



## Candax Energy Inc – (CAX:TSX C\$0.63)

### **Operations Update and New License Award – Making Progress, but Considerable Challenges Remain**

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December 21, 2006

**Stock Rating: Speculative BUY**

**Target Price: \$1.00 (previously \$1.15)**

C\$000	F2005A	F2006E	F2007E
Yr end Dec. 31			
Oil and Liquids (bbls/d)	493	624	2,100
Natural Gas (mcf/d)	1,095	0	3,700
<b>BOE/D (boe/d 6:1)</b>	<b>675</b>	<b>624</b>	<b>2,717</b>
CFPS, f.d.	\$0.05	\$0.03	\$0.19
Net Debt (MM)	(\$11.4)	(\$31.8)	(\$37.6)
Enterprise Value (MM)	\$71	\$75	\$69
EV/BOE/D	\$104,614	\$119,439	\$25,309
Projected Return			58.7%
Shares O/S Basic (MM)			168.9
Shares O/S F.D. (MM)			180.4
Market Cap. (MM)			\$106.4
NAV (\$/f.d. share), end-2006			\$1.00
P/NAVPS			0.6

Source: MGI Securities Inc. & Company Reports

On December 20<sup>th</sup>, Candax Energy (CAX-T) issued an operational update and its 2007 capital budget.

Following a detailed review of the company's most recent update and our modeling, **we are highlighting the speculative nature of our (unchanged, Speculative Buy) recommendation and reducing our target price to \$1.00 (previously \$1.15)**. The company still has considerable operational challenges to overcome and the risk of further delays to development schedules (or lower than expected production) remains. However, for the longer term, we remain convinced that the company's assets are worth more than current market valuation.

The company has also announced that it has been awarded a 60% operating interest in block 1101 in Madagascar with Dubai-based partner EAX. We see this as a positive (if relatively small and immaterial) step forward for the company.

## Developments

### Short-term Outlook Remains Under Review

With regards to ongoing operations, Candax reports steady progress in assembly of the barge-mounted rig for El Bibane redevelopment drilling. However, after reviewing safety and environmental considerations, the company has decided that the support barge supplied is inadequate and a replacement is therefore required. As a definite source for such a vessel has not yet been determined, we assume that timelines for drilling remain under review. We believe that drilling could commence in early January at best, which would imply an earliest possible start-up of production in late February. The company now also intends to drill well EBB-5 (the planned gas injector well) first, which will initially be put onstream as an oil producer while drilling of the other two planned wells continues through Q1 and likely into Q2/07. This will allow the crew to familiarize itself with the drilling equipment while drilling the simplest well of the three-well-program. The new facilities that will allow gas injection are on-site and ready to be hooked up.

Mainly as a result of a further shift in assumed start-up at El Bibane (from January to end-February), our production forecast for 2007 has been reduced from 3,000 boe/d to approximately 2,700 boe/d. We have reduced our cash flow estimates from \$39.5mm to \$34.7mm (based on unchanged assumptions of WTI averaging US\$60.00/bbl in 2007).

CAX has also reported approval of a capital expenditure budget for 2007 of US\$25.4mm for firm and contingent commitments. This is only very slightly above our previous assumptions. We believe the difference is due to shifting of capital expenses for the El Bibane redevelopment originally planned for 2006. We have therefore amended our models to reflect these delays.

While El Bibane has been the main reason for declining production and cash flow estimates over the last year, the company's other fields in Tunisia have not been able to make up for the bad news at El Bibane. In fact, production at these other fields has continued to decline throughout 2006, which we expect to put some pressure on reserves evaluators to make downward revisions to next year's reserves estimates, despite CAX's budgeted plans to implement workover, infill drilling and EOR projects (at Ezzaouia in particular).

## **New License Award – Madagascar**

On November 2<sup>nd</sup> CAX signed a production sharing contract (PSC) for Block 1101 covering most of the onshore portions of the Ambilobe basin in northern Madagascar. CAX will take a 60% operated interest, leaving its Dubai-based partner EAX (East Africa Exploration) with 40%.

### **Madagascar Oil & Gas Overview**

From north to south off Madagascar's west coast, the Ambilobe, Majunga and Morondava basins are perceived as the most interesting for hydrocarbon exploration. These basins all contain thick Mesozoic and Cenozoic sequences deposited in basins formed through tensional separation of Madagascar from Africa, followed by subsidence and tilting to the west. Although previous exploration has not yet led to commercial production being established, a working hydrocarbon system has been proven with numerous oil and gas shows, as well as identified natural seeps. In addition, two huge shallow bitumen deposits have been known since before 1900 but have never been commercially developed.

