

#### **EMPIRE ENERGY GROUP LIMITED**

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(OTCQX: EEGNY)

### **ASX Announcement - Corporate Presentation**

#### 17 April 2012

#### **Unconventional Oil and Gas Conference**

Empire Energy Group is pleased to announce that Mr Bruce McLeod, the Company's Chairman and CEO, will be presenting at the RBS Morgan Unconventional Oil and Gas Day on Wednesday 18 April 2012. The event will be held at the offices of RBS Morgan's, Sydney.

A copy of the presentation to be presented on the day is attached.

#### **About Empire Energy Group Limited**

In early 2007, the Company established Empire Energy USA, LLC and currently holds around 96% of its issued capital. Empire Energy USA is an oil and natural gas producer with operations in Appalachia (New York and Pennsylvania) and the Central Kansas Uplift (Kansas). In addition it holds approximately 400,000 acres of Marcellus and Utica shale formations in New York State USA.

A 100% owned subsidiary Imperial Oil & Gas holds 14.5 million acres of Barney Creek shale formation in the Northern Territory, Australia.

Empire Energy implemented a US\$100 million credit facility with Macquarie Bank Limited in early 2008 for the sole purpose of acquiring and developing oil and gas assets in the USA. This facility has been increased to US\$150 million.

For more information:

Bruce McLeod Executive Chairman Empire Energy Group Limited +61 2 9251 1846



ACHIEVING SIGNIFICANCE IN THE OIL & GAS INDUSTRY RBS Morgans Unconventional Conference - April 2012



### **EMPIRE ENERGY GROUP LIMITED**

### Disclaimer



The purpose of this presentation is to provide general information about Empire Energy Group Limited ("Empire Energy"). The presentation contains certain statements which may constitute "forward-looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements.

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In accordance with Chapter 5 of the ASX Listing Rules, all reserves and resources have been calculated by Ralph E Davis Associates Inc, Petroleum Consultants of Houston, Texas and LaRoche Petroleum Consultants Ltd, Dallas, Texas.

# **Regions of Operation**





### **Operations**



#### Corporate

- US operations 96% owned by Empire Energy Group Limited
- US operations centralised in Pittsburgh, PA
- \$150 mm Credit Facility with Macquarie Bank, drawn to ~\$56 mm
- Macquarie Bank option to take up 10% capital in US subsidiary

#### □ Central Kansas Uplift

- Field operations based in Wichita, KS
- Operating ~256 wells
- Commenced drilling program June 2011
  - FY 12 budget includes 10 development wells and 5 polymer recompletions
  - Well target: IP 30-40 Boe/d; EUR +50,000 Bbl/well
- ☐ Seeking opportunities to book new 1P & 2P reserves by:
  - Reviewing existing assets and targeting formations (behind pipe)
  - Identifying new assets for farm-in or acquisition of development acreage

#### Appalachia

- Field operations based in Mayville, NY
- Operating ~1,800 wells
- Continuing program to improve transportation
- Expect increased production through improved operational efficiencies
- ☐ Marcellus and Utica exploratory programs being implemented

#### ☐ McArthur Basin – Australia

■ Early stage exploration - 14.5 million acres black shale targeting +12Tcfe

## **Key Objectives**



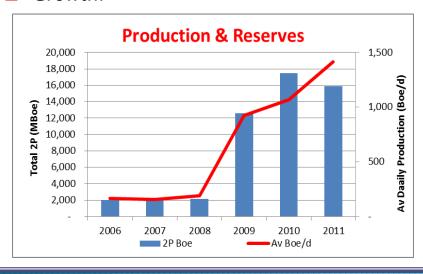
### ☐ Targets:

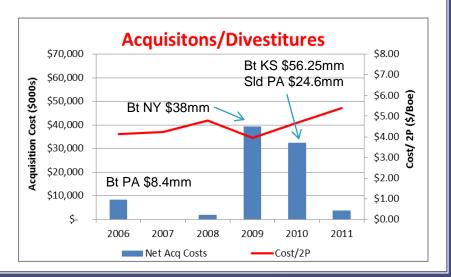
- 1P acquisitions up to US\$100 million (with 2&3P opportunities)
- Continuous PUD drilling programs with existing assets
- JV/Farm-in arrangements in existing regions of operation

