

# Q1

## QUARTERLY ACTIVITIES REPORT

### WORK PROGRAM

- **2016 work program commenced** - The JV partners have approved a capex budget of US\$45 million. Four rigs are currently drilling exploration/appraisal wells on Linxing (East) before moving to development drilling on Linxing (West). Twenty-one wells planned including five exploration wells on Linxing (East) with the remainder being pilot development wells.
- **US\$ 10.1 million cash for Linxing gas sales received by Joint Venture** - Payment for gas sales up to late February 2016 received by Joint Venture (US\$4.9 million net to Sino Gas), representing 85% of total gas sales proceeds to end February. Future sales proceeds from Linxing PSC will be received monthly. Discussions on the remaining 15% from Sanjiaobei PSC continue.
- **Further exploration success on Linxing (East)** - LXDG-08 well tested at 2.7 MMscf/d the highest Company recorded production test from a vertical/deviated well. LXDG-08 was outside the 31 December 2015 Reserve Area. Significant net pay found in LXDG-09 and LXDG-12 with testing planned for 2Q 2016.
- **23% increase in net 2P Reserves to 552 bcf<sup>1</sup>** - Year End 2015 Reserves increase driven by 16% positive revision to existing Reserves on Sanjiaobei and Linxing (West) and the first Reserves bookings on Linxing (East).
- **China gas macro update** - China approved the 13<sup>th</sup> Five Year Plan in March, which continues to prioritise the development of cleaner energy sources such as natural gas. In each of the three months since the November 2015 price reduction, the NEA has reported year-on-year natural gas demand growth of 18-44%.

### FINANCIAL & CORPORATE

- **31 March 2016 Sino Gas cash balance of US\$59 million**
- **Average gross production of 6.3 MMscf/d and gross revenue during quarter of US\$3.2 million**
- **Capex spend of US\$3.8 million gross in Q1**
- **Sino Gas paid Joint Venture cash calls of US\$1.9 million**
- **Macquarie debt facility** - Agreement to defer repayment of US\$1.5 million due 31 March 2016 to 31 December 2016.

Sino Gas' Managing Director, Glenn Corrie said: "We had a strong start to the year achieving a number of crucial milestones, which positions us to unlock the full value of our assets. The receipt of outstanding gas sales proceeds from the Linxing PSC was an important milestone and clears the path for us to advance towards full-field development. The 23% addition to net 2P reserves and outstanding exploration and appraisal results from Linxing (East) provide further confirmation of the scale and quality of our resource base.

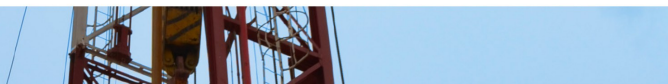
The fundamentals of a growing gas market remain intact with very strong gas demand growth observed during the quarter, spurred by a revision to China natural gas prices in November 2015. Our priorities for 2016 are to finalise payment for gas sold from the Sanjiaobei PSC, ramp-up production to installed capacity of 25 MMscf/d over the year and secure CRR approvals for Linxing (West) and Sanjiaobei."

### 2016 PRIORITIES

- ☑ Update reserves and resource estimates
- ☑ Finalise cash receipt for gas sold from Linxing PSC
- ☐ Finalise cash receipt for gas sold from Sanjiaobei PSC
- ☐ Ramp-up to 25 MMscf/d over the year
- ☐ CRR approvals
- ☐ Prepare for ODPs submission following CRR approvals
- ☐ Complete appraisal of Linxing (East) deep exploration area and submit CRR



<sup>1</sup> Refer to Reserves & Resources statement on page 8 for additional disclosure.



## WORK PROGRAM

### 2016 Work Program

The Joint Venture company has approved a US\$60 million budget (US\$45 million capex / US\$15 million opex). Sino Gas' share of the budget is 49%. The program is focused on maximising production from the two existing central gathering stations (CGS) in order to fully utilise installed capacity of 25 million standard cubic feet (MMscf) per day and continuing to advance Chinese Reserve Report (CRR) and Overall Development Plan (ODP) approvals.