Industry interest in Madagascar and in eastern Africa in general, has been increasing in recent years. Major oil companies including ExxonMobil, Norsk Hydro and BG plc have taken interests in licenses offshore Madagascar's northwestern coastline (some of which neighbor CAX's new onshore license). A bidding round for blocks offshore the west coast in the Morondava Basin is expected to conclude in early December.

### **Block 1101 Overview**

Block 1101 covers a large area of approximately 14,900 square kilometers (approximately 3.7mm acres) at the northern tip of Madagascar. Previous drilling has discovered shallow bitumen deposits within the south west areas of the license on which CAX initially intends to focus.

Phase One of the exploration terms of the agreement lasts two years, under which the partners have committed to expenditures of US\$1.5mm. The companies are currently budgeting to spend approximately US\$2.5mm on geological, geophysical and geochemical prospecting, 2D seismic and one relatively shallow well to approximately 800 meters. In particular, the company currently expects that it will investigate prospects downdip of the bitumen discoveries in the area (although any drilling locations chosen will naturally depend on interpretation of geological and geophysical information gathered).

### **Madagascar Country Risks**

Madagascar has had a very unstable political history and general political risk is therefore assessed as high. The country gained its independence in from France 1960 and since then political conditions have been volatile. The current president, Marc Ravalomanana, came into power in 2001 after a power struggle with the previous leader Didier Ratsiraka, and was re-elected in early December 2006.

Madagascar has a weak economy. Should the recently increased interest in exploration for natural resources lead to commercial developments, this could therefore have a significant impact on the country. Economic disparity is large and continues to increase. The urban industrial sector is expanding through an increase in exports of textiles and garments resulting in job creation. The majority of labor demand is for skilled workers in the urban centers and has little impact on rural communities. The majority of the country's population lives in rural regions that are experiencing only minimal growth, relying on food production and tropical cash crops for sustainability. As a result, the vast majority of the country lives in abject poverty. Natural disasters caused by tropical cyclones, flooding, crop failure or other reasons can exacerbate this issue locally.

All of the above combined with a lack of infrastructure, will contribute to operational challenges. However, we would expect any company operating in Madagascar to plan for potentially difficult conditions. Due to the country's interest in supporting economic development of its natural resources, we would not expect any major political issues impacting exploration activities, although objections to any new developments could be raised on environmental grounds due to the islands unique biodiversity.

## **Long-term Upsides and Reserves Under Review**

### **Tunisia**

Following a technical meeting of the Chaal partners (CAX as operator, Mistubishi and SMIP) in late November, the partners are now establishing a project team to design a well program to maximize flow capability through a sidetrack (to the Chaal-1 well) or new deviated well. Subject to the team's agreement, CAX now plans to seek a rig contract for the second half of 2007 for a rig capable of drilling both the Deep Triassic at Ezzaouia and Chaal. Although CAX management is optimistic this drilling will go ahead in 2007, we note a number of risks besides obtaining partner agreement for drilling at Chaal. Deep drilling at Ezzaouia will still require completion of negotiations with Tunisian state-oil company ETAP, since CAX hopes that ETAP will pay its share of costs in the well regardless of success (ETAP

is theoretically entitled to back-in to any discovery at 55% by paying past costs without assuming exploration risk). Participation from other interest-holders is also uncertain due to the ongoing take-over of Centurion Energy (CUX-T) by UAE-based Dana Gas. In addition, sourcing of rigs in Tunisia (particularly large onshore rigs) is likely to remain challenging.

With annual reserves reporting season approaching, we also feel obliged to review the potential for reserves revisions based on the strict interpretation of NI-51-101 guidelines (as opposed to our more relaxed estimates of likely development potential). We note that due to CAX's failure to achieve commercial flow rates from the Chaal-1 well and significant difficulties in completing that well, future reserves evaluations may not be able to attribute the same probable reserves (if any) to the Chaal structure as were attributed in last year's report. We do not believe there is a high probability of significant reserves downgrades, since the technical challenges the company faced in completing the well for testing could most likely be overcome, but we must note the risk due to its potential significance.

