QuamIA
Quality Company Research

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Significant New Chinese Natural Gas Resources Nearing Development

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Sino Gas & Energy Holdings Ltd. — Strong Buy

Australian Stock Exchange: SEH

INITIAL COVERAGE
Industry: Coalbed Methane (China)

Company Profile				
Since 2006 SEH has identified significant new unconventional natural gas/CBM resources in the prolific Ordos Basin of China's Shanxi province. Significant further potential exists as the company has drilled exploration and appraisal wells on less than thirty five percent of its permitted land with very strong initial production rates on a number of these wells. SEH's Gas Initially In Place increased to over 10 Tcf as of a recent third-party evaluation.	Risk Rating	**High**	**CBM Resources (Mid Case 100%) (BCF)**	
	Investment Rating	**Strong Buy**	2P Reserves	**21**
	Current Price	**A$0.04**	2C Contingent Resources	**1,182**
			Mid Case Prospective Resources	**1,695**
			Gas initially in place	**10.7 Tcf**
	Trade Statistics: 9 December 2011		**Financial Information Six Months (30/6/2011)**	
	52-Week Range	**A$.037 – A$.082**	Working Capital (000)	**(A$ 749)**
	Ordinary Shares Outstanding	**1,120,417,120**	Total Assets (million)	**A$ 33.4**
	Market Cap	**A$ 44.5 million**	Total Equity (million)	**A$ 29.8**
	Daily Share Trading (50-day)	**797,638 shares**		
	Indicated Annual Dividend	**nil**	Operating Revenue	**A$ 0.0**
	Dividend Yield	**nil**	Net Loss	**(A$ 3.6)**

- **China, whose need for significant new energy resources for the foreseeable future is a given, is focused on broadening its domestic energy resources with an increased focus on all non-coal fuels.** We expect SEH's coal bed methane (CBM)-related exploration and development activities will benefit significantly from China's need for new energy resources. With increasing use of all forms of natural gas reducing China's reliance on dirty coal while also reducing the adverse environmental effects of coal-fueled economic growth, the outlook for natural gas in China is bright. CBM, one of the cleanest burning of all fossil fuels, is abundant in China's huge coal fields—the world's largest.

- **The Chinese government has specifically targeted domestic natural gas (including CBM) as a "favored industry," meaning the success of companies like SEH is of interest to national leaders.** The Chinese government has introduced various new incentives for increased natural gas and CBM exploration and production, including lower taxes on production, increased production subsidies and higher wellhead prices.

- **SEH is a very attractive exploration stage pure play for investors who want to invest in China's nearly limitless need for energy.** After only six years of exploration—a relatively short time in the energy business—the company has commenced the transition towards development following significant resource and further reserve growth.

- **We are initiating our coverage of SEH with an Investment Rating of "Strong Buy" and a Risk Rating of "High."** Compared to the company's A$44.5 million market cap, SEH's 10.7 TCF of Gas Initially In Place (GIIP) is very large. However, much work remains to be done over the next 12 months to transform some portion of gas resources into additional commercially valuable reserves and actual gas production.

- **We are not setting a Target Price on SEH at this time.** We do not believe the company's current share price fully reflects SEH's potential to produce significant volumes of gas as its pilot well count increases over the next year or two and its gas reserves base is better defined in 2012. In our view, SEH's recent announcement that it had received and was reviewing

expressions of possible strategic interest is just one indicator of the potentially large gap between SEH's modest current market value and its private value for a potential suitor.

SEH is expected to release its annual report to investors and its updated reserves report in early 2012. Subsequent to the release and analysis of this information, QuamIA will provide an update company note and target price for SEH.

SUMMARY SIX-MONTH FINANCIAL STATEMENTS (FY2010 and FY2011)

Fiscal Yearend = 31 December	30 June 2011	30 June 2010
INCOME STATEMENT (A$ 000)		
TOTAL OPERATING REVENUES	0	0
COST OF REVENUES	0	0
GROSS PROFIT	0	0
TOTAL OPERATING EXPENSES	(1,806)	(1,290)
LOSS FROM CONTINUING OPERATIONS		
TOTAL NON-OPER. INCOME / (EXPENSES)	(625)	1,848
EARNINGS/(LOSS) BEFORE TAXES	(2,431)	558
INCOME TAXES	0	0
EQUITY IN AFFILIATE INCOME	0	0
OTHER COMPREHENSIVE INCOME/(LOSS)	(1,130)	709
NET INCOME/(LOSS) AVAILABLE TO COMMON S. H.	(3,560)	1,267
Earnings Per Share (Basic)	(0.0026)	0.0032
Earnings Per Share (Fully-Diluted)	(0.0026)	0.0032
Weighted Average Shares Outstanding (000) (Basic and F.D.)	941,640	175,207
STATEMENT OF FINANCIAL POSITION (A$ 000)	**30 June 2011**	**31 December 2010**
Assets		
Total Current Assets	2,864	8,613
Total Non-Current Assets	30,585	28,791
Total Assets	33,449	37,404
Liabilities		
Total Current Liabilities	3,614	6,280
Total Non-Current Liabilities	-	-
Total Liabilities	3,614	6,280
Equity	29,835	31,124
Total Liabilities and Equity	33.449	37,404

Sources: ***Company regulatory filings, analyst calculations***

All financial figures in this report are expressed in Australian dollars (A$) or US dollars (US$) unless otherwise noted.

Any currency exchange rates used are either averages for the period indicated (typically for income statement items) or are the exchange rate at the end of day in New York on the date indicated (typically for balance sheet items).

Words and phrases in **bold-faced font** are defined in Appendix One of this report.

COMPANY BACKGROUND AND CORPORATE STRUCTURE

Sino Gas & Energy Holdings Limited was founded in 2005 and was used as a vehicle to initiate the farm-in of 50 percent of Chevron's coalbed methane-related production sharing contracts (PSCs) in China's large Ordos Basin, which contains the country's second largest coal reserves. In 2008 SEH increased its interest in these PSCs to 100 percent. Over the past six years SEH has drilled 15 exploration and appraisal wells on the three authorized areas of exploration (Sanjiaobei, Linxing East and Linxing West) that comprise a total of 3,000 square kilometers (1,158 square miles).

