### Challenger Energy Ltd Investor Presentation



#### July 2013



## Disclaimer

This announcement contains "forward-looking statements". Such forward-looking statements include, without limitation: estimates of future earnings, the sensitivity of earnings to oil & gas prices and foreign exchange rate movements; estimates of future oil & gas production and sales; estimates of future cash flows, the sensitivity of cash flows to oil & gas prices and foreign exchange rate movements; statements regarding future debt repayments; estimates of future capital expenditures; estimates of reserves and statements regarding future exploration results and the replacement of reserves; and where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to oil and gas price volatility, currency fluctuations, increased production costs and variances in reserves or recovery rates from those assumed in the company's plans, as well as political and operational risks in the countries and states in which we operate or sell product to, and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.





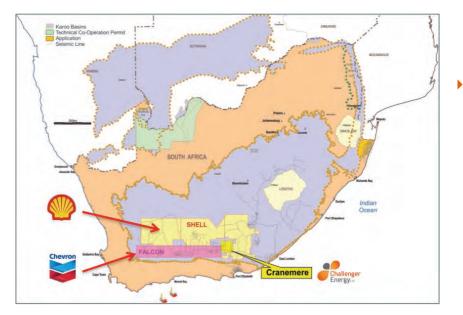
**Company Overview** 

- Cranemere Project
- **South Africa context**
- Summary & Conclusions



# **Company Overview**

- Presently focused on world class shale play in the Karoo Basin, South Africa
  - Discovered gas
  - Potentially transformational to the SA economy, highly motivated government
  - A company making opportunity Challenger the only ASX small cap with exposure to SA shale gas
- Permit award next major value catalyst
  - First mover, awaiting award of exploration license for ~800,000 acres
  - Balance of play fairway under application by Shell, Falcon (& Chevron via farm-in)



New management team - on the cusp of dramatic growth

- Robert Willes MD (ex BP, Eureka)
- Bill Bloking (ex BHPB, Exxon, Eureka)
- Management strongly aligned via equity
- Emerging strategy



# **Financial Overview**



| Liquidity <sup>2</sup> |              |
|------------------------|--------------|
| One Month              | \$423,605    |
| Six Months             | \$2,417,607  |
| One Year               | \$13,424,318 |

|                 |             |            | 1.00       |          |
|-----------------|-------------|------------|------------|----------|
| Broker          | Value       | Buy Vol    | Sell Vol   | Traded % |
| Commonwealth    | \$4,662,209 | 27,061,474 | 29,629,146 | 17.5     |
| E-Trade         | \$4,568,086 | 26,427,070 | 29,262,806 | 17.2     |
| Morg Smith      | \$4,563,497 | 46,085,137 | 13,921,770 | 17.1     |
| Patersons       | \$2,223,338 | 18,171,601 | 8,264,797  | 8.4      |
| UBS             | \$2,205,431 | 4,865,113  | 21,064,879 | 8.3      |
| State One Stock | \$2,156,980 | 11,843,438 | 11,843,438 | 8.1      |
| Bell Potter     | \$1,408,152 | 7,010,000  | 10,976,250 | 5.3      |
| AIEX            | \$938,485   | 5,536,756  | 6,279,725  | 3.5      |
| BBY             | \$807,240   | 4,767,047  | 4,646,047  | 3.0      |
| Pershing        | \$616,433   | 695,000    | 8,003,173  | 2.3      |
|                 |             |            |            |          |

Traded Market Share 1/7/12 - 30/6/13

#### **Capital Structure**

| Fully paid ordinary shares         | 311,482,540 |
|------------------------------------|-------------|
| Unlisted Options <sup>1</sup>      | 25,000,000  |
| Share Price <sup>2</sup>           | A\$0.07     |
| Market capitalisation <sup>2</sup> | A\$21.8m    |
| Cash <sup>3</sup>                  | A\$0.28m    |
| Shareholders                       | 1011        |
| Тор 20                             | 44.81%      |