We continue to believe that the significantly higher than expected pressures encountered should be very positive for estimates of recoverable gas resources. Higher resources could lead to higher reserves in the long run if CAX can successfully achieve commercial flow rates from future wells (or recompletions) in the main Chaal structure.

Longer-term potential of the companies' two higher-risk assets has also been adjusted downwards slightly for various reasons. New seismic over the Chaal structure and re-interpretation thereof now suggest that the northern and southern structures are separated by a fault, increasing the geological risk associated with potential resources in the undrilled southern structure. CAX has reduced its estimates of potential value in the Deep Triassic prospect below Ezzaouia for a number of reasons. Gas-in-place estimates have been reduced since small portions of the mapped structure extend outside of the existing production license (the surrounding exploration licenses are now held by private Tunisian company Exxoil). The company's updated valuation also includes less potential for liquids recovery.

## **Madagascar**

While we welcome the award of block 1101 in Madagascar to CAX (since we believe that it holds substantial longer-term potential), we do not expect any significantly positive market reaction to this news. This is true frontier exploration. While the potential rewards are huge, there is considerable geological risk and a high probability of failure – CAX is unlikely to drill during 2007 and if it does decide to drill, its first well is likely to be for scientific purposes, rather than the evaluation of a large identified structure. Even if successful with its first well, it is unlikely that production would be achieved from this license within the next five years. Although we do not anticipate difficulties in operating in Madagascar, the frontier nature of the area will provide substantial challenges to the company. Lastly, investors may question how Madagascar fits into CAX's previously defined core area of the Middle East and North Africa. While we recognize considerable risks, we stress our belief that this license award does represent a step forward for the company, establishing its first interests outside of Tunisia. However, we will not be attributing any value to the new interest at this early stage of exploration.

## **Strategy Under Review**

We understand that CAX management has recently been reviewing its strategy, in particular with regard to its development of new business opportunities. This is partially as a result of a relatively low success rate in the large number of different assets that the company has bid for over since establishing itself. The company has been successful in completing only three acquisitions, with two of these being new license awards (Chaal and Madagascar). The company is therefore expanding its targets for growth through acquisition to include potential mergers and consolidation opportunities.

While the value of its most recent new license in Madagascar will not be known for some time, we continue to believe that CAX's management has a good track record in terms of negotiating value-creating transactions (although the scarcity of significant deals has been disappointing recently). Although we do not attribute any value to the potential for further deals, we do highlight this fact since it can be forgotten when operational successes are lacking.

Given the company's failure to deliver results from either Chaal or El Bibane during 2006, we expect that investors may remain skeptical about the company's ability to deliver results during 2007. However, we also welcome management's frank admission of its failures and clear determination to improve on recent results. In its most recent press release, CAX has reported several additions to its operations management team in Tunisia, and the establishment of new drilling and project management teams. We welcome these events as important steps to ensuring operations proceed to plan.

## Updated Valuation

Our target price remains based purely on risked net asset value calculated using discounted (10% nominal) post-tax cash flow valuation, but we continue to note that expectations for significantly increased cash flow in 2007 makes CAX also look attractive on multiples of expected 2007 cash flow and earnings. However, we also note that our estimates of 2007 cash flow have now been significantly reduced compared to previous reports due to operational delays. The risk of further delays remains. Taking that into account, together with the reserves risk for the Chaal asset described above, we have decided to risk Chaal reserves with a 65% chance of being retained at a value comparable to that in last year's reserves report. Note that part of our valuation of Chaal (approximately \$8mm using a 20% chance of success) remains based on the structure's longer-term, multi-tcf upside resource potential, which is considerably larger than the 48 bcf (net) attributed to reserves last year.

Other amendments to our valuation include incorporation of the shift in both production and capital expenditures due to ongoing delays at El Bibane. Note that we continue to assign no value to the company's large and high risk potential in the Deep Triassic play in Tunisia. No value has been assigned to any potential upsides or exploration in any other Tunisian assets or for Madagascar exploration acreage.

**Table 1: Updated Risked NAV Calculation Results**

	Risked Resource Estimates (end 2006 Forecast)		
	Resource Estimate	PV10	NAV/share (f.d)
	<i>Mmboe</i>	<i>\$mm</i>	<i>\$/share</i>
Chaal	7.7	40.4	0.22
El Bibane	4.5	66.7	0.37
Other Acquired Assets	1.5	32.5	0.18
Total	13.7	139.7	0.77
Options Proceeds		8.9	0.05
		<b>148.6</b>	<b>0.82</b>
Net Debt		(31.8)	(0.18)
<b>NAV Estimate</b>		<b>180.4</b>	<b>1.00</b>
f.d. shares (mm)			180.4

Source: MGI Securities Inc.