The company's exploration success has delivered large scale independently certified reserves and resources of 2.9Tcf and consistent commercial flow rates across both Sanjiaobei and Linxing.

Based on this success, the company has commenced the transition towards development and project commercialization. Sino Gas has appointed China's National Centre for Coal Bed Methane (NCCBM) to finalise the Chinese reserves estimates on Sanjiaobei to commence work on an Overall Development Plan. Similar steps are also being taken on Linxing.

The company also recognizes the potential for early gas production and is working their Chinese partners to commence pilot gas production and sales during 2012.

With a registered office in Subiaco, Western Australia, the company's head office and all of the company's operating activities are located in the People's Republic of China. SEH went public on the Australian Stock Exchange in 2009.

CURRENT ACTIVITIES / MAJOR ASSETS

SEH's CBM exploration and development activities are focused on an aggregate area of approximately 3,000 square kilometers (1,158 square miles) in the Ordos Basin, a major coal bearing area and the second largest onshore oil- and gas-producing region located in China's northcentral Shanxi province. As an established oil and gas exploration and production area, the region has an established pipeline infrastructure for collection of both crude oil and natural gas, which is distributed in nearby urban areas and major markets to the east (e.g. Beijing) via the three major gas pipelines running east-to-west through Shanxi province, providing an important distribution option for any commercial quantities of gas eventually produced by SEH and its Chinese partners.

Table One (A)
Sino Gas & Energy Holdings Ltd.
Sanjiaobei PSC - Total Certified Resources

Classification	February 2011	November 2011	Change
2P Proved Plus Probable (100%) Reserves	6 Bcf	8 Bcf	33%
2C (100%) Contingent Resources	158 Bcf	389 Bcf	146%
Mid-Case (100%) Prospective Resource	291 Bcf	754 Bcf	159%
Gas Initially In Place (GIIP)	1.8 Tcf	4.2 Tcf	127%

Source: Company disclosure of certification reports from RISC

In early November 2011 SEH received a significant update to its resource estimates on the Sanjiaobei PSC, as outlined in Table One (A) above. Over the relatively short time between the February 2011 and November 2011 figures provided by RISC, an internationally experienced Australian oil and gas consulting firm, engaged by SEH for an independent appraisal of its resources and reserves on Sanjiaobei, raised its Gas-Initially-In-Place to 4.2 TCF. As reported in recent press releases, SEH has seen strong initial gas production from appraisal wells on this PSC.

SEH undertakes its gas exploration activities under Production Sharing Contracts ("PSCs") with the Chinese government, which are contractual relationships with one or more state-owned energy companies. Typically, a PSC provides for the foreign partner to invest its own money during the pre-production period of energy exploration and development. Over the long-term, the foreign and Chinese partners share production revenues based on a pre-agreed ratio. The foreign partner is typically allowed to recoup its capital investment, as well as exploration and development costs, out of initial commercial production. (First introduced in Bolivia in the 1950s, similar arrangements are today common in many energy-rich developing countries.)

SANJIAOBEI PSC

As outlined in Table One (B) below, SEH's net interest in the recently-increased GIIP resource (and any additional resources or reserves identified in the future) on the Sanjiaobei PSC will reduce to 49 percent if China National Petroleum Corporation ("CNPC", the controlling entity of state-owned industry giant PetroChina), the company's authorized state-owned partner on Sanjiaobei, exercises its right to a 51 percent interest after receiving approval from Chinese regulators to move forward with field development under an officially-approved Overall Development Plan (ODP), which management currently is projecting will occur in early 2013.

Table One (B) Sino Gas & Energy Holdings Ltd. Sanjiaobei PSC - Sino Gas share Certified Reserves & Resources			
Classification	**February 2011**	**November 2011**	**Change**
2P Proved Plus Probable Reserves	3 Bcf	4 Bcf	33%
2C Contingent Resources	78 Bcf	191 Bcf	146%
Mid-Case Prospective Resource	143 Bcf	370 Bcf	159%
Gas Initially In Place (GIIP)	0.9 Tcf	2.1 Tcf	127%

Source: Company disclosure of certification reports from RISC

**Figures for both time periods adjusted for potential reduction due to terms of Sanjiaobei PSC*

SEH's total area of exploration on this PSC is 1,126 square kilometers (435 square miles). In September 2011 the company completed its 410.5 kilometer (255 mile) seismic program on the Sanjiaobei PSC, the interpretation of which has been one of the major factors in the company and its partner CNPC deciding on the next state of drilling and other development efforts. Based on the new seismic, the company has drilled and is testing two further wells during the remainder of calendar 2011.

LINXING PSC (EAST AND WEST)

SEH's total area of exploration in this PSC, which was recently extended for another two years, is 1,874 square kilometers (723 square miles). This recent extension reflects the success the company has had in its exploratory activities (primarily on Linxing West) to date and its Chinese partner's expectations for future success. Once commercial production of gas begins, SEH will retain a 65 percent operating interest in Sanjiaobei with its partner China United Coalbed Methane Corporation ("CUCBM") which is 50 percent owned by China National Offshore Oil Corporation ("CNOOC") owning the remaining 30 percent. The remaining 5 percent is the subject of an option agreement with a US based company. As outlined in Table One (C) below, highlights SEH's gross interest in the Linxing PSC.

Table One (C) Sino Gas & Energy Holdings Ltd. Linxing PSC - Total Certified Resources	
Classification	**February 2011**
2P Proved Plus Probable (100%) Reserves	13 Bcf
2C (100%) Contingent Resources	793 Bcf
Mid-Case (100%) Prospective Resource	941 Bcf
Gas Initially In Place (GIIP)	6.5 Tcf

WHAT IS UNCONVENTIONAL GAS?