#### **Significant Shareholders**

| LQ Super Pty Ltd   | 12.89% |
|--|--------|
| Pitt Street Absolute Return Pty Ltd and related entities | 5.46%  |
| Challenger Directors                                     | 2.46%  |

1. Option exercise prices range from \$0.15-\$0.35 with exercise dates of February 2014 to November 2016

2. As at 26th July 2013

3. As at 30th June 2013



## **Board & Management Team**

|                             | Chairman<br>Michael Fry  | Managing Director<br>Robert Willes   | Adviser<br>Bill Bloking   | Technical Director<br>Paul Bilston  | Country Manager<br>Peter Price  |
|-----------------------------|--|--|---|---|---|
| Qualifications              | B.Com (UWA), F.Fin   | BA (Hons), MAICD   | BSc Mech Eng (Summa cum Laude), FAICD   | B.Eng, PhD.   | MSc, Royal School of<br>Mines, MSAIMM   |
| International<br>Experience | USA, Australia   | UK, Norway, Algeria,<br>Belgium, Australia, Asia   | USA, Australia, Asia,<br>Europe, South America  | Australia, Asia, USA,<br>South Africa   | South Africa, Zimbabwe,<br>Zambia, UK, Belgium  |
| Relevant<br>Experience      | <ul> <li>Chairman Red Fork<br/>Energy Limited (RFE)</li> <li>Chairman Norwest<br/>Energy NL (NEW)</li> <li>Past Member ASX</li> <li>Treasury management</li> </ul> | <ul> <li>CEO Eureka Energy<br/>Ltd</li> <li>Head of Business<br/>Development, Asia<br/>Pacific – BP Australia<br/>&amp; Indonesia</li> <li>GM Browse &amp; Greater<br/>Gorgon – BP Australia</li> <li>GM North West Shelf –<br/>BP Australia</li> <li>Project Manager M&amp;A<br/>– BP London</li> <li>Negotiator Gas<br/>Marketing - BP Gas &amp;<br/>Power UK</li> </ul> | <ul> <li>MD Eureka Energy Ltd</li> <li>President Australia/<br/>Asia Gas - BHP Billiton</li> <li>COO - Esso Eastern<br/>Products Trading Co</li> <li>Senior Adviser - Exxon<br/>Corp Strategic<br/>Planning</li> <li>GM Gas - Esso<br/>Indonesia</li> <li>Manager, Supply<br/>Operations Far East &amp;<br/>Western Hemisphere -<br/>Exxon</li> </ul> | <ul> <li>Former MD Challenger<br/>Energy Ltd (CEL)</li> <li>GM Lucas Energy</li> <li>Manager, Operated<br/>Assets – AGL Energy<br/>Ltd</li> <li>Client Program<br/>Manager – Agility</li> <li>Group Manager, Oil &amp;<br/>Gas - GHD</li> </ul> | <ul> <li>Country Manager –<br/>Molopo (MPO)</li> <li>Independent consulting<br/>engineer</li> <li>GM Mining - Babcock<br/>Industrial Contractors</li> <li>MD, Ops<br/>Mgr,Consulting<br/>Engineer – Rand<br/>London Corp</li> <li>Various roles –<br/>Anglovaal South Africa,<br/>Anglo American<br/>Zambia, Lonhro<br/>Rhodesia</li> </ul> |
| Citizenship                 | Australia  | UK/Australia   | US/Australia  | Australia   | UK  |
| Industry<br>Experience      | 7 yrs E&P (30 yrs Capital markets)   | 26 yrs   | 39 yrs  | 20 yrs  | 55 yrs  |



# **World Scale Opportunity**

#### Proven Gas to Surface

- Permit of ~ 800,000 acres centred on only well within the basin to flow significant gas to surface (Cranemere)
- CEL first mover Shell and Falcon/Chevron pursuing adjacent acreage

Basin Resource Potential (U.S. Energy Information Administration June 2013)