A 21 well drilling campaign is planned including five exploration wells on Linxing (East) and 16 pilot development wells. Testing of the third and fourth horizontal wells drilled last year is expected in the second and third quarters. With sufficient seismic for the CRR submissions completed, no seismic is planned in 2016.

### 2015 Reserves and Resources Update

During the quarter, RISC completed an independent Reserve and Resource assessment as of 31 December 2015 using the SPE (Society of Petroleum Engineers) PRMS (Petroleum Resource Management System) Guidelines. Results of the 20 wells drilled and 25 well tests performed in 2015 were reviewed for the assessment.

Total project Proved plus Probable (2P) Reserves increased 22% to 1,962 Billion cubic feet (Bcf) with Sino Gas' share up 23% to 552 Bcf<sup>1</sup>. The increase in Reserves was driven by a positive revision in Reserves on Linxing (West) and Sanjiaobei and new Reserves bookings on Linxing (East). With the commissioning of the Linxing CGS during the year, the portion of total project 2P Reserves classified as Developed and Producing more than doubled to 52 Bcf (Sino Gas share 16 Bcf)<sup>1</sup>.

The reserves on Linxing (West) and Sanjiaobei increased 16% due to an increase in the estimated recovery factor partially offset by a reduction in estimated Gas Initially In Place (GIIP). The first Reserves and Contingent Resources were assigned on the Linxing (East) prospective area based on the discovery of gas pay and successful demonstration of commercial flow rates in multiple zones during the 2015 Work Program.

RISC's independent economic valuation of Sino Gas' share of the project's Expected Monetary Value (EMV) decreased 16% compared to the year end 2014 estimate to US\$2.6 billion due to

a 27% decrease in gas price, partially offset by increased Reserves and Resources volumes<sup>2</sup>.

RISC's estimate of the net present value (NPV) of Sino Gas' share of 2P Reserves is US\$1.3 billion<sup>2</sup> or US\$13.97/2P barrel of oil equivalent<sup>3</sup>.

Refer to Sino Gas' Reserves and Resources on page 8 for details and additional disclosures and Sino Gas' ASX Announcement on 10 March 2016.

### Health, Safety and the Environment

A total of 108,580 Lost Time Injury free hours were recorded during the first quarter 2016 from the drilling, testing and operations on the Linxing PSC and maintenance on the Sanjiaobei PSC.



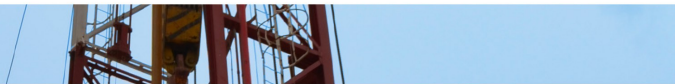
Drilling rig on the Linxing (East) exploration area.

<sup>1</sup> Refer to Reserves & Resources statement on page 8 for additional disclosure.

<sup>2</sup> EMV is based on NPV<sub>10</sub> with a mid-case gas price of US\$7.16/Mscf and lifting costs (opex+capex) of ~US\$1.20/Mscf for mid-case Reserves, Contingent & Prospective Resources.

<sup>3</sup> Mscf to boe conversion 6:1.





### Pilot Program

Gas production continued during the quarter from the Linxing CGS. Production for the quarter averaged 6.3 MMscf/d. Only one minor downtime incident occurred causing a seven hour shut down, resulting in 99.7% uptime for the quarter, a strong result for a recently commissioned plant. Production, was, however, reduced over a period of ten days in February due to an ice blockage in one of the gathering lines connecting wells from the south of the CGS.

Surveying work for the future tie-in of wells in the TB-26 and TB-27 area to the Linxing facility was completed.

