

# Quarterly Report

For the three months ending 30 June 2014

# Q2

2014 Activities Report

## FOCUSED ON THE STRATEGY — PIPELINE PRODUCTION IN 2014

- ▶ Drilling program underway — 19 wells drilled in 2014
- ▶ Well testing program — 18 wells fraced in 2014
- ▶ First horizontal well successfully tested
- ▶ First CRR approval on Linxing (East) received
- ▶ Funding position strengthened with Macquarie debt facility
- ▶ Board and management strengthened

Following the commencement of the 2014 work program in the first quarter, Sino Gas & Energy Holdings Limited's (ASX:SEH, Sino Gas, the Company) ramped-up field operations and made significant progress towards each of the Company's key priorities of securing project approvals, improving single well productivity and maximising production.

Approval for the Chinese Reserve Report (CRR) submitted on Linxing (East) has been received from the Ministry of Land & Resources (MOLAR). This is the first major approval in the two-step regulatory process to develop gas assets into producing fields under Production Sharing Contracts (PSCs) in China. Drilling of the thirteen exploration wells required for the first round of CRR submissions on Linxing (West) and Sanjiaobei has been completed. Furthermore, deep exploration well LXDG-02 completed drilling in the western portion of Linxing (East), with initial electronic wireline results identifying 7.2m of net pay.

After careful analysis and review to optimise stimulation treatment, significant gas flows were recorded on Linxing (West) from TB-26 and the first horizontal well on Linxing (West). A flow rate of 1.2 million standard cubic feet (MMscf) per day (approximately 1.66 MMscf/day calculated at standard field pressure of 200 psi) was achieved from an unfraced lower zone of TB-26 in the prospective area. Furthermore, following a nine stage fracture stimulation treatment of the first horizontal well, flow testing was conducted over 80 hours in two stages, achieving a gas flow rate of 4.93 MMscf/day or over 8 MMscf/day calculated at 200 psi. To date, RISC's economic evaluation has been modelled based on a development case employing 100% vertical wells, and this result provides a confirmation that the use of horizontal well technology can potentially have a positive impact on project economics. Three single zones frac tested for approximately one week across both PSCs resulted in gas flows of between 260-450 thousand standard cubic feet per day from one upper and two middle zones. In addition, long term flow testing of two wells over two months in the discovered area of Sanjiaobei produced parameters for CRR compilation in line with expectations.

Delivery of equipment to the Sanjiaobei central gathering station at Qiaojiaoshan was completed during the quarter and construction of the third party pipeline is complete, and will be connected upon commissioning of the central gathering station. Design for the infield gathering lines has commenced and a selection process for additional well locations are currently being chosen for the north/west portion of the block, with rigs expected to be mobilized by Q4 to commence drilling. Site preparations have been completed on the Linxing Central Gathering Station and major components are ready to be transferred to site starting in late July. Initial land lease negotiations have been finalised on some sections of the infield gathering pipelines allowing construction to commence between TB-07 and TB-11. Five production wells have been completed so far in 2014 as a part of the pad drilling campaign in the southern portion of Linxing (West), to increase the number of wells available for tie-in into the pilot pipeline production program.

Glenn Corrie was appointed as Chief Executive Officer in July and is expected to commence with the Company mid-August. Mr Corrie's technical and commercial capabilities as well as his senior management experience are an ideal fit with Sino Gas' requirements as it moves through the development phase and into production at its Ordos Basin assets. In addition, Philip Bainbridge joined the board as a Non-Executive Director who will be transitioning in to the role of Chairman; and Frank Fu joined the Beijing team as Chief Operating Officer.

During the quarter the Company entered into a binding term sheet with Macquarie Bank for up to US\$50 million under a structured term debt facility. As at 30 June 2014, MIE Holdings Corporation had completed its US\$90 million dollar commitment in relation to qualifying PSC expenditure to secure a 51% interest in the PSC Operator. Sino Gas is expected to be cash called for approximately \$US25 million for its 49% share of PSC expenditure and administration costs in 2014.