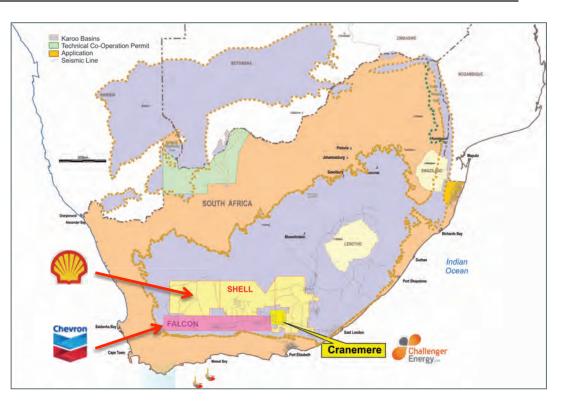
- Estimated 370 tcf technically recoverable
- Ranked #8 globally

#### Partner & Work Programme

- Black Economic Empowerment (BEE) Partners in place
- Advanced discussions with farm-in partners

#### Key Events

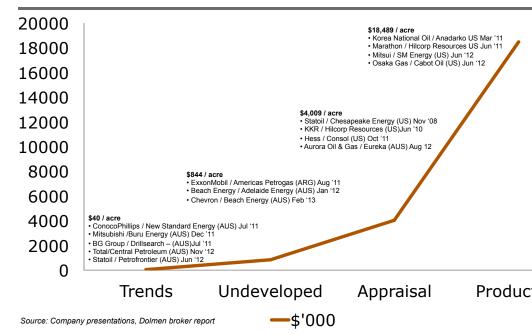
- Moratorium lifted September 2012
- Chevron announced AMI and farm-in with Falcon Dec 2012
- Awaiting award of Exploration Right anticipated early 2014



# Challenger now the only small cap player with exposure to this play.



### **Investment Case**



Recent transactions demonstrate increasing market value of acreage as it progresses towards commercialisation.

(CEL ~800,000 acres, market cap \$21.8m<sup>1</sup>)

1 : Information current as at 26 July 2013.

Key parameters for commercialisation are underpinned by supportive government.

Infrastructure and supply chain will develop as resource scale becomes clear.

| tion |                            |                |
|------|----------------------------|----------------|
|      |                            | Good Fair Poor |
|      | Gas Market<br>Fundamentals |                |
|      | Gas Price                  |                |
|      | Infrastructure             |                |
|      | Supply Chain               |                |
|      | Land Access                |                |
|      | Environment/Regulation     |                |
|      | Water                      |                |
|      | Fiscal Terms               |                |
| -    | Resource Upside            |                |
| -    | Technology Upside          |                |

Source: Company view



# **Building the Company**



World class exploration asset with high WI
 Re-rating anticipated on permit award

- ✓ Advanced farm-in discussions
  - BEE partners in place

✓ Future Legacy Asset - leverage high value position to grow the firm

2

#### **Enhance Sustainability of Portfolio**

Identify and add assets with potential for near term development

3

#### Build a long-term sustainable company with a quality unconventional portfolio

Identify and secure future high potential assets Significant shifts in oil & gas landscape create opportunities to acquire assets and form alliances



#### Guiding principles

- Quality assets in advanced exploration/early development phase
- Manage risk profile through partnerships & farm-out
- Value accretive to CEL whilst maintaining balanced risk profile