#### Milestone:

□ US listing with +5,000 Boe/d

#### Growth:





# **Development Pipeline**



Australia, NT

Appalachia, US Williston Basin, US

Shale oil/gas Multi Bbl/Tcf targets Shale oil +70mmbbls Gas +5Tcf (GIP) Appalachia (gas), US Kansas (oil), US

1,640 Boe/d (36% oil) 2P: 15.8 MMBoe Farm-in & Acquisitions

**Greenfields** 

**Exploration** 

Development

**Production** 

Land holder agreements

Proof of concept

14.5 million acres

Move to Reserves

up to 220,000 acres

Marcellus+Utica shale

4,600 net ac Bakken

Minimal production/technical risk

Hedging to insulate cash flow

Definable low cost development

Targets have >70% probability of success

Empire has a balanced portfolio that provides immediate cashflow and targets large emerging resource plays

### The PDP Model



#### Current Targets:

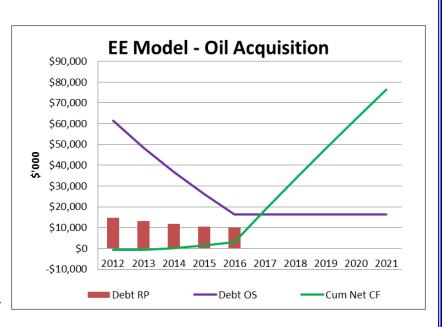
- Conventional Oil and Ngls
- Defined, slow decline assets
- Operations within existing regions
- Development opportunities

### Acquisition metrics:

- Leverage
- <5.5x NTM cash flow</p>
- 5 year hedging protects cash flow
- Negligible additional G&A
- Equity for development program

#### Outcome:

- Cum Net Cash flow after debt repay & service, G&A
- → >80% debt repaid over hedging period
- Free cash flow after 5 years
- Future dividend stream?

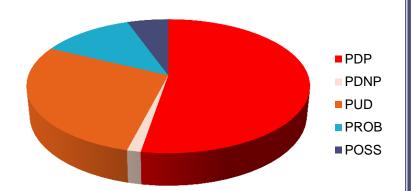


## **Reserves & Operations**



- ☐ Empire Energy operator of ~99% of all assets
- Reserves\*
  - □ PDP 9.2 mmBoe
  - ☐ 1P Reserves 13.6 mmBoe
  - 2P Reserves 15.9 mmBo
- ☐ Current Net Production (6:1 oil:gas)
  - □ ~1,640 Boe/d (35% Oil);
  - KS 550 Bbl/d
  - PA, NY 1090 Boe/d
- Av Lifting Costs (2012)
  - □ \$24.00 /Bbl (incl taxes \$5.40)
  - \$2.10 /Mcf (incl taxes \$0.30)
- Hedging:
  - ~70% natural gas production through to 2015 @ av \$5.85/mcf (current \$2.10 /Mcf)
  - ~72% oil production through to 2015 @ av \$90.00/Bbl
- ☐ Utica/Trenton & Marcellus Shale, Pennsylvania & New York
  - Prospective Reserves/Resource\* Marcellus Oil +70 MMBbls (RF = 3%)
  - Prospective Resource\* Utica Gas +5Tcf (GIP unrisked)
- McArthur Basin Australian Shale
  - □ 14.5 million acres with numerous gas, oil and bitumen shows
  - ☐ Preliminary target resource +14Tcf