Major progress has been made on the agreed objectives and the Operations team have a clear strategy in place to commence pilot pipeline gas production and are focused on the implementation of that strategy. 2014 is shaping up to be another transformational year for Sino Gas, as we enter an exciting phase of developing our unconventional gas assets and remain focused on monetising the assets and increasing shareholder value.

Gavin Harper, Chairman

## FINANCIAL

### Financial Position

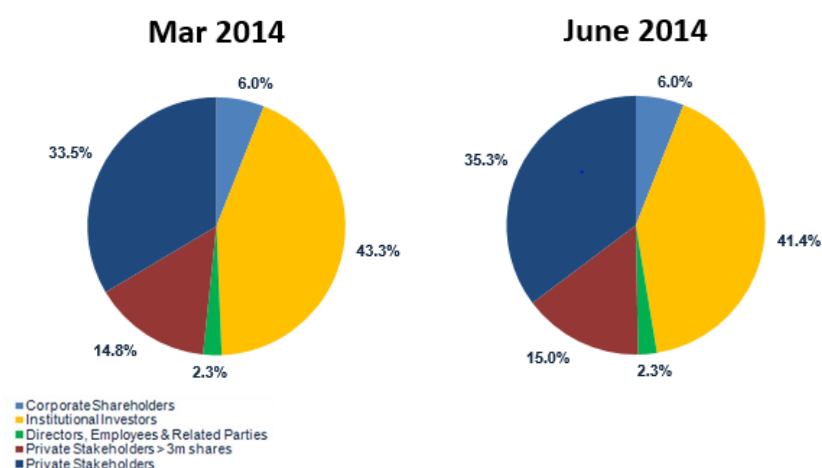
Sino Gas' cash position at the end of the quarter was approximately US\$57.1 million. As at 30 June 2014, MIE had completed its US\$90 million dollar commitment in relation to qualifying PSC expenditure to secure a 51% interest in SGE. SGEH is expected to be cashed called for approximately US\$24 million dollars in relation to qualifying PSC expenditure in 2014.

In June, the Company announced that it had entered into a binding term sheet with Macquarie Bank for up to US\$50 million under a structured term debt facility. Under the terms of the facility, Tranche A of US\$10m is committed and available to be drawn down on execution of the facility documentation and satisfaction of customary conditions precedent (including finalising due diligence). Tranche B of US\$40m is subject to satisfaction of further conditions precedent including Macquarie obtaining internal credit approvals. Refer to ASX Announcement on 25 June 2014 for further details on the key terms of the facility.

During the quarter, SGEH contributed US\$553,000 to non-qualifying PSC expenditure to the head office general and administration costs of SGE. Sino Gas' 49% share of the non-qualifying PSC expenditure of SGE for 2014 is forecast to be approximately US\$1 million.

### Share Register

Moving into the second half of the 2014, the register continues to contain a high proportion of institutional investors, which is currently at 41.4%, compared to 43.3% at the end of the first quarter.



### Q2 2014 Highlights

- ▶ 2014 seismic data interpretation completed in preparation for CRR submissions
- ▶ 2014 Drilling program — 19 wells completed drilling.
- ▶ 2014 Testing Program—Four testing teams fraced 19 wells.
- ▶ Pilot – Delivery of equipment to central gathering station completed and third-party spur pipeline completed on Sanjaobei. Linxing central gathering station foundation complete and pipeline construction commenced.
- ▶ Appointment of Mr Glenn Corrie as Chief Executive Officer and commencement of Frank Fu as Chief Operations Officer
- ▶ Binding term sheet signed with Macquarie Bank

### SHARE PRICE ACTIVITY FOR THE SECOND QUARTER 2014

High	\$0.165
Low	\$0.13
Last	\$0.16
Average Daily Volume	3,486,777 (2013 Average 3,174,470)

### ROLLING 3 MONTH SHARE PRICE PERFORMANCE (ASX:SEH)





## Board and Management

On 1 June, Frank Fu commenced as Chief Operating Officer (COO), bringing extensive unconventional natural gas operational experience in Shanxi Province, including operating experience on Sino Gas's acreage.