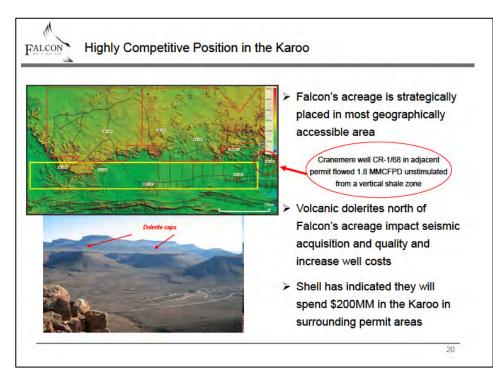
Company Overview

**Cranemere Project** 

- **South Africa context**
- Summary & Conclusions



# **Prime Acreage Position**

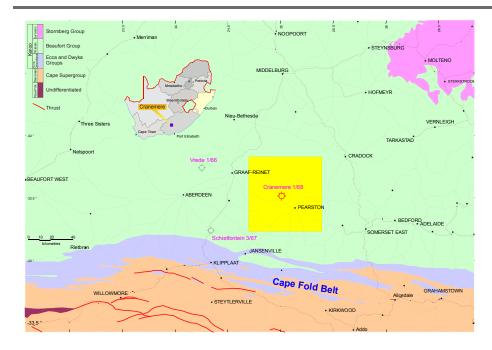


Source: Company presentation

- Substantial foothold in some of best acreage, adjacent to Falcon/ Chevron permit area
- The application area contains the only well to flow substantial gas to surface (unstimulated, vertical well)
- Easier terrain than that to the north

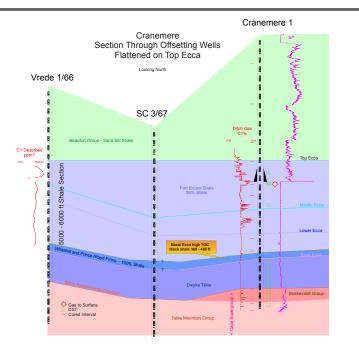


## **Discovered Gas**



- Three deep, down to economic basement wells drilled in the late sixties by SOEKOR, the government corporation charged with finding hydrocarbons in South Africa
- Cranemere 1/68 ostensibly drilled to test the northern pinchout of the pre-Karoo Bokkeveldt rocks

Source: After Simplified Geology of South Africa Council for Geoscience 2003

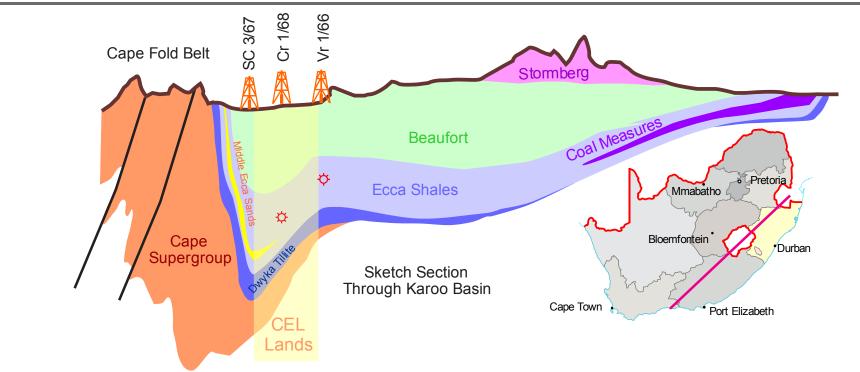


- Gas to surface from fractures in the Ecca shales not anticipated
- CR 1/68 gas log clearly shows zones of high gas readings (red above)
- Uniform shale sections in all wells

Source: CEL and Soekor



## **Geological Setting**

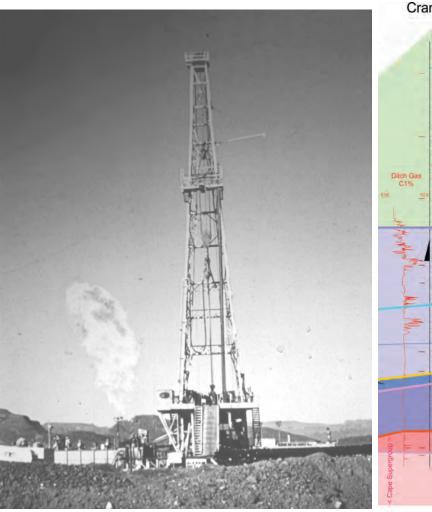


- Fort Brown Upper and Middle Ecca shales are deep basin turbidites deposited in the foredeep of the rising
   Cape Fold Belt and are have a vertical thickness of 1,500 1,800 metres (5,000 6,000 ft)
- Basal Ecca Shales (Whitehill & Prince Albert formations) are high TOC marine and have vertical thickness of 110 – 150 metres (360 – 485 ft)

Source: After Winter and Venter (1970)