Natural gas, the cleanest-burning major fossil fuel, is commonly used for energy production in industrial, commercial or domestic home heating systems, gas turbines in electricity-generating plants, industrial boilers and specially-designed internal combustion engines in motor vehicles. Although its primary importance is as a relatively clean-burning fuel source, methane (the primary constituent of natural gas) is also an important raw material used in the production of fertilizers, various industrial gases (e.g. acetylene and hydrogen), methanol and acetic acid. Natural gas is most widely transported via pipelines (on land) and as highly compressed liquid natural gas ("LNG") when shipped across major bodies of water.

Historically, natural gas has been extracted from relatively deep wells located in rock formations that are typically associated with petroleum reservoirs. These reservoirs were increasingly easy to locate as technology improved during the second half of the 20th century and were the most practically and economically extractable. However, the potential to find significant new "conventional" natural gas fields with available technology has decreased over the past couple of decades.

At the same time, demand for natural gas has increased due to both expanded global economic activity and the environmental advantage of using relatively clean-burning natural gas versus more highly polluting fossil fuels (particularly, in the case of China, coal). Advances in exploration and development technologies over recent decades have made it increasingly practical for energy exploration companies to find and extract different types of so-called "unconventional" gas, all of which contain commercially valuable quantities of natural gas's most important energy-producing component - methane.

Of the four most widely available varieties of unconventional gas – coalbed methane, shale gas, tight gas and hydrates – SEH is focusing its exploratory efforts on both shallow and deep CBM prospects.

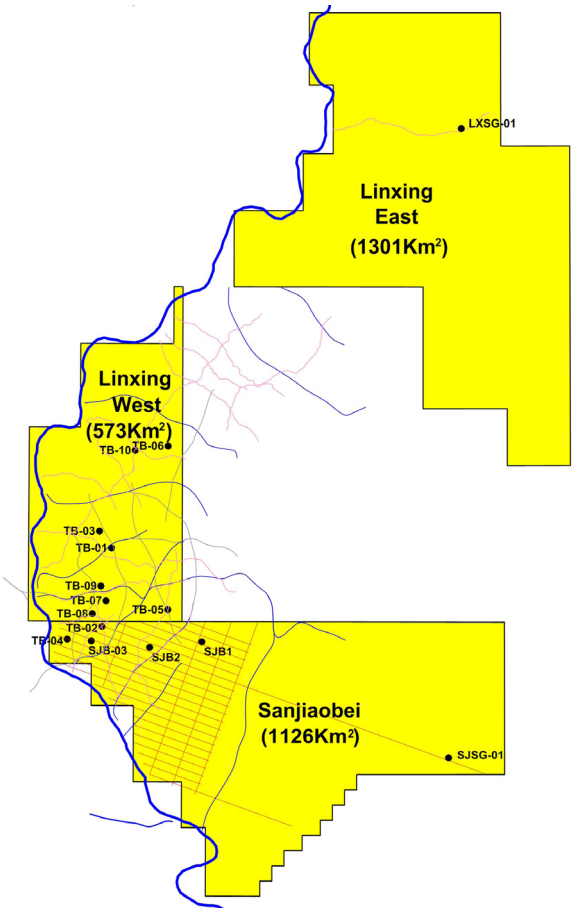
Coalbed methane ("CBM") (also known as coal seam methane ("CSM") and coal seam gas ("CSG") typically accounts for approximately 95 percent of the variety of gases that are present in varying concentrations in all undisturbed coal seams. These gases were generated by the same geological processes that created coal and, to a lesser extent, by microbial activity within the coal. Typically, in order to extract economic quantities of CBM, a large number of relatively shallow wells are drilled across the area of a gas-bearing coal seam, which can encompass many square kilometers/ miles. These wells typically must be stimulated by fracturing the target rock formations with a mix of very high pressure water combined with proppants (small particles of sand or other materials that wedge into tiny cracks and crevices in the coal seam to allow gas to flow) and certain chemical agents. This process eventually leads to lower water pressure within the seam, allowing the gases that are adsorbed in the coal to "desorb", just as removing the cap from a bottled carbonated beverage allows the gas dissolved in the beverage to be released.

During its initial exploration efforts SEH has focused primarily on deep CBM located in bodies of rock whose methane content has migrated from nearby coal seams over the millennia. To extract this gas "fracture" stimulation techniques are generally applied, although this has not always been required in SEH's work to date. We expect "fracking" will typically be necessary in production on all SEH's wells on both Linxing West and Sanjiaobei (see Detailed PSC Map below), which will likely be drilled at depths of approximately 1,500 to 2,100 meters.