On July 16, the company announced the appointment of Mr Glenn Corrie as Chief Executive Officer. It is expected that Mr Corrie will start with the Company mid-August. Former Managing Director & CEO, Robert Bearden, retired in June for personal and family reasons.

In addition, the Company announced the succession of current Non-Executive Director Philip Bainbridge to the role of Non-Executive Chairman will be effective 1 September 2014, at which point current Chairman Gavin Harper will transition to a Non-Executive Director role.

## Occupational Health & Safety

To the end of the second quarter, approximately 480,000 OH&S incident free man-hours have been recorded executing the 2014 seismic, drilling and testing programs (2013 total: 2,000,000).

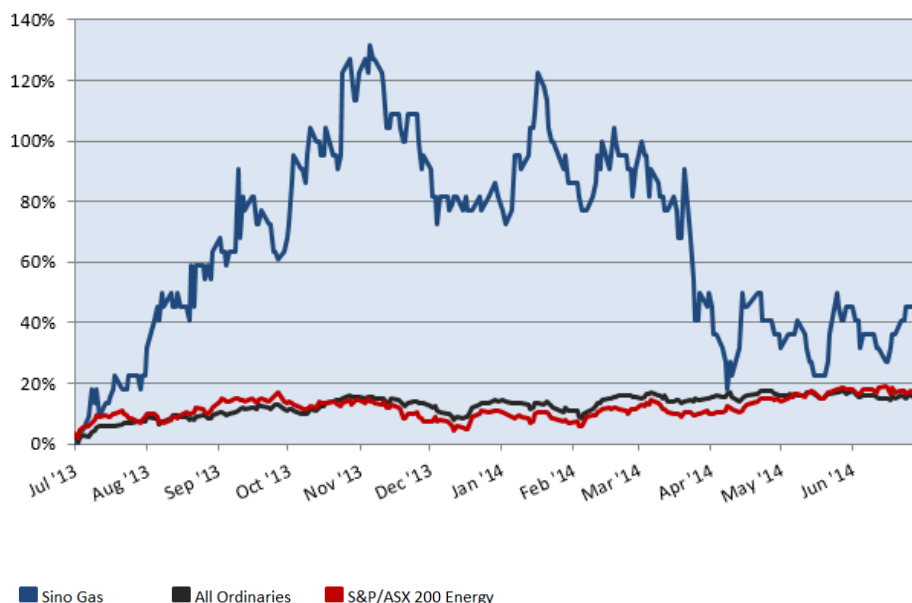
## Investor Relations and Marketing

During the quarter, the Company continued its engagement of the Australian and Asia-Pacific investment communities including presentations to a number of institutions, banks and conferences, including Scotiabank, Credit Suisse and UBS.

The Company also held two site visits, which were attended by major institutional investors, funds and banks. Newly appointed Non-Executive Director Philip Bainbridge joined Robert Bearden (former Managing Director & CEO) on the second site visit and met staff in the Beijing office.

## Share Price Performance (ASX:SEH)

### Relative to All Ordinaries Index and S&P/ASX 200 Energy Indices



## 2014 Outlook - Key Milestones

- ▶ Negotiations on additional Gas Sales Agreements continuing
- ▶ Commence submission of additional Chinese Reserve Reports
- ▶ Commencement of pipeline gas production
- ▶ Overall Development Plan compilation and preparation for submission
- ▶ Additional wells continue to be brought online as drilling is com-

### **Linxing (West) - Sino Gas 31.7%<sup>1</sup>** **Shanxi Province, People's Republic of China**

Interpretation of 285km of seismic lines has been completed by a third party contractor and the results are currently being reviewed by the Operations team.

During the quarter the final exploration well of eleven wells required to fulfil the drilling requirements for CRR submission was spud and by the time of writing had been drilled to total depth. Initial electronic wireline logs at exploration well TB-25, which completed drilling in the central eastern portion of the block, identified 11.6m of net pay.