# Cranemere 1/68 Discovery Well



- Cranemere 1 Top Ecca Lower Ecca Bokkeveldt Groun
- The well entered a gas zone at approximately 8150 ft MDRT which threatened to blow out, it was controlled by closing BOP
- > Zone interpreted as fractured Ecca Group shales
- DST 3B over the interval 8154' 8312' produced
   a strong gas flow to surface which was flared, it
   flowed 1.83 MMscf over a 23.6 hour period
- Extensive core collected from CR 1/68
- Permit surrounds well

Source: CR 1/68 WCR

•

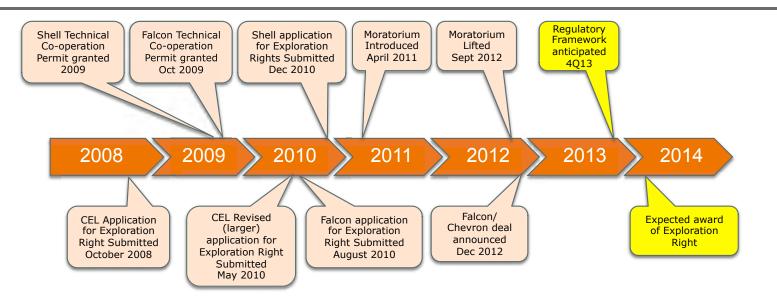


# **Permit Summary**

- Applicant Bundu Gas and Oil Exploration (Pty) Ltd 90% owned and controlled entity of Challenger Energy Ltd. (CEL), 10% BEE partners
- Area  $\sim$ 1 million acres (4300 km<sup>2</sup>) applied for, expecting award  $\sim$ 800,000 acres to allow for game parks
- **Prospectivity** EIA study inferred total of ~32tcf GIP, >7 tcf risked recoverable (excluding Fort Brown)
- Term 3 Years with up to three renewals not exceeding two years each
- Anticipated Work Programme studies, seismic reprocessing, 1-2 core holes, drill & frac one well and production test
- Fiscal Terms Corporate Tax 28%, Royalty 7%



## **Timeline & Status**



- New regulatory framework being developed, to be governed by revised Mineral and Petroleum Resource
   Development Act. Anticipated draft framework issued for industry comment in coming months.
- Regulator (Petroleum Agency of South Africa PASA) anticipates ministerial approval to re-commence processing of applications once new regulatory framework in place. No firm date, but general expectation is early 2014





- **Company Overview**
- Cranemere Project

**South Africa – context** 

Summary & Conclusions



### **South Africa – Economy under Pressure**



| Modelled value added and Employment<br>Scenarios |            |            |  |
|--|------------|------------|--|
|  | Scenario A | Scenario B |  |
| Gas Resource tcf                                 | 20         | 50         |  |
| Production Years                                 | 25         | 25         |  |
| Average Annual Value Added Rt                    | on         |            |  |
| Upstream   | 30         | 86         |  |
| Downstream                                       | 50         | 115        |  |
| Combined   | 80         | 201        |  |
| Average Annual Employment                        |            |            |  |
| Upstream   | 55         | 155        |  |
| Downstream                                       | 238        | 549        |  |
| Combined   | 293        | 704        |  |

Source: Econometrix Report March 2012

- Largest economy in Africa; high levels of unemployment and inequality are the key economic problems facing the country.
- Official unemployment 25%, unofficial estimates ~40%, youth unemployment ~53%.
- A quarter of South Africans live on less than US \$1.25 a day, with limited access to economic opportunities and basic services.
- Per capita GDP growth mediocre, growth 1.6% a year from 1994 to 2009, 2.2%
   pa 2000–09. First quarter 2013 figures show an annualized rate of 0.9%.
- Crisis in power availability insufficient capacity in power infrastructure led to rolling blackouts in 2007. Margin between demand and capacity still low, leaving the country vulnerable to further blackouts.
- Econometrix (SA's largest independent macro-economic consultancy) Report
   March 2012 concluded;
  - A 50 tcf shale resource could add R200bn to GDP pa and create 700,000 sustainable jobs; and
  - Could provide a solution to power supply challenges and ensure South Africa's energy security

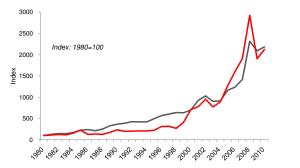
#### The government is strongly motivated to pursue potential shale gas resources as a catalyst to transform the economy.



