



Recommendation **Speculative Buy**

Price **\$2.21**

Target (12 months, pre-drill) **\$4.00**

Expected Return Potential

Capital growth 80%

Dividend yield 0%

Total shareholder return (TSR) 80%

Company Data and Ratios

Enterprise value \$174m

Market cap \$250m

Issued capital 114.4m

Free float 75%

12 month price range \$1.20-2.89

GICS sector Energy

## Karoon Gas Australia (KAR)

### *Huge LNG upside potential*

- ◆ Highly prized Browse Basin acreage
- ◆ Drilling of major targets to begin 2H08
- ◆ Management has a proven record of value creation
- ◆ Potential to multiply share price many times

### Initiate coverage with a Speculative Buy

KAR is a junior player in the high growth LNG sector with enormous upside potential. It is well positioned with highly prospective offshore Browse Basin acreage, a world ranking JV partner in ConocoPhillips, substantial net cash and proven management. The KAR investment proposition is high risk for very high reward. A potential \$20-\$40 share price could result over time from a successful outcome of Browse drilling, yet the company has a management capable of identifying other value adding opportunities in oil and gas if not successful.

SCE expects the KAR share price to increase in advance of drilling commencing third quarter 2008. We estimate a pre-drill target price of \$4.00 per share, based on the risked value of the drill targets; there is a large gap between this value and the current share price that we expect will begin to close.

**Highly prized Browse Basin acreage.** Large permit areas, acquired cheaply in 2004, lie along trend of Woodside's major Scott Reef discoveries (20Tcf reserve, production target 2013) and the Buffon-1 gas shows. From data provided by recent seismic surveys and from what is known from nearby gas reservoirs, KAR has identified a number of prospects estimated to contain risked reserve potential of 20Tcf and 600MMbbl of condensate. Such a reserve position, if confirmed by drilling, could support a new LNG project with onshore facilities located at Darwin.

**Drilling to begin 2H08.** A rig has been contracted for an eight month, three well program commencing August 2008. This major undertaking will be 80% funded by ConocoPhillips leaving KAR well placed to fund its share. Preceding this will be a major 3D seismic survey and ongoing seismic interpretation.

**Management has proven track record.** Under the leadership of Robert Hosking, KAR has acquired strategic assets of high value and put together a management group with strong technical expertise. Just as it has done in the past, the company will continue to look to acquire undervalued assets in the oil and gas sector both in Australia and in other regions.

**High risk, speculative investment.** Oil and gas exploration is inherently a high risk business by virtue of geological and technical uncertainties. As a small cap company with no revenue stream operating in an environment of large capital requirements, KAR carries a degree financial risk. However the company has established a solid financial position with sufficient cash to fund the critical next 18 months exploration program. Relative to other oil and gas situations KAR's gas prospects carry low to moderate geological risk.

#### Disclaimer and disclosures

This report must be read with the disclaimer and disclosures on page 7 that form part of it.

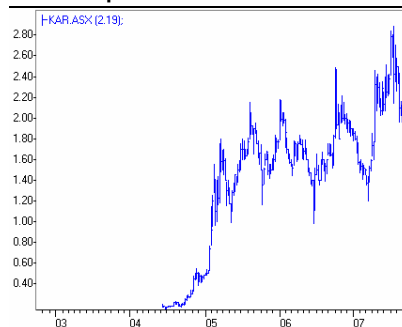
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#### Absolute price





## Summary

Huge leverage to Browse Basin exploration

Karoon is a Melbourne headquartered, small cap oil and gas exploration company with huge leverage to exploration for gas in the Browse Basin, offshore WA. By positioning itself early with large permit holdings in a proven oil and gas province, KAR has become a player in the LNG industry as a potential project developer. The company is in a solid financial position with a market capitalization of \$250M and net cash of \$76M, sufficient to cover exploration expenses over the next 12-18 months.

The Browse Basin extends 300km offshore Broome where KAR has farmed down to a potential 40% interest in two key permit areas and gained 40% of another, on trend of major gas discoveries. These include Woodside's 20Tcf Torosa/Brecknock/Calliance fields. It is partnered by the US's third largest oil company, ConocoPhillips (COP:NYSE), who has agreed to effectively fund 80% of a major two well exploration program to earn up to a 60% interest.

Potential risked reserves of 20Tcf + 600MMbbl

Realisation of only part of the discovery potential would multiply KAR's value many times. From previous nearby discoveries and recent seismic survey data KAR has estimated potential risked reserves of 20Tcf and 600MMbbl of condensate. Drilling of three wells is planned to commence in third quarter 2008 as part of a major \$250M exploration program (KAR's share ~\$70M). The establishment of 7Tcf of gas would be sufficient to establish an LNG project linking the Browse to onshore facilities that could be located in Darwin.