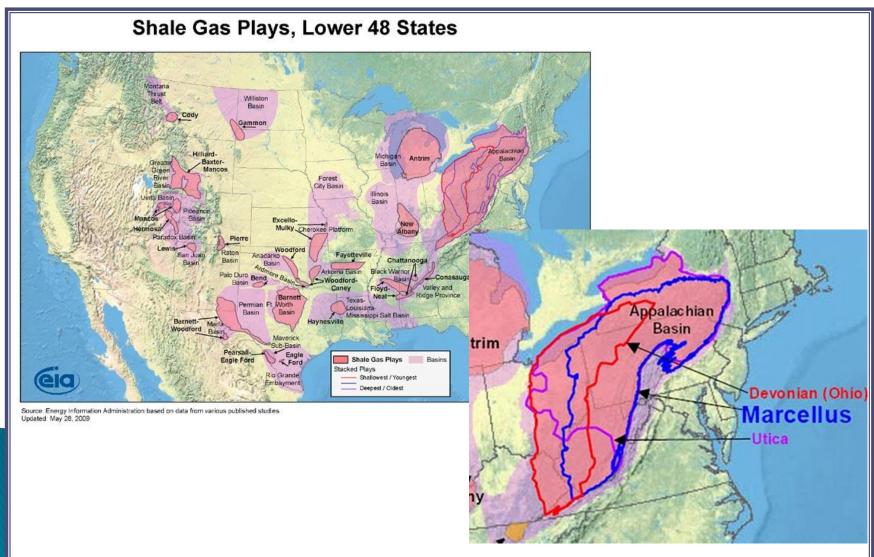




<sup>\*</sup>Natural gas and oil reserves/resources have been certified by independent petroleum engineers.