## **South Africa – Power Issues**

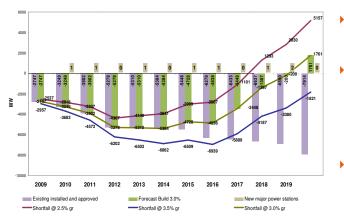
•

#### Chart 6: Indices of Rand Coal Production Prices and Rand Brent Crude Oil



| Coal price index     Brent price index |             |         |  |  |  |
|--|-------------|---------|--|--|--|
| Table 4: Age Distribution of Eskom     |             |         |  |  |  |
| Age group                              | GW capacity | % share |  |  |  |
| Over 40 years                          | 3.5         | 10.0    |  |  |  |
| 35-45 years                            | 9           | 25.7    |  |  |  |
| 25-35 years                            | 21          | 60.0    |  |  |  |
| Under 25 years                         | 1.5         | 4.3     |  |  |  |
| Total                                  | 35          | 100     |  |  |  |

Chart 1: Electricity Shortfall



- Significantly increased demand since 1994, ageing fleet, ~90% dependent on coal, mine locations remote to demand = line losses, cheap coal reserves running low.
- Typical available capacity ~30GW vs peak demand of ~36GW
- Integrated Resource Plan (IRP) established in 2010 to develop a sustainable electricity strategy for next 20 years seeks to more than double current generation capacity to 89 GW by 2030
  - Huge new build programme nuclear, coal, gas and renewables
    - New build coal more expensive than existing (largely depreciated)
    - Gas advantaged against new coal, and renewables on a capex per MW installed basis.

Eskom – state owned power utility, dependent on massive Govt support

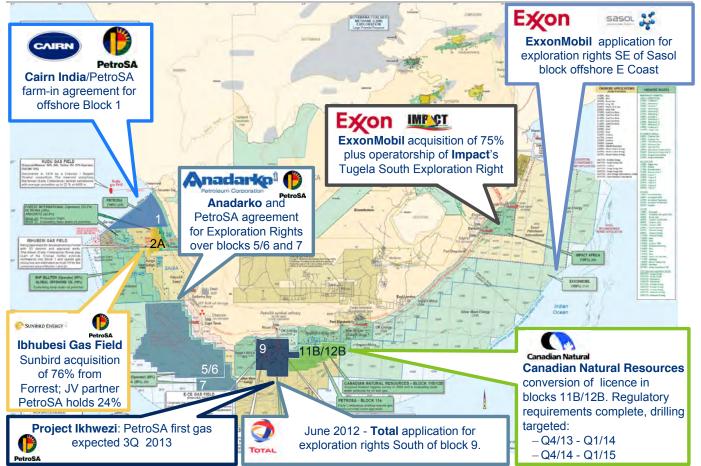
- Credit support and direct funding to Eskom ~16.9% of 2010 GDP
- Coal provides base load, planned renewables to provide additional power during daytime hours, diesel peaking plants make up shortfall.
  - Natural gas the only base load technology that can follow the SA load curve morning and evening peaks, ramped down overnight.
- LNG import now under active consideration to bridge the gap and address the shortfall in feedstock for PetroSA's gas-to-liquids plant at Mossel Bay.



Source: Econometrix Pty Ltd

# **Growing International Interest**

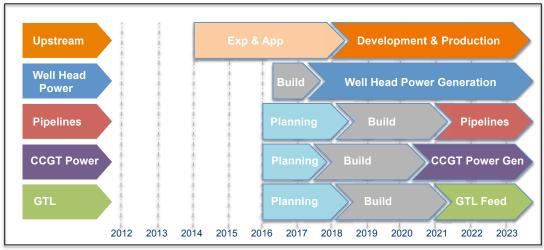
- Recent events in SA offshore acreage.
   Existing participants include Shell, BHPB, Gazprom, Tullow, Forest, Cairn.
- In addition to shale gas, other onshore activity includes CBM ie Sunbird, Kinetiko, Molopo.