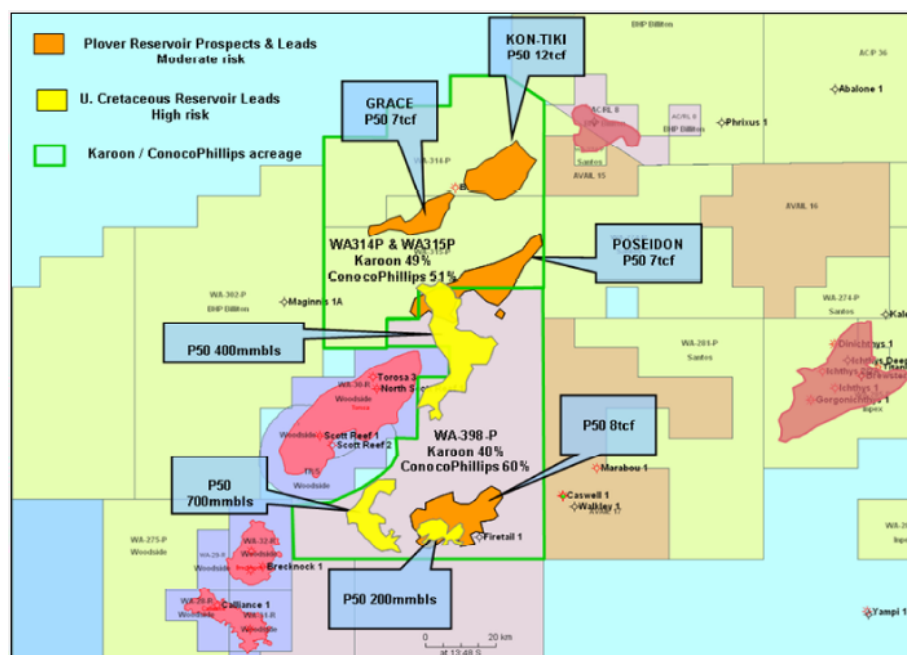
Management has a proven track record of creating value for shareholders by identifying new opportunities in the oil and gas industry. In this regard, KAR will continue to look to acquire assets in Australia and elsewhere to which it can add value.

**Board** – Robert Hosking (Executive Chairman), Mark Smith (Executive Director and Exploration Manager), Geoff Atkins (Non-executive), Stephen Power (Non-executive).

**Significant Shareholders** – Talbot Group Holdings (14.6%), Ropat Nominees (10.9%), JJ Holdings (5.2%).

**Financials** – As of June 2007, KAR had net cash of \$76.4M (\$0.70 per share) and no debt. Proceeds from equity issues amounted to \$65M in FY07, the latest being a \$41.8M placement at \$2.20 in May 2007. There are currently 5.675M unlisted options issued with exercise prices ranging from \$1.60 to \$2.35 at various expiry dates up to end October 2008.

Figure 1 – KAR/COP JV's Browse Permits with KAR's potential reserve estimates



Source: Company data



## Browse Basin Permits and Potential

### WA-314-P and WA-315-P

KAR purchased a 100% interest in Browse Basin permits WA-314-P and WA-315-P from Liberty Petroleum in November 2004 and entered into a farm out deal with ConocoPhillips in late 2006.

**COP to pay up to 80% exploration**

Under the agreement, ConocoPhillips earns a 51% interest in the permits by reimbursing KAR 80% of the cost of the seismic program in 2006 (a US\$9.6M payment to KAR) and funding 80% of the costs of drilling two exploration wells at an estimated cost of up to US\$80M. ConocoPhillips has an option to acquire a further 9% interest in the permits by paying 80% of the next US\$125 million of joint venture expenditure.

Seven large high relief leads have been mapped with areas ranging from 60 to 350 square km. These leads are the same play type as Scott Reef immediately to the south; they have been mapped at a composite horizon of the Callovian unconformity (top reservoir and base seal) and the base of the Buffon Volcanics (top reservoir) in an area around the Buffon-1 well.

The potential reserves listed in Figure 2 below are whole lead numbers, some of which extend outside the permit areas. They were compiled before the estimates produced in Figure 1 but present additional detail. Exploration work will define the lowest risk and highest value prospects for the planned late 2008 two well drilling program.