### Linxing (West) - Sino Gas 31.7%

Following the completion of the Linxing (East) exploration and appraisal drilling, the rigs will move to Linxing (West) to commence the pilot development well drilling campaign. Thirteen wells are planned to be drilled in 2016 to support the ramp up of production to full installed capacity of ~17 MMscf/d at Linxing CGS. In addition, the two horizontals drilled in 2015, TB-3H and TB-4H, will be tested and tied in to the Linxing CGS during 2016.

### Linxing (East) - Sino Gas 31.7%

The 2016 Linxing (East) drilling campaign has been optimised and the Company now expects to drill five exploration and appraisal wells.

During the quarter, four of the wells were spudded and two, LXDG-09 and LXDG-12, had completed drilling by the end of the quarter. Drilling of LXDG-09 identified 62.7m net pay and LXDG-12 identified 39.3m net pay. These wells are expected to be tested in Q2 2016.

As announced on 29 March 2016, Sino Gas achieved its highest ever vertical/deviated well test rate from the LXDG-08 well. LXDG-08 tested at 2.7 MMscf/d from an unfracted single upper zone and has the potential to produce over 3 MMscf/d at standard operating pressures. This well was drilled outside the 31 December 2015 Reserves area. Two additional wells are currently being fracted and tested.

Refer to Page 6 *Additional Exploration Disclosure*.

Processing and interpretation of the 160km of 2D seismic acquired in Q4 2015 continued during the quarter and is nearing completion.

The data acquired from seismic, drilling and testing is expected to be used to compile the third deep gas Chinese Reserve Report (CRR) for submission to our PSC partner before the end of the year.

Preparation of the ODP for the shallow CBM area in the northeast of the block continued during the quarter. Planning is underway to obtain further data to support the submission, although drilling is not expected this year. Once data has been collected from these additional wells, an economic assessment will be conducted and a final investment decision made on the future development of the shallow CBM area.

### Sanjiaobei PSC - Sino Gas 24%

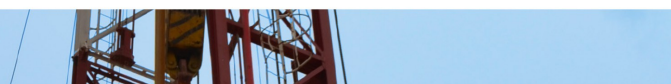
The Sanjiaobei CGS remains offline pending progress on the receipt of gas sales proceeds from our PSC partner, PetroChina CBM. Maintenance work was undertaken on the plant and gathering lines to ensure the field remains ready for operations start up.

No wells were drilled during the quarter on Sanjiaobei. Three wells are included in the 2016 budget.

The Company continues to make good progress towards Overall Development Plan (ODP) approval. The Sanjiaobei CRR has been approved by the Joint Management Committee and is now progressing through PetroChina technical review with approval expected mid-year. Once approved, ODP preparation will commence.



Testing operations on the Linxing (East) exploration area.



## FINANCIAL

### Financial Position

The Company had a cash balance of US\$59 million as of 31 March 2016. In addition, as a result of the receipt of pilot gas sales proceeds for Linxing, the Joint Venture held US\$7.6 million (US\$3.7 million Sino Gas share) of cash at the end of the quarter.

To preserve financial flexibility, the US\$1.5 million repayment of the Macquarie debt facility that was due on 31 March 2016 has been deferred with the agreement of Macquarie to the end of 2016. As such, the total drawn on the facility remains unchanged at US\$10 million.

### Project Funding

Total capital expenditures incurred by the joint venture were US\$3.8 million (unaudited) for the first quarter of 2016. Sino Gas received cash calls of US\$1.9 million from the joint venture for its 49% share of expenditures.

### Pilot Project Revenue

The Joint Venture received US\$10.1 million (US\$4.9 million net to Sino Gas) for pilot gas sold from the Linxing PSC from December 2014 through to late February 2016. Future gas sales receipts will be received monthly. This accounts for approximately 85% of total pilot gas sales proceeds outstanding as of the end of February 2016.

Proceeds for pilot gas sales from the Sanjiaobei PSC (~US\$1 million net to Sino Gas) have been made to our PSC partner, PetroChina CBM (PCCBM), and discussions on the final allocation are progressing, leveraging the successful resolution achieved with our PSC partner on the Linxing PSC, CUCBM. The restart of the Sanjiaobei CGS and further investment will be driven by progress on the receipt of gas sales proceeds.

