

Primary applications include retrofit for street and walkway, outdoor area lighting architecture

# DL-S Street Light Product Line

Primary applications include streets and walkways, outdoor area lighting architecture

# *DL-B*High-Bay/ Low Bay Product Line

Primary applications include warehouses and stadiums

# DL-WP Street Light Product Line

Primary applications include perimeter lighting



# 100% Proprietary Technology

System and method for data transfers over large-area wireless networks. Our patent enhances the transfer of data via the IoT through the ZigBEE communication protocol.

- Designed for large area network
- Optimizes the efficiency of communication decreasing network load without compromising data capability
- Robust and reliable network communication to increase system availability
- Easy plug-n-play commissioning method lowering commissioning time and cost

### **Current Communication Mechanism**

- Broadcast and multicast are designed for one-way communication
- Responses of a broadcast or multicast will result in serious packet loss
- Message conflict

### **Revised Communication Mechanism**

- Redesigned communication mechanism for broadcast and multicast
- Regulated communications within the network, thus decreasing the chance of message conflicts
- Decreased instantaneous network load and enhanced system reliability and availability



# The Strategy

Lighting control is the not-so-secret path to the value added services layer

\$ \$ \$





Sensors unlock value added SAAS revenue:

**Smart parking** 

**Security** 

License plate recognition **Video analytics** 

**Assistance to autonomous** vehicles

**Artificial** intelligence Sensors

IoT node with controller (network layer)

**Light Fixture** 

Cloud **Lumen** is moving up the stack



# Early traction in the market

Our technology is already being used by a wide range of large blue chip multinationals. Listed below are just some of the clients in our portfolio





























John F. Kennedy INTERNATIONAL AIRPORT



# Applications for the technology

Listed below are some of the applications commonly used for our technology







































# Financials

12 Months ending	12 Months ending	*12 Months ending	
30-Apr-15	30-Apr-16	30-Apr-17	
2.62	2.73	3.20	
2.27	1.85	2.17	
0.35	0.88	1.03	
0.25	0.61	0.72	
0.10	0.27	0.32	
	ending 30-Apr-15 2.62 2.27 0.35 0.25	endingending30-Apr-1530-Apr-162.622.732.271.850.350.880.250.61	

\*Note: 30-Apr-17 figures are Annualised based on 10 months actual to 31 January 2017

\$AUD '000 Millions





# Anticipated capital structure at IPO

Existing shares on issue	2,750,000			
Shares to be issued to Cloud Lumen vendors	20,000,000			
Shares to be issued upon conversion of convertible				
note	18,437,500			
Shares to be issued at IPO	25,000,000			
TOTAL shares on issue at IPO	66,187,500			
Market Capitalisation	\$13,237,000			
Performance shares 1	8,000,000			
Performance shares 2	8,000,000			
Performance shares 3	8,000,000			
Total performance shares	24,000,000			

#### **Milestones for Performance Shares**

Milestone 1: Revenue of AU\$4m

Milestone 2: Revenue of AU\$7m

Milestone 3: Revenue of AU\$10m



# Competitor Analysis

Cloud Lumen is the only technology focused lighting company with an IoT focus

Company	Code	Market Cap (\$'M, AU)	Enterprise Value (\$'M, AU)	Sales (\$'M, AU)
Acuity Brands, Inc.	AYI-US	10,484.7	10,321.6	4,499.96
Dialight Plc	DIA-GB	551.8	542.4	330.70
Energy Focus, Inc	EFOI-US	46.5	27.0	41.70
<b>Lighting Science Group Corporation</b>	LSCG-US	6.9	786.4	70.89
Lime Energy Co.	LIME-US	25.7	66.6	N/A
Lucibel SA	ALUCI-FR	60.8	57.6	40.38
Lumenpulse, Inc.	LMP-CA	543.6	557.5	N/A
PhotonStar LED Group PLC	PSL-GB	5.5	5.6	9.65
Revolution Lighting Technologies, Inc.	RVLT-US	193.4	252.9	231.53
Cloud Lumen	TBD	13.3	7.2	3.20



# Thank you for your time

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