### ConocoPhillips brings expertise and conviction

**COP – No 3 in the USA**

In farming in to the JV, ConocoPhillips has made a significant commitment which indicates a high level of conviction to the project. COP is the third-largest integrated energy company in the United States based on market capitalization, reserves and production and has the sixth-largest reserves position amongst the global majors (excluding national oil companies). In particular, COP has strong capabilities in deepwater exploration and production as well as all other disciplines of oil and gas production. A core activity is natural gas gathering, processing and marketing. Headquartered in Houston, Texas, the company operates in more than 40 countries.

**Figure 2 – KAR's Estimated Potential Reserves – WA-314-P and WA-315-P prospects**

Prospect	Water depth Metres	Prospect area Sq. Kms	Risk ranking	Gas in place		Gas recoverable		Condensate			
				Most likely	High case	Most likely	High case	Most likely		High case	
								Low rate	High rate	Low rate	High rate
				Tcf	Tcf	Tcf	Tcf	19bbbls/mmscf	43bbbls/mmscf	19bbbls/mmscf	43bbbls/mmscf
Grace	575	83	Low	8.60	14.51	6.45	10.88	123	277	207	468
Kon-Tiki	500	280	Med	17.14	49.58	12.86	37.19	244	553	707	1599
Prospect B	1300	43	Med	2.52	4.25	1.89	3.19	36	81	61	137
Prospect C	1250	127	High	7.36	12.41	5.51	9.30	105	237	177	400
Poseidon	480	132	Low	3.46	5.85	2.60	4.38	49	112	83	189
Prospect E	1500	333	High	45.58	76.90	34.18	57.68	649	1470	1096	2480
Prospect F	600	53	Med	3.90	6.58	2.93	4.94	56	126	94	212
Totals				88.60	170.10	66.40	127.60	1262	2856	2425	5485
Million tonnes LNG equivalent				443	850	332	638				

■ = HIGH GRADE PROSPECTS    bbls = barrels of oil    mmscf = million standard cubic feet    Tcf = trillion cubic feet

Source: Company data



**Strategic block awarded recently**

## WA-398-P

In May 2007 a joint venture between COP (60%) and KAR (40%) was awarded the WA-398-P permit located immediately to the south of WA-315-P. This is a significant addition to KAR's existing permit acreage in the same proven oil and gas region. It contains the southern flank of the high grade Poseidon prospect, another major Plover target in the south of the block and potential for oil in upper cretaceous targets.

KAR plans to drill one well in this block, with up to four wells drilled in total in all blocks in the 2008 drilling campaign. There is a four well commitment in the WA-398-P three year primary term. By expanding the drill program, the overall probability of discovery equation improves substantially. Other advantages will be the ability to coordinate drilling in this block with the commitments in the northern permits, making mobilisation more cost effective.

The work commitment to April 2009 includes 1,400km<sup>2</sup> of 3D seismic and the drilling of one well.

## Gas reserve potential

KAR has estimated a risked reserve of 20Tcf of gas and 600MMbbl of condensate in seven prospects located in the permit areas. These prospects have been identified by the company from seismic and other information from the area, notably:

- The Buffon-1 well. Drilled by Woodside in 1981, this well gave strong indications of the presence of gas within the closure in poor reservoir quality fractured volcanic rocks. However, poor drilling techniques caused damage to this formation and it was not tested properly. Below the volcanics the good quality reservoir section was penetrated below the limit of the closure and was water bearing. Post drill mapping by Woodside showed that this reservoir is hundreds of metres shallower to the north and south of the well, offering considerable followup potential.
- Woodside's giant Scott Reef (now called Torosa)/Brecknock/Calliance gas fields. KAR's permits are on trend of these fields that have a combined 20Tcf and 200Mb condensate. Discovered in the 1970s, Woodside (52% interest) is planning development with JV partners BHP Billiton, Shell and Chevron.
- Highly favourable geological setting. KAR's targets are of the same geological play type lying immediately to the north and east of Torosa. Targets are the Plover Reservoir below the volcanics. The Grace and Kon-Tiki structures are interpreted to contain Plover reservoir up-dip of Buffon-1 making them highly prospective.
- New 2D and 3D seismic completed in early 2007. This data, which is still being interpreted, has enabled greater understanding of relationships between the Plover reservoir and overlying volcanics (Figure 1).

## Substantial work program ahead

**3D seismic and three well program coming up**

KAR has completed the Year 2 work program of a 400km<sup>2</sup> 3D seismic survey in each of the WA-314-P and WA-315-P permits. The Year 3 drilling work commitments (the drilling of one well in each permit) have been extended by 12 months to 11 February 2009. A contract has been signed for the use of the Sedco 703 semi-submersible drilling rig with drilling expected to start in the third quarter of 2008. On-going seismic interpretation will enable KAR to determine the drilling targets in each of the permit areas.