Five production wells have been completed so far in 2014 and an additional three are currently drilling as a part of the pad drilling campaign in the southern portion of Linxing (West), to increase the number of wells available for tie-in into the pilot pipeline production program. Electric wireline logs of the first two potential pilot production wells drilled for the year in the southern portion of the block identified 21.1 and 17.2 metres of net pay. In addition, the second horizontal well was spud before the end of the quarter and has commenced drilling of the lateral section.

Testing teams continued frac testing operations across Linxing (West) during the quarter, with the aim of testing wells to be available for the pilot pipeline production program in the south, and gathering important reservoir information in the northern portion. Exploration well TB-18 was tested in the central western portion of the prospective area at a rate of 291,000 scf/day for six days from an upper level zone. Refer to the exploration results table on page 6 for additional disclosure.

Following the frac optimisation program to improve single well productivity, the first horizontal well was fraced in a five metre middle level zone in the southern portion of the block. Following a nine stage fracture stimulation treatment, flow testing was conducted over 80 hours in two stages, achieving a gas flow rate of 4.93 MMscf/day at a relatively stable flowing tubing head pressure of 2,008 psi (over 8 MMscf/day calculated at standard field pressure of 200 psi). Pressure build-up testing was conducted in between the two testing phases for eight days, with initial results indicating an estimated formation pressure of 3,116 psi.

A lower four metre pay zone was perforated on TB-26 in the prospective north-western portion of Linxing (West). Flow testing conducted over four days achieved a stable flow rate of 1.2 MMscf/day at a relatively stable flowing tubing head pressure of 1,740 psi (approximately 1.66 MMscf/day calculated at standard field pressure of 200 psi). The well was subsequently shut in for pressure build up testing, to gather reservoir information for the Chinese Reserve Report. The result was particularly encouraging, given that the testing was conducted in the prospective area which does not currently have any contingent resources assigned and was achieved from a less prolific lower zone without frac stimulation.

### **Linxing PSC (East) - Sino Gas 31.7%<sup>1</sup>** **Shanxi Province, People's Republic of China**

The second exploration well LXDG-02 was spud on existing seismic lines on Linxing (East) during the quarter and had completed drilling by time of writing. Initial electronic wireline results identified an encouraging 7.2m of net pay, and the well is scheduled to be frac tested in Q3. The well was drilled further to the south of LXDG-01, with the aim of gaining a further understanding of the significant underexplored deeper resource potential within Linxing (East).

Sino Gas has received official notification that the CRR submitted on Linxing (East) for the coalbed methane resource has been approved by the Ministry of Land & Resources (MOLAR).

Approval of the CRR is the first step in a two-step regulatory process to develop gas assets into producing fields in China. It forms the basis of the Overall Development Plan (ODP) which, once approved, allows the commencement of commercial development for that specified resource. Preparation for the ODP has commenced on schedule, while dewatering operations continue on six wells.

<sup>1</sup>Refer to page 7 for additional disclosure on Sino Gas' Production Sharing Contracts.





## Sanjiaobei PSC - Sino Gas 24%<sup>1</sup>

Shanxi Province, People's Republic of China

During the quarter, two exploration wells completed drilling on the eastern edge of the fine seismic grid. Initial electric wireline results indicated that 12.7 and 4.9 metres of net pay was discovered during drilling at SBJ18 and SJB25 respectively.

Fracturing and well tests continued during the quarter. Long term flow testing of two existing wells (SJB14 and SJB16) in the discovered area fraced in 2013 was completed, with both wells flow tested for over two months producing results in line with expectations and providing parameters for the compilation of the CRR. SJB15 and SJB19 commenced testing on the eastern edge of the fine seismic grid, with preliminary results demonstrating commercial post-frac gas flows. In addition, two wells have been fraced and commenced the flow back process, whilst two wells (SJB10 and SJB22) were perforated awaiting frac testing at the end of the quarter.