# **Shale Gas in South Africa**

- Shale gas impact on US energy security and the economy widely acknowledged;
  - decreasing reliance on imports, revitalizing existing and creating new industries, stimulating growth, increasing employment and improving the balance of payments (IHS research US unconventional oil & gas supported 1.7 million jobs in 2012, forecast 3 million by 2020)
- US Energy Information Administration (EIA) estimates shale gas potential ~370tcf risked technically recoverable (2013 update).
  - Independent Econometrix Report analysis based on 25-50tcf economically recoverable full extent will only be known post exploration, but still transformational to SA's energy balance at these levels.
- Shale likely to play significant role in future iterations of the IRP with a drive to early gas fired power generation.
  - Potential to spark a "Dash for Gas" such as that experienced by the UK which moved from gas fired power generation at 5% of installed capacity in 1990 to 30% by 2002.
- Existing synthetic fuels industry coal and gas to liquids plants at Secunda and Mossel Bay. As conventional feedstock declines these could offer an export market for shale gas based on oil products rather than gas pricing.



Source: Company view



Hypothetical Timeline for Shale and Market Development

 Proposed LNG imports may further accelerate infrastructure development and act as a "bridge" to shale gas

#### **Shale Gas: Core to the National Debate**

#### SA can be a fast growing economy: Motlanthe

#### JUN 25, 2013 | SAPA | 9 COMMENTS

South Africa can become one of the fastest-growing economic hubs in the world if it exploits its natural resources, Deputy President Kgalema Motlanthe said on Monday.

"Fortunately for South Africa, we have among the best solar energy resources in the world, in addition to coal, which makes it logical for us to pursue the exploitation of photovoltaic technologies," he said.

"In addition, we have abundant shale gas resources, the commercial exploitation of which we have to investigate and pursue."

Speaking at the Green Economy National Youth Summit in Cape Town, Motlanthe said the country's uranium deposits were too sizeable to ignore from a beneficiation perspective.

"If this is coupled with the potential for regional interconnection within the Southern African Development

Community sub-region, we have the potential to be one of the fastest-growing economic hubs in the world."

He said the focus would be on environmentally balanced and sustainable energy resources.

Motlanthe listed some of the options available to ensure the country's energy security while adding economic benefits.

One of these was solar power, which held "enormous potential" for regional development in the Northern Cape.

There was also potential for "positive economic spin-offs" from the accelerated exploration of shale gas in the Karoo, as well as from diplomatic efforts to harness the natural gas discoveries in Mozambique and Tanzaria.

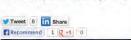
Another option was the pursuit of a knowledge economy through the beneficiation of uranium, and a nuclear programme.

He said heavy reliance in the past on coal as an energy source had resulted in limited rural development.

"[It has resulted in] skewed economic development, with the urban areas and the coalfield areas enjoying better infrastructure, while other rural areas have yet to attain access to modern energy carriers," he said.

The country had since adjusted its energy objectives to ensure diversified sources, security, cost minimisation, increased access, reduced emissions, water conservation and localisation of energy value chains.

\*Accordingly, our energy planning framework seeks to maximise the economic benefits of our electricity, gas and liquid fuels infrastructure development programmes, [while] at the same time... meeting the other set objectives.\*



Media release from Econometrix

2 March, 2012



#### Economic report: Karoo shale gas development could boost GDP and create hundreds of thousands of jobs

- Just 10% of the US EIA estimated 485 tcf (trillion cubic feet) shale resource could add R200 billion to GDP annually and create 700 000 sustainable jobs
- Could provide SA with a solution to its electricity supply and pricing challenges
- Development of gas could ensure South Africa's energy security

The shale gas opportunity in the Karoo could significantly boost South Africa's economy and create hundreds of thousands of Jobs. This is according to an economic report released by Econometrix, the country's largest independent macro-economic consulting firm.