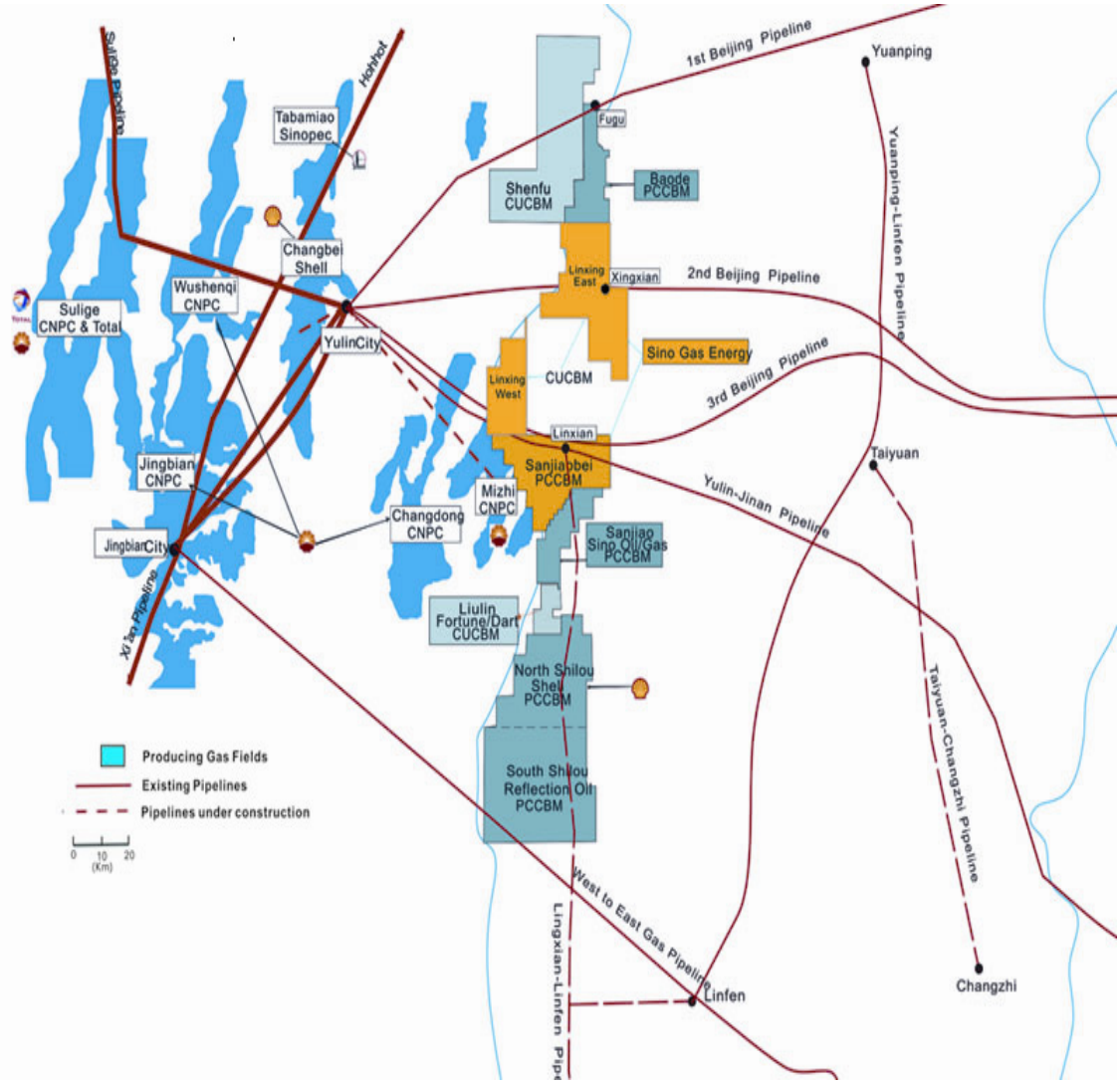
In the near term, we expect SEH will focus its expanding pilot well program on the western area of Sanjiaobei, for which seismic data has already been obtained (as denoted by the grid of red lines on the Detailed PSC Map below). It is also important to point out that this area is directly adjacent to producing fields owned by other companies (denoted as dark blue areas in the Regional Map of Ordos Basin and Linxing East, Linxing West and Sanjiaobei PSCs on Page Six). Additional wells will give SEH a better understanding of the extent to which these producing zones extend into Linxing West and Sanjiaobei.

In addition to the deep CBM targets SEH is appraising on Linxing West and Sanjiaobei, the single shallow CBM well (LXSG-01) that has been drilled on Linxing East has provided indications there may be commercially-exploitable coalbed methane prospects within underlying coal seams in the northern portion of Linxing East. Although there is not yet a specific plan in place to drill further on Linxing East over the near term, management is considering initiating a drilling program of CBM test wells in this area during 2012.

SINO GAS AND ENERGY HOLDINGS LTD. - DETAILED PSC MAP



SINO GAS AND ENERGY HOLDINGS LTD.
REGIONAL MAP OF ORDOS BASIN AND LINXING EAST, LINXING WEST AND SANJIAOBEI PSCS



CHINA'S PERMANENT AND GROWING NEED FOR NATURAL GAS IN ALL ITS FORMS

As the huge Chinese economy continues to modernize and expand, one potential limiting factor will be the availability of sufficient energy resources. China's economic success story over the past three decades has been largely based on "cheap labor" that could compete in many industries with the more expensive labor and capital- (and energy-) intense production methods of more developed economies. However, China's leaders want to see the country's economy move beyond industries that depend on low labor costs, which will require increasing industrialization and mechanization, both of which increase the country's need for energy resources. In addition, other changes in China's culture and social structure, such as increasing urbanization and greater residential and commercial use of electricity, have driven and will continue to drive China's thirst for energy resources. While the country is taking the lead in many "alternative" energy technologies (e.g. solar, wind, biomass), we believe fossil fuels and, to a lesser extent, nuclear energy will be the core technologies that will provide the energy China needs to fuel itself for the foreseeable future.

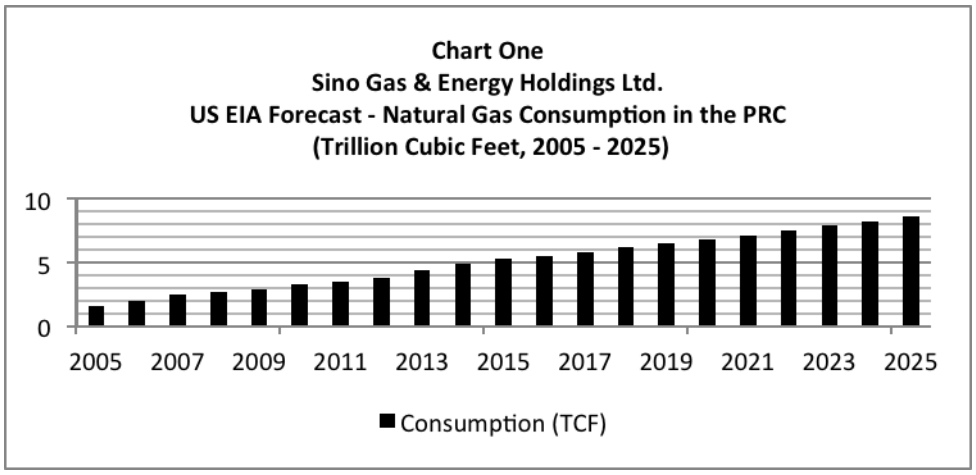
In recent years, China has imported ever-greater amounts of coal (the source of 70 percent of total energy consumption nationwide) and petroleum products. However, national leaders would prefer to minimize energy imports beyond what is absolutely necessary, in order to avoid the related increased geopolitical risks and the drain on foreign currency reserves. To this end, every effort is being made to maximize domestic energy resources while also reducing the reliance on coal, the dirtiest and most polluting major fossil fuel. Increasing usage of more environmentally-friendly energy sources will make a major contribution to improving the dangerous levels of air pollution in many areas in China,