## Pilot Program Update

Site preparations have been completed on the Linxing Central Gathering Station and major components are ready to be transferred to site starting in late July. Both the design and surveying work has been completed for the infield gathering and third-party spur pipelines. Initial land lease negotiations have been finalised on some sections of the infield gathering pipelines allowing construction to commence between TB-07 and TB-11. Construction is expected to take approximately three months to complete, with seven wells initially planned to be connected into the pilot pipeline production program (including the first horizontal well). Completion of this section of pipeline will allow these wells to be hooked up to compressed natural gas (CNG) facilities ahead of scheduled pipeline gas sales later in the year. With the commencement of construction on the internal gathering lines underway, the third-party spur pipeline is expected to begin construction in Q3, with completion expected to coincide with the commissioning of the central gathering station towards the end of the quarter.

Delivery of equipment to the Sanjiaobei central gathering station at Qiaojiaoshan was completed during the quarter in accordance with the approval of the Joint Management Committee, with the installation of flare stack. Construction of the third party pipeline is complete, and will be connected upon commissioning of the central gathering station. Design for the infield gathering lines has commenced and a selection process for additional well locations are currently being chosen for the north/west portion of the block, with rigs expected to be mobilized by Q4 to commence drilling. Wells for the program are expected to be tied into the pilot pipeline production program as they are completed.



Photo: Commencement of pipeline construction on Linxing (West).



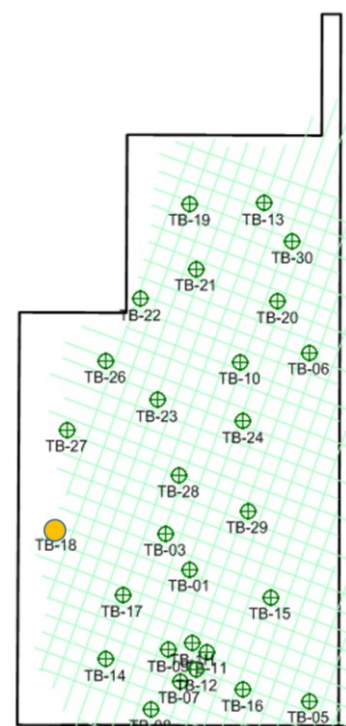
Photo: Completion of foundation at Linxing (West) Central Gathering Station

<sup>1</sup>Refer to page 7 for additional disclosure on Sino Gas' Production Sharing Contracts.

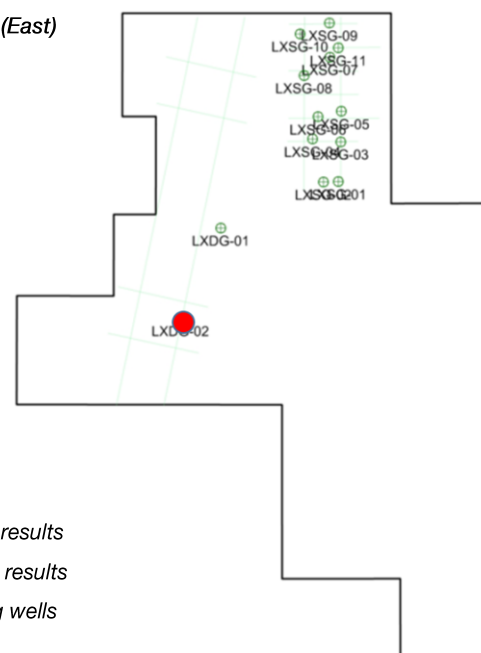
## EXPLORATION RESULTS DISCLOSURE

Exploration Disclosure	Testing Result	Drilling Result
(a) The name and type of well.	TB-18 (Deviated Well)	LXDG-02 (Vertical Well)
(b) The location of the well and the details of the permit or lease in which the well is	Linxing Production Sharing Contract (PSC). Refer to map on right.	
(c) The +entity's working interest in the well.	31.70%	
(d) If the gross pay thickness is reported for an interval of conventional resources, the net pay thickness.	Electric wireline logs identified 33.4 of net pay y (24.6m vertical)	Electric wireline logs identified 6.5m 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 was at a depth of 1,544-1,558m.	Single zone test scheduled in 2014.
(g) The types of test(s) undertaken and the duration of the test(s).	Fractured and gas flow test-ed for 6 days.	
(h) The hydrocarbon phases recovered in the test(s).	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 5mm. Needle valve used. Post-frac test gas rate was 291,000 scf/d with well head pressure of ~2.1MPa.	
(k) If applicable, the number of fracture stimulation stages and the size and nature of fracture stimulation ap-	One stage	
(l) Any material volumes of non-hydrocarbon gases, such as, carbon dioxide, nitrogen, hydrogen sulphide and sulphur.	Adjacent well gas sample from same pay zone shows CH4 92.189%, C2~C6 7.208%, CO2 0.354%, N2 0.249%.	
(m) Any other information that is material to understanding the reported re-sults.	None	