A 3D seismic program will commence this year on WA-398-P with a vessel expected to be contracted soon. The Year 1 work commitment for this permit (the drilling of one well) has also been extended to 30 April 2009, to be coordinated with drilling of the other permits.

**For a total \$250M cost**

At a cost of US\$40-50M per well, the upcoming drilling program will be substantial. The planned programs of seismic and three wells are estimated to cost up to \$250M over the next 18 months. Under the farmin agreement, ConocoPhillips will pay 80% of the cost of the two wells in WA-314-P and WA-315-P and KAR 20%. KAR will be required to fund 40% of the cost of drilling and other JV expenditure in WA-398-P. We estimate KAR's expenditure requirements over this period (18 months) on the Browse programs to be approximately \$70M.



## Valuation analysis

We look at the potential value of KAR on an NPV basis and value of potential reserves.

### Browse development economics

There are several ways in which an LNG project could be developed using potential gas reserves in KAR's permit areas. The favoured arrangement by the JV partners would be piping the gas to ConocoPhillips existing liquefaction plant site in Darwin.

KAR, in consultation with WorleyParsons and Wood McKensie conducted an economic evaluation in late 2006 of an LNG project sited in Darwin (Figures 3 and 4). Their conclusion was a project NPV of US\$5.0B and an IRR of 22%. This translates to \$22.00 per KAR share for its 40% interest. If we assume a capital cost estimate 30% or US\$1.0B higher, the NPV comes to \$17.50 per share. Offsetting this, gas prices for LNG have strengthened in recent times, providing upside to these NPVs.

Main parameters for the study are:

- Reserves of 7Tcf.
- LNG production capacity of 5.0Mtpa, condensate recovery of 33bbls/MMcf, LPG 68bbl/MMcf.
- Capex US\$3.2B, covering semi-submersible platform, 1000km pipeline, liquefaction and other onshore plant.
- Prices: LNG US\$5/MMbtu, condensate US\$50/bbl, LPG US\$40/bbl.

5.0Mtpa LNG project scoping study shows \$22/share NPV

COP wants Browse gas in Darwin

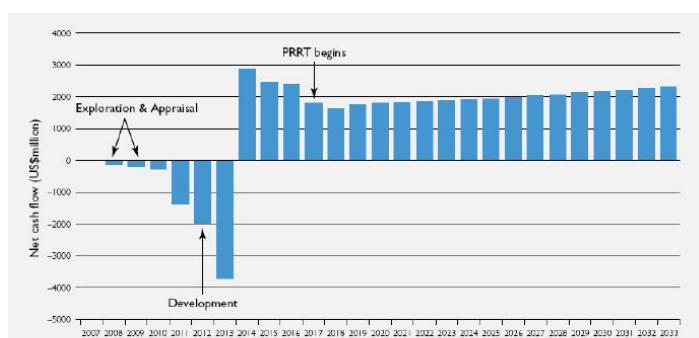
ConocoPhillips' 3.4Mtpa Darwin LNG plant is operating very well, according to its Australian president, Joe Marushack who commented recently on its performance. COP is looking to expand the plant but will need a new source of gas as all Bayu-Undan reserves are already committed. Marushack has indicated that discovery of gas in the Browse could allow another train at Darwin to proceed.

### Value of reserve potential

In Figure 5 we look at the value KAR's potential reserves would bring to the company if realised. If any of the three high grade prospects come in they will add substantial value. We have used rule-of-thumb unit values of \$3.00/boe potential reserves. Note that WPL's largely undeveloped contingent resources are valued by the market at +\$7/boe. The Kon-Tiki prospect stands to add \$23.00 per share if successful, according to this analysis.

KAR's risked potential reserves of 20Tcf and 600MMbbl condensate equates to 4.2 billion boe which would value KAR's 40% share at \$44 per share.