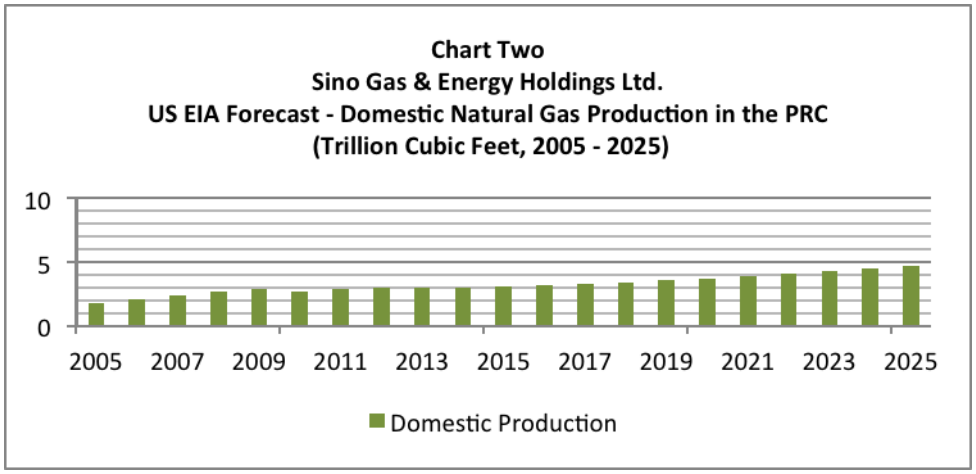
which has until recently all but ignored the negative environmental effects of its heavy reliance on burning coal to fuel its economic growth.

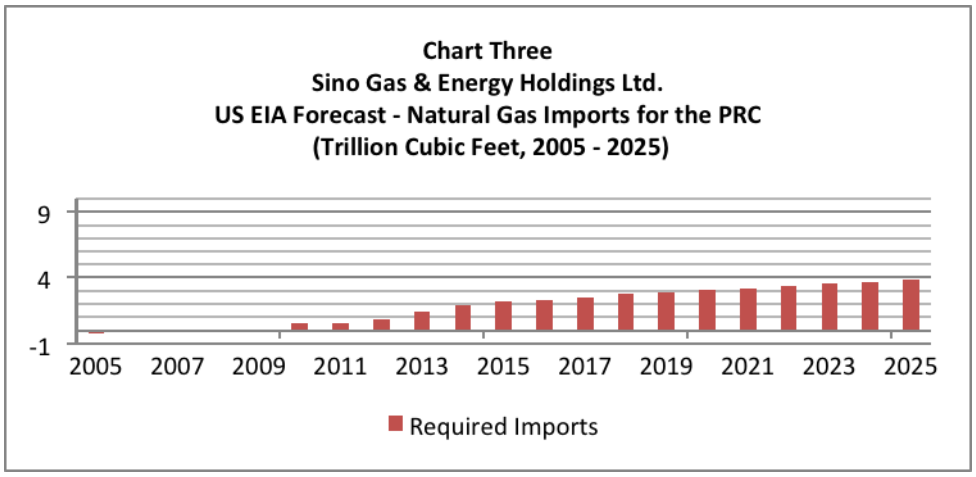
The Chinese government has introduced a variety of incentives to encourage the development of the country's natural gas industry (with specific incentives for CBM exploration and production), including the recent introduction of relatively free market pricing (most energy prices in China are highly regulated), tax incentives, pricing subsidies and other actions (including the recent elimination of import duties on CBM-related drilling technology). In addition, the price of electricity generated by burning CBM has been set higher than the price for electricity from other fuels, giving electric utilities an incentive to increase their use of CBM.

As illustrated in Charts One, Two and Three below, the US Energy Information Administration is forecasting that a quadrupling of China's usage of natural gas (including CBM and other unconventional gas resources) through at least 2025 is not going to be matched by a similar increase in the country's domestic gas production. The large increase in imports highlighted by Chart Three will be a continuing driver of the national government's expanding effort to find and produce significant levels of gas from new domestic resources.

In our view, all of these factors create a business and regulatory environment that puts SEH in a "sweet spot" in the world's fastest growing large economy.







Source: U.S. Energy Information Administration

COMPANY MANAGEMENT

- **Mr. Gavin Harper, Executive Chairman**
  Mr. Harper has been involved with SEH since 2006 and brings to the Chairman's role significant oil and gas industry leadership experience. He has over 36 years experience in the oil and gas industry in a variety of senior roles, primarily with Chevron Corporation. He has broad experience of working in both operating and non-operating roles in complex joint ventures in Asia, Australia and the UK. Gavin was appointed as a non - executive director of SGEH on 14 March 2008, then Executive Director in July 2010. He was appointed Chairman of Sino Gas on 1 January 2011. He is also a director of Renewable Heat and Power Limited (a biomass renewable energy company in Australia), a director of Green Energy Limited (an Australian company engaged in CBM in Poland). Mr. Harper has a BA from University of Kent at Canterbury and Diploma in Business Administration from Strathclyde University.

- **Mr. Stephen Lyons, Managing Director**
  Mr. Lyons was appointed Managing Director of SEH in 2008. He is a foundation shareholder in SGE and was a key part of the team that negotiated and implemented the successful farm-in from Chevron that lead to the creation of SEH and has been a pivotal member of SGE's executive management team since SGE's formation. As Managing Director he leads the company's Beijing-based executive team, reporting to the Board. He has been based in Beijing, China since mid-2006.
  Mr. Lyons has an audit, corporate services and banking background and has worked in Australia, London and China. He has held a number of executive positions with Australian Stock Exchange-listed companies and the Australian operations of a Swiss-based multinational, as well as private companies. He has also consulted to a London based merchant bank and previously worked for Ernst & Young and an internationally affiliated accounting group, mainly focusing on audit and corporate services. He holds a BA (Accounting) degree from Curtin University of Western Australia, is a qualified Chartered Accountant and Member of the Australian Institute of Chartered Accountants.