Linxing (West)



Linxing (East)



### Key

- Drilling results
- Testing results
- Existing wells

Historical testing results by zone (2006—Q2 2014)

Zone	No. of Well Test	Average Thickness (m)	Average Test Length (Days)	Average Flow Rate (Mscf/d)	Max. Flow Rate (Mscf/d)
Upper Zone	9	4.6	13.3	796	2901
Mid-Upper Zone	12	7.7	17.5	303	969
Middle Zone	12	5.7	27.3	184	708
Mid-Lower Zone	4	5.5	36.8	128	230
Lower Zone	2	4.0	19.0	894	1663
Comingled Tests	4	30.1	49.5	208	542



SGE's interest in the Linxing PSC with CUCBM is 64.75% and 49% for the Sanjiaobei PSC held with PCCBM. 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.

In the formation of the strategic partnership, MIE acquired 39 million ordinary shares in SGE from Sino Gas for a consideration of US\$10 million. In addition, MIE is progressively investing a further US\$90 million of qualifying expenditure into SGE to secure an interest of 51% in the issued capital of SGE. Refer to Note 23 Interests in joint ventures of the notes to the consolidated financial statements of the 31 December 2013 year end accounts for more information.

As at 30 June 2014, MIE has completed its US\$90 million dollar commitment in relation to qualifying PSC expenditure to secure a 51% interest in SGE. This amount comprised of US\$23.7 million in loan notes and US\$66.3 million towards cumulative redeemable preference shared (CRPS) which have been converted into ordinary shares of SGE.



The PSCs are located in the Ordos Basin and cover an area of approximately 3,000km<sup>2</sup>. The Ordos Basin is the second largest onshore oil and 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 provinces in which Sino Gas' PSCs are located and natural gas is seen as a key component of clean energy supply in China.

No petroleum tenements were acquired or disposed of during the quarter.

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



## SINO GAS' RESERVES & RESOURCES

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

Sino Gas' Attributable Net Reserves & Resources	1P RESERVES (Bcf)	2P RESERVES (Bcf)	3P RESERVES (Bcf)	2C CONTINGENT RESOURCES*	P50 PROSPECTIVE RESOURCES <sup>†</sup> (Bcf)	EMV <sub>10</sub> (\$US\$m)
31 December 2013 (Announced 4 March 2014)	129	291	480	850	1,023	2,258
31 December 2012 (Announced 20 March 2013)	32	94	199	653	885	1,556
CHANGE (+/-)%	+211% (2P Reserves)			+30%	+16%	+45%
Total Project 31 December 2013	466	1,068	1,786	2,941	3,978	N/A

\*Note: Contingent and Prospective Resources have not been risked for the risk of development and discovery. The estimated quantities of petroleum may potentially be recovered by the application of future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration and appraisal 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 ("NPV") and risk weighted EMV are summarised below:

SINO GAS' ATTRIBUTABLE ECONOMIC VALUE	NPV <sub>10</sub> (\$US\$m)	EMV <sub>10</sub> (\$US\$m)
Reserves	625	653
Contingent Resources	828	754
Prospective Resources	1,350	851
TOTAL		2,258

### 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 (Announced 4 March 2014) using probabilistic estimation methods. 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 wellhead gas price of \$US8.79/Mscf and lifting costs (opex+capex) of ~US\$1.5/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 Resources in this release 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. RISC consents to the inclusion of this information in this release.