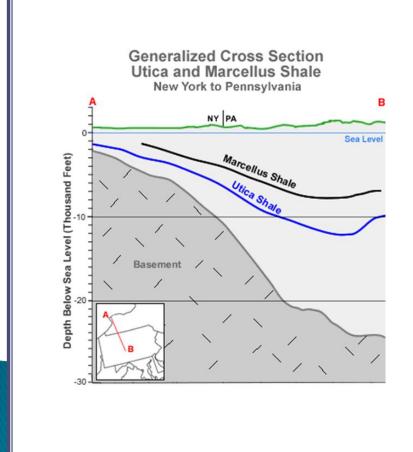
# The Shale Plays

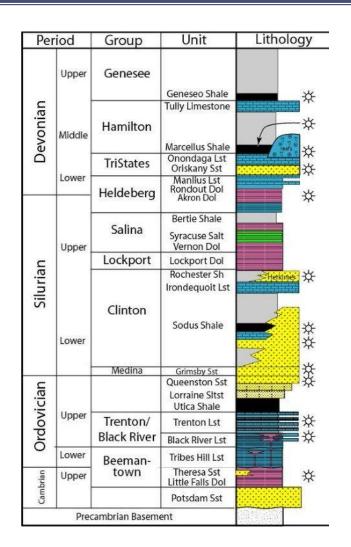




# The Appalachian Shale Plays

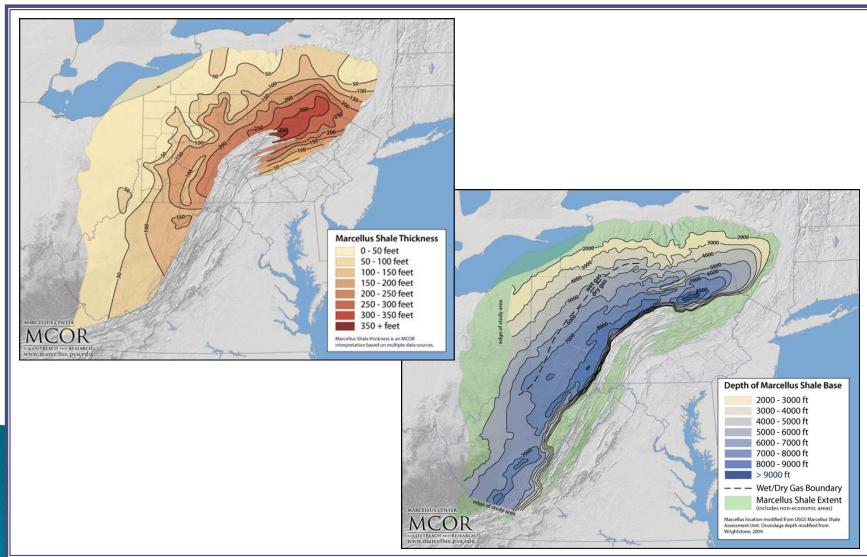






# Marcellus - Where?

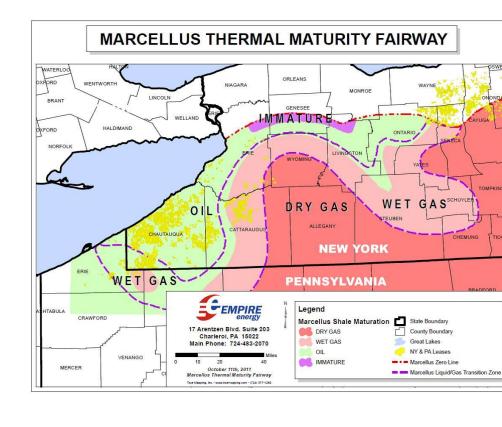




# Marcellus - Empire's Position



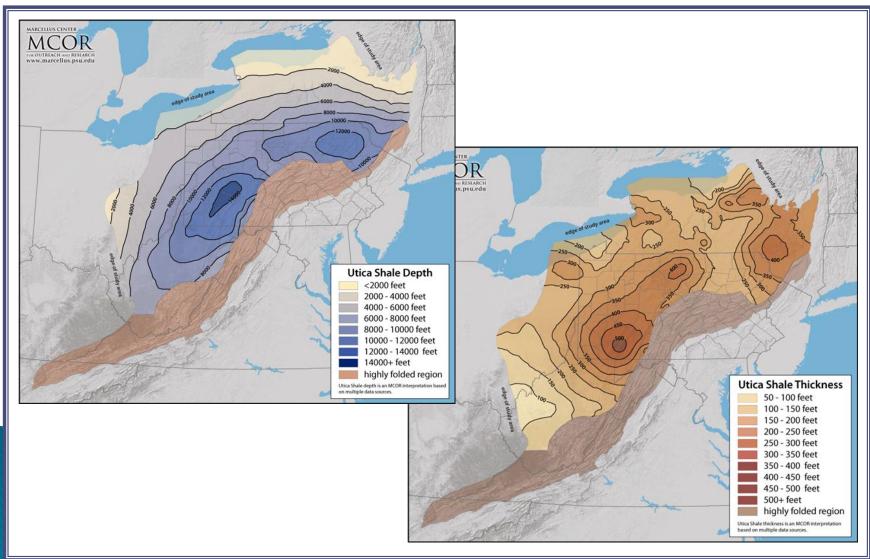
- 99% acreage in New York State
- ~220,000 gross ac
- ~90,000 ac held by production
- Hydrocarbon generation & presence
- Oil Resource P50\*= 70.3 MMBbls
  - □ 2-5 Mbbs/5ac-ft
  - □ 3% recovery factor
  - Based on 100,000 ac
- ☐ Gas Resource P50\* GIP = 200 Bcf
  - □ 70 to 150Mcf/ac-ft
  - ☐ Recovery factor 25%
  - Based on 40,000 ac
- Net Marcellus 20' to 100'
- □ Depth 3,000' to 5,000'



<sup>\*</sup>Reserves/resources have been certified by Ralph E Davis Associates, Inc, Houston, petroleum engineers

### **Utica - Where?**

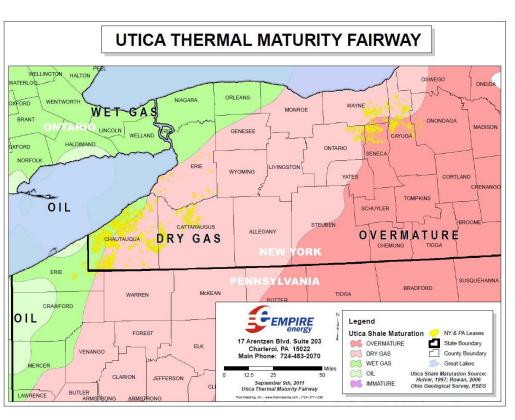




## **Utica - Empire's Position**



- 99% acreage in New York State
- □ ~180,000 gross ac
- Hydrocarbon generation & presence extension from recent Ohio success
- Oil/Condensates
  - To be tested in western Counties
- ☐ Gas Resource P50\* GIP = 4.6 Tcf
  - □ 70 to 150Mcf/ac-ft
  - ☐ Recovery factor 20%
  - ☐ Based on 40,000 ac
- Net Utica thickness 250' to 350'
- □ Depth 4,500' to 6,500'
- □ Recent Utica Shale sale & farm-in Arrangements in Ohio State (oil/wet gas corridor) at \$6,000 - \$15,000 /acre