Sino Gas' 49% share of estimated gas sales in the first quarter was US\$1.6 million, all attributable to the Linxing PSC.

## CORPORATE

### Management

On 1 January 2016, Ian Weatherdon commenced employment as the new Chief Financial Officer as announced on 30 November 2015. Mr Weatherdon is a Chartered Accountant with over 25 years of experience in the oil and gas industry, most recently with Talisman/Repsol in Singapore where he was Vice-President, Finance for the Asia Pacific region.

### Investor Relations and Marketing

Sino Gas continued its commitment to meet regularly with the investment community. Management met with both institutional and retail shareholders during the quarter and participated in the Euroz Investor Conference. The Company also held two conference calls providing an update on the Company's operational and commercial activities and Reserves and Resources increase announced on 10 March 2016. Recordings of both calls can be found on our website at [www.sinogasenergy.com](http://www.sinogasenergy.com), along with copies of our recent presentations, announcements and other investor materials. The Company is an active participant in Australia week in China which is currently underway. Additional investor relations activities across our core markets are planned for 2Q 2016.

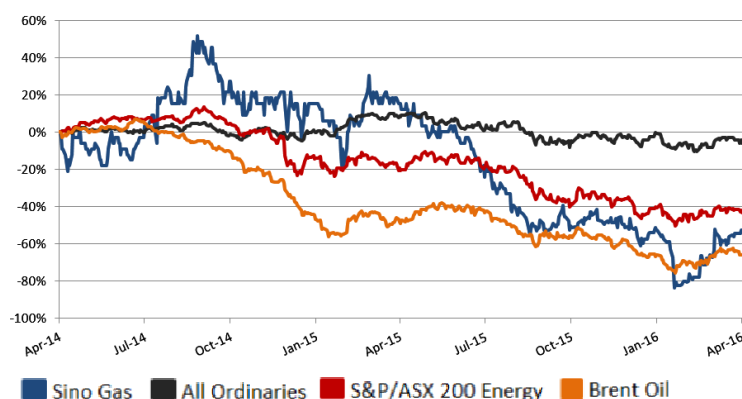
### Annual General Meeting

The company's Annual General Meeting is scheduled for Tuesday, 17 May 2016 in Perth, Australia. The notice of meeting will be dispatched shortly.

### Share Register

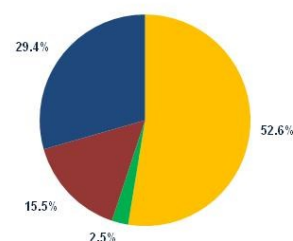
During the quarter, the portion of institutional shareholders fell slightly to 46%. The share of private shareholders increased and the shareholding of Directors and Employees remained unchanged.

### Sino Gas Share Price Performance (ASX:SEH)

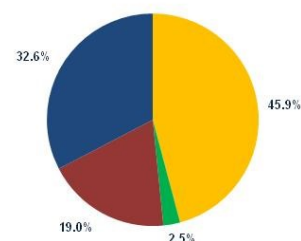


### Share Register Composition

Dec 2015 Register



Mar 2016 Register



■ Institutional Investors  
 ■ Directors, Employees & Related Parties  
 ■ Private Stakeholders > 3m shares  
 ■ Private Stakeholders

## CHINA GAS MARKET UPDATE

### China Natural Gas Demand

Significant gas demand growth has been observed in China since the reduction in regulated industrial gas prices in November 2015. According to the National Energy Administration (NEA), natural gas demand was up 44% year over year in December 2015, 18% in January 2016 and 19% in February 2016.