- **Peter Mills, Non Executive Director**
  Mr Mills has extensive experience in the Upstream Oil and Gas business in technical and general management roles working in Europe, Northern Africa, Asia and Australia. Over the past 29 years Peter has worked for Woodside, BHP Petroleum, Hess and Premier Oil in areas of field development, operations management, joint venture management and commercial negotiation. Peter retains a strong technical involvement in oil and gas operations, particularly in field development, production optimisation and the application of technology to enhance production and value. His most recent work has focused on development of "unconventional" tight gas reservoirs.
  Peter is currently Managing Director of Eureka Energy Limited (ASX: EKA), and a Director of Castle Energy Consultants. His more recent roles have been President of Premier Oil Indonesia, President of Hess Indonesia and Technical Manager for Hess UK.

- **Mr. John Chandler, Non-Executive Director**
  Mr. Chandler is a lawyer with over 30 years commercial, corporate and business experience. He has been a partner in major Australian law firms, including Freehills, KPMG Legal and Deacons, and now practices on his own with a focus on the oil and gas industry and corporate governance. In the last ten years John has acted in acquisition,

joint venture and project negotiations for, amongst others, Chinese and Japanese companies, including Sinosteel, Anshan, Tokyo Electric and Tokyo Gas. John was appointed to the SGEH Board on 16 April 2008. Currently, he is also a director of Structerre Consulting, an unlisted structural engineering company with over 100 employees. He is the Associate Director of the Centre for Mining, Energy and Natural Resources Law at the University of Western Australia. Mr. Chandler holds an LL.B. (Hons), Diploma in Business Administration and is a qualified Solicitor of the Supreme Court of England and Wales and Barrister and Solicitor Western Australia.

- **Mr. Bernie William Ridgeway, Non-Executive Director**
  Mr. Ridgeway was appointed to the SEGH board of directors when the company incorporated on 5 March 2007. He was appointed to the SGE Board on 15 July 2005. He was responsible for initially recognizing the potential to develop a clean energy business in China and has been instrumental in the formation and direction of SGE. Mr. Ridgeway is a qualified Chartered Accountant, a Member of the Institute of Chartered Accountants in Australia and a Member of the Australian Institute of Company Directors. He has been involved with a number of public and private companies for over 25 years and is currently the Managing Director of Imdex Limited (ASX:IMD), an Australian Stock Exchange-listed company. Mr. Ridgeway holds a B.Bus degree in Accounting.

- **Mr. Frank Fu, Chief Operating Officer**
  Mr. Fu has worked in the oil, gas and CBM sectors since 1993, including the last 14 years with Phillips and ConocoPhillips. He has managed drilling engineers, offshore rig operations and key operation contracts for the ConocoPhillips offshore operations in the Bohai Bay. Previously he gained extensive CBM operational experience in Shanxi Province. Mr. Fu holds a BS degree in Geology and Exploration.

- **Mr. Colin Heseltine, Strategic Consultant**
  Mr. Heseltine had a forty year career with the Australian Department of Foreign Affairs and Trade (1969-2008), which included many postings in the Asian region and senior policy advisory positions in Australia. Since leaving the Australian Government in July 2008 he has provided consultancy services to business organizations. He is a senior associate with the Nautilus Institute, an Australian public policy think-tank which focuses on energy and sustainability issues in the Korean peninsula and is vice chairman of the Australia Korea Business Council. He is also Adjunct Professor of RMIT University (Melbourne). Mr. Heseltine has a Bachelor of Economics degree with honours from Monash University.

- **Mr. Harry Spindler, Company Secretary**
  Mr. Spindler has more than ten years' experience with major corporate recovery and advisory firms. He is a member of the Institute of Chartered Accountants in Australia and a member of the Financial Services Institute of Australia. In September 2008 Mr. Spindler joined Indian Ocean Advisory Group, which specialises in growth, corporate and taxation matters. During his career, Harry has worked on high profile restructuring engagements in the mining industry, as well as advising a number of Australian Stock Exchange-listed mining companies. Mr. Spindler has a bachelors degree in accounting and finance.

RECENT NEWS

15 November 2011

Announced significant upgrade of certified resource estimates for Sanjiaobei PSC based on independent third-party report completed on 1 November 2011.

24 October 2011

Announced completion of capital raise totaling A$ 6 million in two tranches at $0.04 per share, updated information on SJB1 and TB04 wells and the company's receipt of an "expression of interest" by an outside party with a "strategic interest" in SEH's Chinese PSCs. (Merrill Lynch has been engaged as SEH's advisor in exploring this potential suitor's interest.)

4 September 2011

Announced two-year extension on Linxing PSC (to August 2013).

1 September 2011

The Chinese government announced that duties on imports of coalbed methane-related equipment would be eliminated during the current Five Year Plan (2011 – 2015), reflecting the increasing importance government officials put on CBM

as an important element of China's effort to be as self-sufficient as possible in energy production.

12 August 2011

Announced completion of 410.5 kilometer (257 mile) seismic program on Sanjiaobei PSC.

INCOME STATEMENT REVIEW

With its operations currently devoted only to exploration and appraisal activities and no sales of gas during the period, for the six months ended 30 June 2011, SEH reported an A$3.6 million loss (A$0.0026 per fully diluted share), which included "Exchange Difference Arising From Translation of Foreign Operations" of A$1.1 million.

BALANCE SHEET REVIEW

As of 30 June 2011 SEH reported total assets of A$33.4 million, including Cash and Cash Equivalents of A$2.6 million and capitalized Deferred Exploration and Evaluation Expenditure of A$30.5 million. The company reported negative working capital of A$749,000 at period end. Equity stood at A$29.8 million with total liabilities of A$3.6 million. The company had no long-term debt.