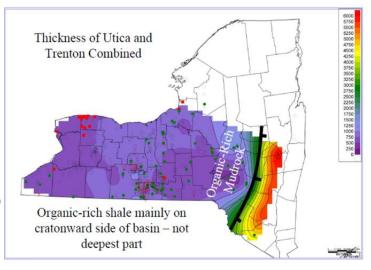


<sup>\*</sup>Reserves/resources have been certified Ralph E Davis Associates, Inc, Houston, petroleum engineers

### Utica - Points to Ponder

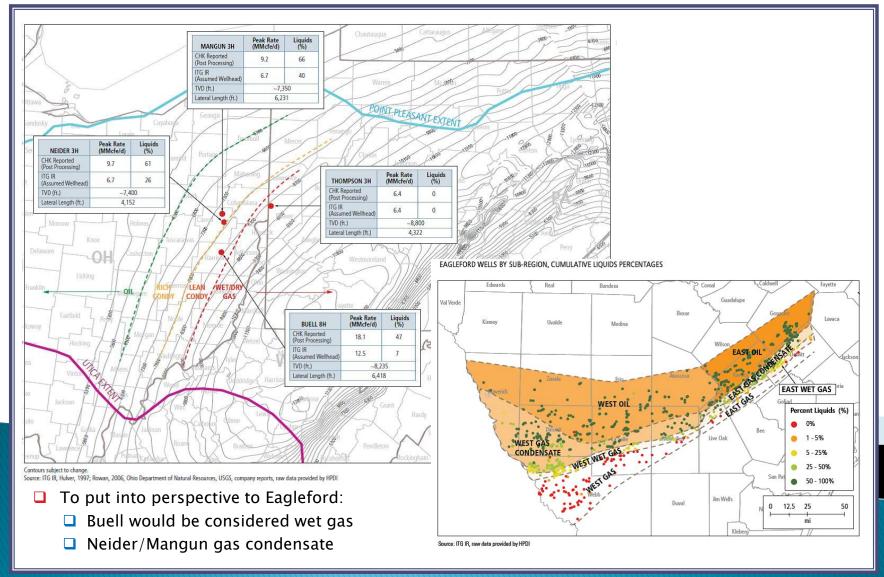


- Utica mineralogy in wells from NY, OH, and PA is similar to that from Quebec
- Significant natural gas flows from the Utica in Quebec from vertical wells with single stage completions
- Utica higher carbonate/less clay than Marcellus (similar to Eagleford)
- Based on the little data available from NY, the Utica play may be more structurally complex than many other unconventional plays
- CHK significant oil & natural gas liquids in the
  Utica/Point Pleasant in eastern OH (see next slide)
- Little oil/gas production from Utica in NY
- The Utica/Point Pleasant is an emerging play in OH, is the Utica/Trenton-BR in NY going to be similar?
- ☐ Trenton-BR WNY CAI 1.5 to 3.0 in CNY (Oil to Dry Gas)
- Utica+Trenton 750' to 1250' thick WNY to CNY
- TOC values vary in wells where data is available
- Empire to take a "watch and see" since substantial rights are HBP