### 13<sup>th</sup> Five Year Plan

During March, the Government of China approved the 13<sup>th</sup> Five Year Plan (2016-2020). The Plan targets an annual GDP growth rate of at least 6.5% (6.5% to 7% in 2016) and emphasises the importance of increasing the quality of economic growth, such as improved environmental protection. Key points related to energy include:

- Continued emphasis on increasing natural gas' share of the total energy mix.
- Strong measures against air pollution with more natural gas to substitute coal.
- Provide greater support for private investment in the energy sector, in particular for upstream oil and gas.
- Continue efforts to further liberalise natural gas pricing.
- Accelerate the construction of infrastructure and increase foreign company participation and Third Party Access.

## SUPPLEMENTARY INFORMATION

### Historical testing results by zone (2006—Q1 2016)

Zone	Well Tests	Average Thickness (m)	Average Test Length (Days)	Average Flow Rate (Mscf/d)	Max Flow Rate (Mscf/d)
Upper Zone	14	5	11	833	2,901
Mid-Upper Zone	27	7	15	450	3,099
Middle Zone	13	6	25	242	708
Mid-Lower Zone	9	5	19	464	2,542
Lower Zone	10	5	10	656	1,663
Comingled	23	20	19	698	2,569
Horizontal Wells (Middle Zone)	2	1,160	2	7,442	9,775

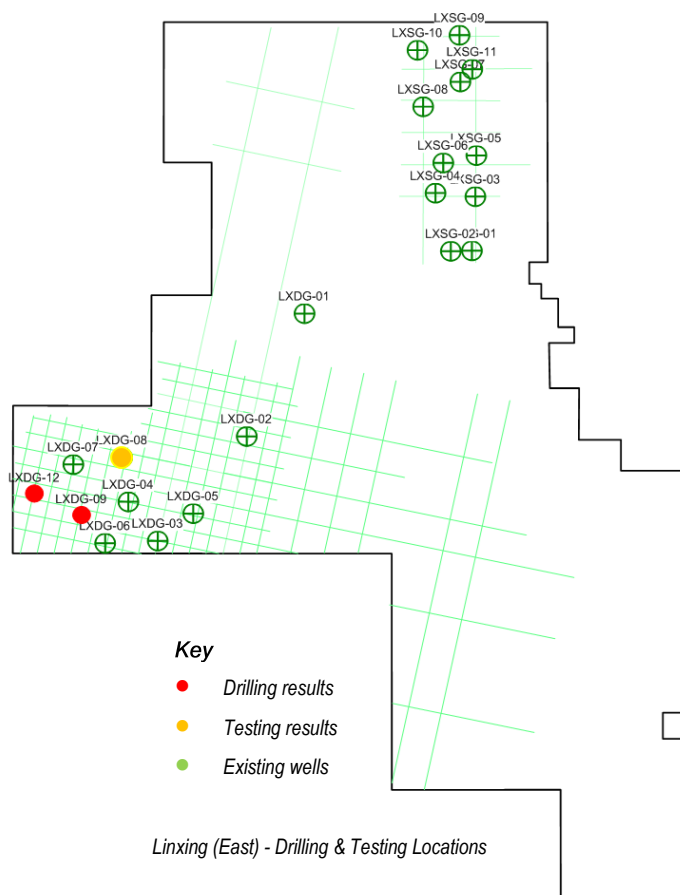
Note: Results have been standardised to a standard field pressure of 200psi.