CAPITAL STRUCTURE

SEH currently has 1.12 billion ordinary shares outstanding. As outlined in Table Three below, the company also has a total of 376 million options outstanding with exercise prices ranging from A$0.08 to A$0.50, the majority of which have an exercise price of A$0.0125 and expire on 31 December 2012.

Although it appears unlikely at this time that the 31.6 million options expiring on 31 December 2011 will be exercised, SEH does have the potential to raise approximately A$43 million in new capital if the A$0.125 31 December 2012 options outstanding are exercised.

Table Three
Sino Gas & Energy Holdings Limited
Current Capital Structure

	Number Outstanding		Expiration Date	Exercise Price (A$)	Potential Additional Capital On Exercise (A$)
	Shares	Options			
Ordinary Fully Paid Shares	1,120,417,120				
		31,644,345	31 Dec. 2011	$0.5000	$15,822,173
		334,283,757	31 Dec. 2012	$0.1250	$41,785,470
		1,310,000	13 Mar. 2013	$0.5000	$655,000
		8,750,000	25 Nov. 2013	$0.0793	$693,875
Total	1,120,417,120	375,988,102			$58,956,518

Source: Company regulatory filing dated 6 December 2011

FUTURE FINANCING NEEDS

We expect SEH, like most other small and fast-growing energy exploration and development companies, will eventually need significant additional funding that will be orders of magnitude greater than the relatively modest amount SEH has spent to date. Major work will have to be undertaken for the company to complete the transition to development of its two PSCs. In line with their PSC contracts, we expect a significant portion of such additional funding will come from the company's two Chinese partners when and if those partners exercise their contractual right to opt in once either or both of SEH's PSCs reach development. We also believe there is a good possibility one or more non-Chinese energy majors will be brought in to provide some of the financial resources that will be required if the strong early success of SEH's exploration activities proves to be representative over the longer term for Linxing East, Linxing West or Sanjiaobei.

OTHER CONSIDERATIONS

A substantial expansion of SEH's gas resources and the upgrade of those resources to reserves would likely trigger interest from a major global player in the energy industry to acquire an interest in one or more of the company's properties or SEH itself. Such an investment could take the form of a joint venture, a purchased interest in specific wells or an investment in or full buyout of SEH, all of which reflect the fact that the exploration activities of smaller companies in the energy industry are often an important source of new production for larger competitors. This is especially true when the public value of a company's market cap is well below the perceived value of its assets to a larger competitor. SEH's independent certifier, RISC, recently calculated a "risked" valuation of US$ 664 million for the company. This valuation metric (calculated as the sum of weighted average present values of SEH's potential low, medium and high case NPV's), points to a significant potential gap between the company's current public value (A$ 44.5 million) and its assets' potential private value to an interested acquirer.

SEH's appointed advisor, the National Centre for Coal Bed Methane ("NCCBM") is now working on its Chinese Reserves Report covering the Sanjiaobei PSC. This report, which must be approved by regulators before SEH and its Chinese partner can move forward with development of an ODP on a PSC, is expected to be completed by mid 2012.

RATINGS AND TARGET PRICES

We are initiating our coverage of SEH with an Investment Rating of "Strong Buy" based on a variety of factors, including:

1) the established status of the Ordos Basin as a prolific coal-, gas- and oil-producing region.

2) all wells tested to date have hit gas with commercial gas flows, while a significant number have delivered strong initial production in excess of 1,000,000 scf per day.

3) the Chinese government's commitment to non-coal domestic energy resources.

4) the industry prominence of SEH's Chinese partners.

We are giving these shares a Risk Rating of "High" because much work and further investment of significant additional time and capital remains to be expended in order to transform SEH's successful work over the past six years into commercially-extractable levels of gas.

We are not establishing a Target Price for SEH's ordinary shares at this time. Although the company has identified significant resources (GIIP > 10 Tcf), the company's current circumstances - identified resources and small but growing reserves, balance sheet structure, potential need for additional capital coupled with potential shareholder dilution – are unique and difficult to compare directly with valuations on other publicly-traded companies. We believe the prospects for significant resource and reserves development are very strong here, but, as with many microcap energy exploration and development companies, are unique and extremely difficult to value until more independently-verified information (e.g. resources, reserves, initial and sustainable production on further pilot wells) comes available over the coming year and beyond.

In addition, we think there is a strong likelihood SEH will experience a significant investment by, or possibly even a takeover offer from, a major energy company that will have access to far more information about the company than is currently in the public domain. As mentioned above, we believe there is potentially a very large gap between SEH's value as a standalone company and the private value of its expanding Chinese gas assets if they were in the hands of a much larger competitor.

We will review our Investment and Risk Ratings for SEH as more information becomes available regarding a) management's plans for further resource exploration, appraisal and development and b) independent third-party appraisals of the company's expanding portfolio of resources and, eventually, reserves.

INVESTMENT RISKS

The company's shareholders face certain risks that are common to the energy exploration and development industry and junior resource companies, as well as certain risks unique to SEH and the CBM/natural gas sector. We believe the most important of these risks are:

All oil and gas exploration and development activity involves some level of potential for failure—We estimate

approximately 55 percent of exploratory wells drilled in the search for conventional natural gas turn out to be either dry holes or to contain too little gas to be economically feasible. Although the success rate for drilling and development of "traditional" CBM wells is significantly higher (often as high has 100 percent in terms of drilling wells that produce at least some amount of CBM are not uncommon). Whilst SEH has had a 100 percent success rate over the last few years drilling gas discovery wells and producing commercial flow rates, the risk nevertheless remains.

Estimates of oil and gas reserves for any particular well or field, especially during the early period of exploration, are highly uncertain—Although resource and reserve estimates in the oil and gas industry are based on well-established scientific methods and mathematical models, they also involve estimation techniques that are highly dependent on the experience and judgment of the estimator. These methodologies are subject to many unknown and partially known factors, such as geological structure, gas availability and dispersion, porosity, permeability and gas or fluid saturation. Reserve estimates also take into account the likely cost of oil and gas recovery, which must be below the current market price of oil and gas to make production economically feasible. Although natural gas prices in China are largely controlled by the government, estimating whether it will be economically feasible to recover oil or gas from a particular play or field can still be subject to significant variability.