# Early CHK Ohio Utica Wells

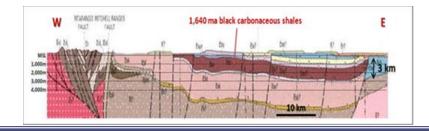


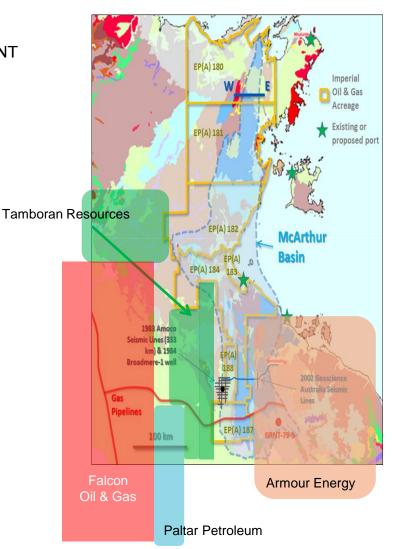


### McArthur Basin-Shale



- ☐ Held by Imperial Oil & Gas (100% owned subsidiary)
- □ 14.6mm acres in the MacArthur & Georgina Basins, NT
- Large scale shale oil & gas exploration play
- Low historic exploration maturity
- □ Target organic rich black oil and gas shales of the Barney Creek Formation of Palaeo – and Meso-Proterozoic age (1.4 to 1.6 bn years)
- ☐ Shales up to 4,000 ft thick in regions
- Initial exploration areas of interest identified.
- ☐ First Licences expected 2012
- ☐ Licence Categories:
  - ☐ 1: EP(A) 187 gas pipeline passes through
  - ☐ 2: EP(A) 180 to 184, 187 (Aboriginal Land)
  - □ 3: EP(A) 188 (Native Title)
- ☐ Falcon/Hess Beetaloo JV valued at \$24/ac

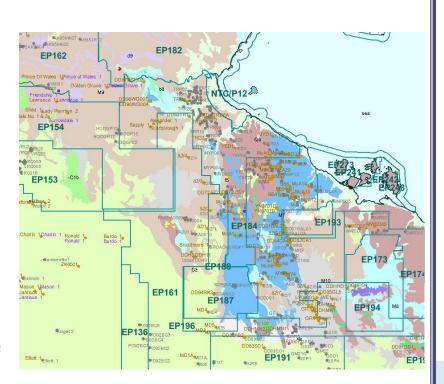




## McArthur Basin- Targets



- Substantial drilling & core history
- ☐ Oil and bitumen bleeds in core
- ☐ Some seismic history (2D)
- ☐ Proven to be gas-prone. A mineral exploration well GRNT-9 (in adjacent lease) ignited and produced a 6m flare for 6 months. Est 0.5Bcf flow over period
- ☐ Implementing development team with significant US and global experience in shale basins
- Over the next 12 months analyse available core and geotechnical data
- ☐ Move towards a P50 Resource measurement
- ☐ Increasing interest from global majors in large scale Basin development
- □ Identify JV partner?



# Empire - Corporate Snapshot



☐ Key Board & Management (last slide)

### ☐ Financials

■ EBITDAX (2012) = \$16.0 MM

□ PV10 (2P) = \$156 MM

### □ Key Financial Ratio's

 $\Box$  EV/EBITDAX = 6.8x

 $\blacksquare \qquad \qquad \mathsf{EBITDAX/interest} \qquad \qquad = 6.7\mathsf{x}$ 

### **☐** Key Valuation Multiple

 $\square$  EV/2P Reserves = \$7.00/Boe

### ■ Major Shareholders

	Macquarie Bank Limited	13.8%
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☐ Imperial Investments P/L 5.1%

Insiders 4.0% (5.6% diluted)