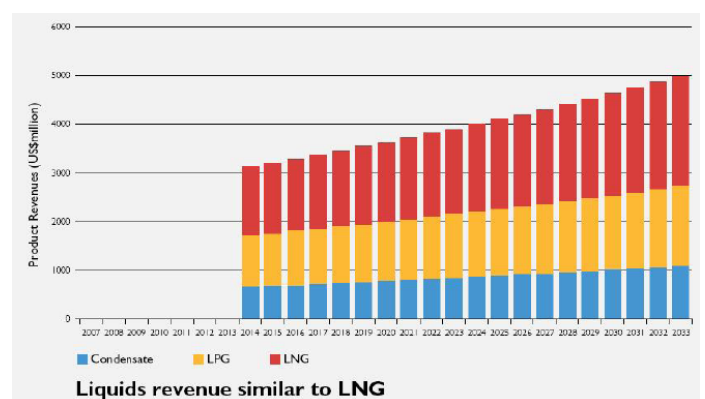
Figure 3 – KAR JV's LNG Project Study - Net Cash Flows



Project NPV US\$5.0 Billion, IRR 22%. Assumptions: Condensate US\$50/bbl, LPG US\$40/bbl, LNG US\$5/MMbtu.

Source: Company data

Figure 4 - KAR JV's LNG Project Study – Product Revenues



Liquids revenue similar to LNG

Source: Company data





### Target price estimate

**Pre-drill target price of \$4.00**

We expect the KAR share price to increase as it approaches the commencement of drilling in August 2008 (global market forces aside) as is normal for oil and gas explorers. We estimate a 12 month pre-drill price target of \$4.00 per share. This assumes the market awarding 20% of the risked value of the drill targets. The company is yet to identify the precise drill locations but we have used the three highest value prospects of Kon-Tiki, Grace and Poseidon for our target price calculation. Table 5 shows SCE's estimated unrisked values for these prospects amounting to 665MMboe for \$17.44 per share (at \$3.00/boe), 20% of which is \$3.50. The company has other well commitments in the Browse beyond FY09 that we assign the residual value of \$0.50 per share.

**Post drill potential many times higher**

If the first well is successful in establishing the pre-drill reserve estimate, it would very soon add multiples of the current share price. If Kon-Tiki comes in, for example, it could theoretically be valued at \$23/share. If the first well is unsuccessful there should still be value in the stock from the other high value targets to follow.

**Figure 5 – SCE's KAR value analysis**

	Gas	Liquids	Total Boe	KAR's share	NPV/boe	Unrisked Value		COS*	Risked Values (KAR share)	
	Tcf	MMbbl	MMboe	%	\$/boe	\$M	\$/share		MMboe	\$/share
<b>All prospects</b>										
Risked Reserve Potential	20	600	4200	40	3.00			na	1680	44.06
<b>Selected Prospects</b>										
Unrisked P50 Reserve Potential										
WA-314-P, WA-315-P										
Kon-Tiki	12		2190	40	3.00	2628	22.97	35%	307	8.04
Grace	7		1280	40	3.00	1536	13.43	35%	179	4.70
Poseidon	7		1280	40	3.00	1536	13.43	35%	179	4.70
Sub Total									665	17.44
WA-398-P										
Unnamed	8		1460	40	3.00	1752	15.31	20%	117	3.06
Unnamed		20-200	110	40	3.00	132	1.15	15%	7	0.17
Unnamed		20-700	360	40	3.00	432	3.78	15%	22	0.57
Unnamed		20-400	210	40	3.00	252	2.20	15%	13	0.33
Total Selected Prospects	34		11090				72.27		1488	39.01

Source: Company and Southern Cross Equities estimates

\* COS= Chance of Success

### Gippsland Basin

Up to mid August this year, Karoo held a 100% interest in PEP-162 within the Western on-shore Gippsland Basin (Vic). It retains EL-4537 in the same area. The permits contain gas-bearing black coal across the Narracan Trough and potential economic oil plays. Two wells were drilled in early 2007, the first, Megascalides-1 was plugged and abandoned after it found the reservoir to have very low permeability. The second well Megascalides-2 found the Rintouls Creek reservoir to be absent. With these results, Karoo decided not to proceed with these permits after the permit years expire.

### Growth through acquisition

Just as it has done in the past, the company will continue to look to acquire undervalued assets in the oil and gas sector both in Australia and in other regions. Executive chairman, Bob Hosking was the founding chairman of Nexus Resources that has seen its share price rise from \$0.20 to \$1.80 and market cap reach \$800M. Under his leadership, KAR has acquired strategic assets of high value and put together a management group with strong backgrounds and expertise.



## Recommendation structure

Buy:	Expect >15% total return on a 12-month view
Speculative Buy:	Expect >30% total return on a 12-month view but carries significantly higher risk than its sector
Fair Value:	Expect total return between -15% and +15% on a 12-month view
Sell:	Expect <-15% total return on a 12-month view

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**Authorisation**

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Southern Cross Equities Ltd and its associates hold 100,000 shares in Karoon Gas Australia (KAR) as at the date of this report. This position is subject to change without notice.