We believe it is likely current shareholders interest in SEH will be diluted as SEH continues to grow. This dilution could come from different sources, including the exercise of one or more of the tranches of outstanding options detailed in Table Three above, a significant investment in SEH by one of its competitors or any future capital raises. SEH announced on 21 November 2011 that it was seeking a strategic partner to fund the company at asset level which may lesson the dilution that would otherwise be experienced.

ACCOUNTING / AUDITING

SEH reports its financial results using Australian Generally Accepted Accounting Principles.

SEH's financial statements are audited by the Perth, Australia office of Deloitte Touche Tohmatsu.

We are not aware of any current disagreements existing between the company and its auditors on any significant accounting-related issues.

APPENDIX ONE

LAYMAN'S GLOSSARY OF COMMON OIL AND GAS INDUSTRY TERMS

Acre Parcel of land containing 43,560 square feet (4,047 square meters or 0.4 hectares)
Adsorbed Contained within small fractures, fissures, bubbles and other open spaces within the coal
Barrel 42 U.S. gallons (159 liters)
Bbls Barrels of oil
BCFE Billion Cubic Feet of Gas Equivalent
BTU British Thermal Unit—the amount of energy required to increase the temperature of one pound of water one degree Fahrenheit
Darcy Industry standard measure of a formation's permeability expressed as the amount of a fluid of a given viscosity that flows through a sample at a specific pressure and temperature. (See **millidarcy** below.)
Mile, Square Parcel of land containing 27.9 million square feet (or 640 acres)
MCF Thousand Cubic Feet, the standard measure of natural gas volume. One MCF equals 1 million Btu of energy at 60 F. degrees under pressure of 14.7 pounds per square inch. Six MCF of natural gas contains the energy equivalent of one barrel of oil.
MMCF Million Cubic Feet, a measure of natural gas volume
Millidarcy One one-thousandth of a darcy. Typically the measure used to express the permeabilty of gas-bearing formations, which do not have to be as permeable as oil-bearing formations to be profitably exploited.
P Number Probability that an estimate of oil or gas is accurate (e.g. P10 = there is a ten percent probability a particular estimate will turn out to be accurate)
Permeability Measure of the average rate of flow of a liquid or gas through a geological formation
Play A known or estimated accumulation of oil and/or gas located within a contiguous geographic area, typically characterized by similar geologic structure(s) throughout the area.
Porosity Measure of a geological formation's percentage of total volume that consists of open spaces
Production Sharing Contract (PSC) Common in the energy industry's emerging markets, under a PSC arrangement a foreign firm is allowed, in partnership with an approved domestic partner, to explore (and pay all costs) for oil and/or gas. When government authorities are convinced the foreign firm has identified commercially viable resources or reserves, the foreign firm is allowed to sell the oil/gas and be reimbursed for much, and sometimes all, of its exploration costs. Once agreed reimbursement of these costs has been achieved, the foreign firm and its local partner have a pre-agreed interest in covering further development and production costs, as well as all revenues from the sale of future gas/oil production. (Also called a "production sharing agreement".)
Recovery Factor Estimate of percentage of total oil or gas in a well, play or field that will ultimately be commercially extracted over its operating life
Reserve Estimate Estimate of available and/or recoverable oil and gas quantities in a well, play or field using one or more of a variety of industry standard methodologies
Reserves, P1 Proved reserves for a company or play

Reserves, P2 Total proved plus probable reserves for a company or play
Reserves, P3 Total proved, probable and possible reserves for a company or play
Reserves, Possible Estimate of recoverable oil and gas quantities based on the assumption certain important unknown factors will turn out to be favorable after further exploration and/or development.
Reserves, Probable Estimate of recoverable oil and/or gas quantities in the future based on actual production from a well or group of wells
Reserves, Proved Estimated quantities of oil and/or natural gas that geological and engineering data demonstrate with reasonable certainty to be economically recoverable in future years from known reservoirs using existing technology under existing economic and operating conditions
Reserves, Technologically Recoverable Estimate of oil and/or gas that can be recovered without regard to cost or profit using current technology
Resource, Potential Estimated quantities of oil and/or natural gas that are to a certain degree measurable and which appear to have the possibility of being extractable at a profit
Revenue Interest, Net Percentage of the production or proceeds from production attributable to the working interest parties after royalty and overriding royalty interests have been deducted
Spud To begin initial drilling operations on a well
TCF Trillion cubic feet

APPENDIX TWO

DEFINING OIL AND GAS RESOURCES AND RESERVES

US and other international securities regulations require that publicly-traded oil and gas exploration, development and production companies adhere to specific requirements for providing public investors with information regarding the likelihood an oil and/or gas site (i.e. well, field or play) contains potentially commercial quantities of oil and/or gas.

Under these regulations, designating such a material as a resource indicates that a site is likely to contain a quality and quantity of commercially-saleable oil and/or gas that could be profitably extracted at current market prices, although verifiable proof of the grade and quantity of oil and/or gas, based on industry standards, is not yet available.

On the other hand, designating a site as having a reserve of oil and/or gas indicates that geologic and other testing or measurement has been performed based on generally accepted industry standards and has shown the site contains a grade and quantity of oil and/or gas that can likely be extracted and sold at a profit at current market prices. It is important to note that the economic (pricing) component in calculating oil and gas reserves is a key factor in determining the level of reserves. All other things being equal, the reserves that can be associated with a site fluctuate with the market price of oil and/or gas: estimated reserves increase as market prices rise, estimated reserves decrease as market prices fall.

Many publicly-traded junior oil and gas companies make reference to potential resources on the wells, fields or plays they are exploring or developing; far fewer such companies advance their operations to the point that they can inform investors about actual oil and/or gas reserves.