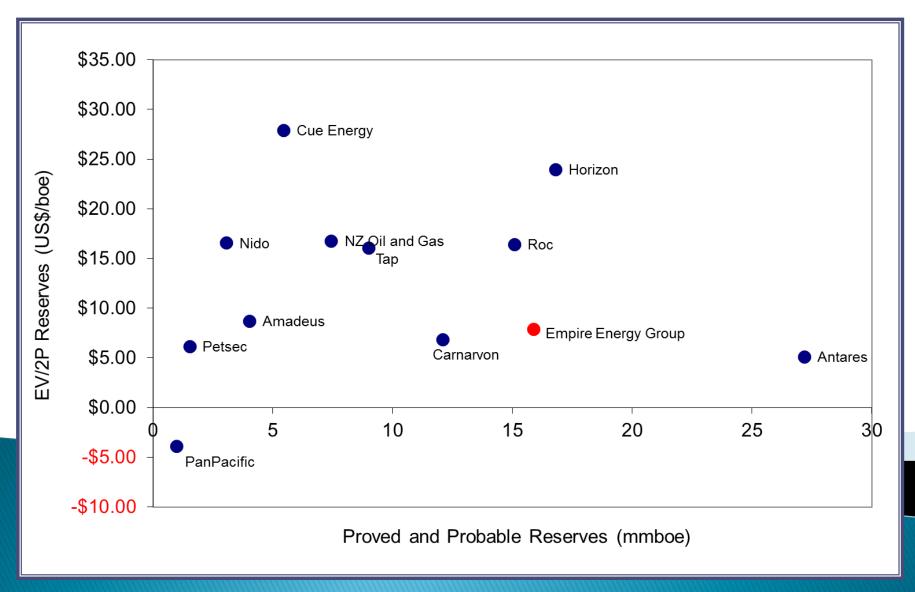
Top 20 shareholders 43.1%

Corporate Structure		
Aust. Securities Exchange OTC-QX (New York)	EEG EEGNY	
Shares on issue	291.5 mm	
Share Price	US\$0.24	
Market Cap	US\$70.0 mm	
Debt	US\$56 mm	
Cash & liquids	US\$ 5.0 mm	
Enterprise Value	US\$121 mm	
Options Outstanding (av exercise price = \$0.15)	26.8 mm	



# **ASX Comparables**





### **Board & Management**



#### **BOARD**

- Bruce W McLeod Executive Chairman & CEO, B.Sc (Maths), M.Com (Econ) extensive experience in the Australian Corporate and Resource Capital markets. Over the past 25 years he has been involved in the acquisition and rationalisation of listed and unlisted companies, as well as raising debt and equity capital for projects and companies. Prior to this he spent six years with a major international bank where he was Executive Director, responsible for the financial and capital markets operations.
- David Sutton Non Executive Director
- Kevin Torpey Non Executive Director

#### **MANAGEMENT**

- □ Dr John Warburton -Director & CEO Imperial Oil & Gas Pty Ltd, FGS, MAICD 27 years of technical and leadership experience in International Petroleum E&P including 11 years with BP and 4 years as General Manager Exploration & New Business for LASMO-ENI in Pakistan. John's petroleum expertise covers the Middle East, Kazakhstan, Azerbaijan, North & West Africa, Pakistan, Europe, Australia, New Zealand, PNG, SE Asia, China, Korea and Japan. He has published 28 internationally recognised technical articles with particular focus on petroleum exploration in complex fold and thrust belts.
- Al Boyer SVP & COO involved in the natural gas business for +40 years. Operates over 40 privately owned wells. In early 2000's involved in a well drilling program (200 wells in 20 months) and the consolidation of field operations for Somerset Oil & Gas Inc until its takeover by EOG Resources. Has drilled 1,000's of wells in western PA, NY, OH and WV.
- Tony Crisafio CFO serves as Contract Chief Financial Officer. Tony is an independent business consultant, providing financial and operational advice to businesses. Prior, Tony was a Partner with Ernst & Young. Tony is also a Director and Chairman of the Audit Committee of Petroleum Development Corporation Inc, an E&P company with operations in the Appalachians, Michigan and the Rocky Mountain Region.
- Rob Kramer VP Mid Continent Operations, B.Sc (Ind. Eng) responsible for the Company's Mid-Continent operations in Kansas and North Dakota. Prior to joining Empire Energy Rob was a Completions and Production Engineer for Anshutz Exploration Corp, USA. Prior to that Rob played a key role in the establishment of Sanjel (USA) Inc in the Mid Continent where he was Lead Engineer for well design including cementing, fracturing, acidizing as well as coil tubing operations. Rob began his E&P engineering career with Schlumberger where he was a Field Engineer for Well Stimulation Services
- Tim Hull VP Appalachia Operations responsible for Appalachian operations. Tim has been involved in the North Eastern US natural gas industry for over 20 years. He is a director member of IOGA (New York).