## Linxing (East) — Additional Exploration Disclosure

Exploration Disclosure	Testing Result	Drilling Result	Drilling Result
(a) The name and type of well.	LXDG-04 (Deviated Well)	LXDG-09 (Deviated Well)	LXDG-12 (Vertical Well)
(b) The location of the well and the details of the permit or lease in which the well is located.	Linxing Production Sharing Contract (PSC). Refer to map below.		
(c) The entity's working inter-	31.70%		
(d) If the gross pay thickness is reported for an interval of conventional resources, the net pay thickness.	Electric wireline logs identified 25.5m of net pay.	Electric wireline logs identified 62.7m of net pay.	Electric wireline logs identified 39.3m of net pay.
(e) The geological rock type of the formation drilled.	Coal bearing formations from the Permian to Carboniferous System.		
(f) The depth of the zones tested.	Test target payzone at a depth of 1447.5~1451.5m	Testing planned in 2016	
(g) The types of test(s) undertaken and the duration of the test(s).	Perforated and gas flow tested for 3 days		
(h) The hydrocarbon phases recovered in the test(s).	Natural gas		
(i) Any other recovery, such as, formation water and water, associated with the test (s) and their respective proportions.	None		
(j) The choke size used, the flow rates and, if measured, the volumes of the hydrocarbon phases measured.	Choke size 8mm. Only-perf test gas rate was 2,693,400scf/d with well head pressure of ~725psi.		
(k) If applicable, the number of fracture stimulation stages and the size and nature of fracture stimulation applied.	No fracture stimulation applied		
(l) Any material volumes of non-hydrocarbon gases, such as, carbon dioxide, nitrogen, hydrogen sulphide and sulphur.	Gas sample from adjacent well in the tested pay zone shows CH4 98.654%, C2~C6 0.819%, CO2 0.527%.		
(m) Any other information that is material to understanding the reported results.	None		

Key

● Drilling results





## ABOUT SINO GAS & ENERGY HOLDINGS LIMITED

Sino Gas & Energy Holdings Limited (Sino Gas, ASX: SEH) is an Australian energy company focused on developing Chinese natural gas assets. Sino Gas holds a 49% joint venture interest in Sino Gas & Energy Limited (SGE) through a strategic partnership with MIE Holdings Corporation (MIE, SEHK32: 1555). SGE has been established in Beijing since 2006 and is the operator of the Linxing and Sanjiaobei Production Sharing Contracts (PSCs) in the Ordos Basin, Shanxi province.

SGE has a 64.75% interest in the Linxing PSC, partnered with CUCBM, a subsidiary of CNOOC, and a 49% interest in the Sanjiaobei PSC, partnered with PetroChina CBM, a subsidiary of CNPC. SGE has a 100% working interest during the exploration phase of the PSC, with SGE's PSC partners being entitled to back-in upon Overall Development Plan (ODP) approval, by contributing development and operating costs in line with their PSC interest.

The PSCs are located in the Ordos Basin and cover an area of approximately 3,000km<sup>2</sup>. The Ordos Basin is the largest gas producing basin in China. The region has mature field developments with an established pipeline infrastructure to major markets. Rapid economic development is being experienced in the province in which Sino Gas' PSCs are located and natural gas is seen as a key component of clean energy supply in China.

Sino Gas & Energy Holdings Limited (ASX: SEH) was admitted to the Official List of ASX in 2009.



### Sino Gas & Energy Holdings Limited

Investor Relations

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Our latest announcements and presentations can be found on our website:

[www.sinoenergy.com](http://www.sinoenergy.com)

## RESERVES AND RESOURCES

Sino Gas' Attributable Net Reserves & Resources are summarised below:

SINO GAS' ATTRIBUTABLE NET RESERVES AND RESOURCES	1P RESERVES (Bcf)	2P RESERVES (Bcf)	3P RESERVES (Bcf)	2C CONTINGENT RE-SOURCES (Bcf)	P50 PROSPECTIVE RESOURCES <sup>1</sup> (Bcf)	EMV <sub>10</sub> (US\$m)
<b>31 December 2015</b> (Announced 10 March 2016)	362	552	751	814	733	2,569
<b>31 December 2014</b> (Announced 3 March 2015)	350	448	557	739	649	3,076
CHANGE (+/-)%	+23% (2P Reserves)			+10%	+13%	-16%
<b>Total Project</b> 31 December 2015	<b>1,250</b>	<b>1,962</b>	<b>2,723</b>	<b>2,831</b>	<b>2,954</b>	<b>N/A</b>