According to the US Energy Information Administration (EIA), the shale gas reserve of the southern Karoo area is estimated at around 485 tcf, which would make it the fifth largest shale gas field in the world.

To measure the potential impact of shale development on the South African economy, Econometrix created an economic impact model to estimate the likely impact of shale gas production. The study took a conservative approach and ran the model on just 4% (20 tcf) and 10% (50 tcf) of the total EIA estimated recoverable resource in the Karo (48 tcf).

According to the report, successful exploration of shale gas in the Karoo could deliver permanent and sustainable jobs, increased government revenues and positive effects on GDP in addition to increased energy security.

On the estimates of 4% (20 tcf) of estimated resource and 10% (50 tcf), there would be an annual economic impact' of more than R80 billion and R200 billion to GDP, which is around 3.3% and 5.6% respectively of total 2010 GDP. To put this into perspective, coal mining value added L3% to the total GDP in 2010.

The average annual government revenue from 20 tcf and 50 tcf production would be around R35 Billion to R90 Billion and it would generate around 300 000 to 700 000 permanent jobs for a period of 25 years, which





#### Report commissioned by Shell

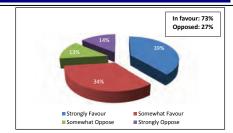


Figure 3. Attitudes towards efforts to determine the presence of natural gas in the Karoo

#### DAILY MAVERICK

#### OPINIONISTA IVO VEGTER

#### The Karoo desperately needs development

🚔 IVO VEGTER 🛛 🖉 💽 🎦 26 JUN 2013 12:44 (SOUTH AFRICA)

Digital & mobile

Every time I visit towns along the N12, they are a little more dilapidated and desperate. This is the backdrop, the quiet tragedy, against which wealthy elites protest the potential development of shale gas resources.

My latest trip through the Karoo has done little to convince me that fears about shale gas drilling justify blocking the economic development of the region. On the contrary, the towns and rural areas need a boost, and urgently. The ill-founded, misinformed, and short-sighted fears of the environmentalist elite cannot trump the needs of local businesses and communities.



Ivo Vegter is a columnist and the author of Extreme Environment, a book on environmental exaggeration and how it harms emerging economies. He



Login Register Subscribe

The



AS MOST of Africa begins to prosper, the continent's biggest economy is faitering. Figures released on May 28th showed that GDP in South Africa rose at an annualised rate of Just DB% in the first quarter. A new report from the African Development Bank (ADB) and the DECD, a rich-country think-tank, trumpeding Africa's economic prospects, mixis South Africa a lowly 48th out of 52 countries in terms of its economic outlook. Yet South Africa's forecast of 2.8% GDP growth for 2013 already looks too optimistic. The sustained 5% rate that the government awys is needed to cut unemployment and poverty seems a world waxy.

One of the few bright spots in the first-quarter GDP figures was mining, but its output is failing again and the threat of strikes clouds its immediate prospects. Around a quarter of South Africa's lotal exports are to Europe, which is mired in recession. Spending at home is also weak. Massmert, a supermarket chain part-comed by Walmart, is only the latest big realier to report poor sales. Consumer confidence is at a nine-year low. Banks are outling





- Company Overview
- Cranemere Project
- **South Africa context**

#### **Summary & Conclusions**



# **Challenger has a Bright Future**

**Company making base asset in Cranemere** 

Near term value catalyst

Enhanced organisational capability

**Emerging strategy** 

- ✓ Unique small cap access to a proven gas to surface shale play in a global Top Ten basin
- ✓ EIA inferred GIP 32tcf, >7 tcf risked recoverable with upside for Fort Brown shales
- Balance of play fairway under application by Shell, Falcon/ Chevron
- ✓ Permit award anticipated in coming months
- ✓ Advanced farm-in discussions
- New management team motivated via equity alignment
- ✓ Tight share register

 Transform Challenger via value accretive organic and inorganic opportunities



2

3

4

### Contact

Robert Willes – MD Challenger Energy Limited

- **Mobile:** +61 410 479 032
- Email:robert.willes@challengerenergy.com.auWeb:www.challengerenergy.com.au