Note 1: Prospective resources are the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Sino Gas' share of the project's success case Net Present Value and risk weighted EMV are summarised below:

SINO GAS' ATTRIBUTABLE ECONOMIC VALUE	NPV <sub>10</sub> (US\$m)	EMV <sub>10</sub> (US\$m) <sup>2</sup>
<b>Reserves</b>	1,284	1,285
<b>Contingent Resources</b>	763	689
<b>Prospective Resources</b>	1,022	595

Note 2: EMV is based on NPV<sub>10</sub> with a mid-case gas price of US\$7.16/Mscf escalated at 3.75% per year and lifting costs (opex+ capex) inclusive of inflation of 2.5% per year of ~US\$1.2/Mscf for mid-case Reserves, Contingent & Prospective Resources.

### Resources Statement & Disclaimer

The statements of resources in this Release have been independently determined to Society of Petroleum Engineers (SPE) Petroleum Resource Management Systems (PRMS) standards by internationally recognized oil and gas consultants RISC. These statements were not prepared to comply with the China Petroleum Reserves Office (PRO-2005) standards or the U.S. Securities and Exchange Commission regulations and have not been verified by SGE's PSC partners CNPC and CUCBM. EMV is the probability weighted net present value (NPV), including the range of project NPVs and the risk of the project not progressing. Project NPV<sub>10</sub> is based on a mid-case gas price of US\$7.16/Mscf escalated at 3.75% per year and average lifting costs (opex+capex) inclusive of inflation of 2.5% per year of ~US\$1.2/Mscf for mid-case Reserves, Contingent & Prospective Resources. All resource figures quoted are unrisks mid-case unless otherwise noted. Sino Gas' attributable net Reserves & Resources assumes PSC partner back-in upon ODP approval, CBM Energy's option to acquire an interest of 5.25% in the Linxing PSC (by paying 7.5% of back costs) is exercised, and MIE fulfil funding obligations under the strategic partnership agreement. Reserves & Resources are net of 4% in-field fuel for field compression and field operations. Reference point is defined to be at the field gate. No material changes have occurred in the assumptions and subsequent work program exploration and appraisal results have been in line with expectations.

Certain statements included in this release constitute forward looking information. This information is based upon a number of estimates and assumptions made on a reasonable basis by the Company in light of its experience, current conditions and expectations of future developments, as well as other factors that the Company believes are appropriate in the circumstances. While these estimates and assumptions are considered reasonable, they are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, gas prices, exploration, acquisition, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward-looking information is no guarantee of future performance and, accordingly, investors are cautioned not to put undue reliance on forward-looking information due to the inherent uncertainty therein. Forward-looking information is made as at the date of this release and the Company disclaims any intent or obligation to update publicly such forward-looking information, whether as a result of new information, future events or results or otherwise.

### Competent Persons Statement

Information on the Reserves and Resources in this annual report is based on an independent evaluation conducted by RISC Operations Pty Ltd (RISC), a leading independent petroleum advisory firm. The evaluation was carried out by RISC under the supervision of Mr Peter Stephenson, RISC Partner, in accordance with the SPE-PRMS guidelines. Mr Stephenson has a M.Eng in Petroleum Engineering and 30 years of experience in the oil and gas industry. Mr Stephenson is a member of the SPE and MChemE and is a qualified petroleum reserves and resources evaluator (QPPRE) as defined by ASX listing rules. Mr Stephenson consents to the inclusion of this information in this release. RISC believes that the reserve and resource assessment fairly represents the available data. RISC is an independent advisory firm that evaluates resources and projects in the oil and gas industry. RISC offers the highest level of technical, commercial and strategic advice to clients around the world. RISC services include the preparation of independent reports for listed companies in accordance with regulatory requirements. RISC is independent with respect to Sino Gas in accordance with the Valmin Code, ASX listing rules and ASIC requirements.