## Recommendation

**We are reiterating our Speculative BUY recommendation for shares of Candax Energy with a reduced target price of \$1.00 (previously \$1.15).** Our target price is based on 1.0x our estimate of risked expected NAV. Our target price represents a potential return of 58.7% from the recent closing price of \$0.63. We note that our valuation is now more cautious than ever in valuing longer-term potential. This is due to considerable short-term risk remaining in exploration, appraisal and development of that potential, and the risk of operational disappointments continuing. We believe that market valuation will therefore remain at a discount to NAV in the near term, until the company can report a series of successes.

However, we now believe that our valuation of CAX's long-term potential is more cautious than for other companies in our coverage, and we recognize the potential for a number of catalysts that could transform perceptions of the company during 2007. Re-establishing production at El Bibane remains of crucial importance, followed by implementation of the planned waterflood at Ezzaouia. However, firming up plans to drill the high-risk, high-reward Deep Triassic could also re-ignite excitement and investor interest, as could renewed drilling at Chaal or any new deal of significant size.

Assuming there are no more extraordinary delays, we continue to expect a sharp increase in production in Q1 2007 (albeit slightly delayed), which will make Candax Energy attractive on short term metrics as well as on long-term discounted cash flow valuation (upon which our target price is based).

<b>Candax Energy Inc.</b>		<b>TSX - CAX</b>	
		<b>Current Price \$0.63</b>	
SHARES		TARGET PRICE	RECOMMENDATION
Shares Outstanding Basic (MM)	168.9	<b>\$1.00</b>	Buy
Shares Outstanding F.D. (MM)	180.4		Spec Buy
Market Capitalization (MM\$)	\$106.4		Hold
Percent of Shares Held by Management	11%		Sell
		Return to Target	<b>Speculative BUY</b>
		58.7%	

Production (Net Sales)					
Units	Year-end Dec.31	2004A	2005A	2006F	2007F
(bbl/d)	Oil & Liquids	0	493	624	2,100
(mmcf/d)	Natural Gas	0.0	1.1	0.0	3.7
(6:1)	BOEPD	0	675	624	2,717

Financial Results					
Units	Year-end Dec.31	2004A	2005A	2006F	2007F
(MM)	Cash Flow	n/a	\$5.3	\$4.9	\$34.7
	CFPS - Basic	n/a	0.06	0.03	0.21
	CFPS - Fully Diluted	n/a	0.05	0.03	0.19
(MM)	Net Income	n/a	(\$1.5)	(\$3.1)	\$9.7
	EPS - Basic	n/a	(0.02)	(0.02)	0.06
	EPS - Fully Diluted	n/a	(0.01)	(0.02)	0.05

**Comment:**

Valuation Metrics					
Units	Year-end Dec.31	2004A	2005A	2006F	2007F
	P/CF - Fully Diluted	n/a	13.7 x	23.3 x	3.3 x
	P/E - Fully Diluted	n/a	(48.7) x	(36.5) x	11.8 x
	EV/DACF	n/a	10.1 x	9.1 x	1.8 x
(\$/BOEPD)	EV/BOEPD	n/a	\$104,614	\$119,439	\$25,309
(\$/BOE)	EV/BOE - P+P Reserves	n/a	\$4.51		

**Comment:** 2005A metrics based on weighted average 2005 share price

Capital Structure					
Units	Year-end Dec.31	2004A	2005A	2006F	2007F
(MM)	Basic Shares O/S	4.7	130.7	168.9	168.9
(MM)	F.D. Shares O/S	4.7	183.1	180.4	180.4
(MM)	Market Capitalization	n/a	\$82.0	\$106.4	\$106.4
(MM)	Net Debt	(\$3.7)	(\$11.4)	(\$31.8)	(\$37.6)
(MM)	Enterprise Value	n/a	\$71	\$75	\$69
(MM)	Capex	\$0.1	\$46.3	\$24.9	\$29.0
	Net Debt to Cash Flow	8.2 x	(2.1) x	(6.5) x	(1.1) x

**Core Areas**



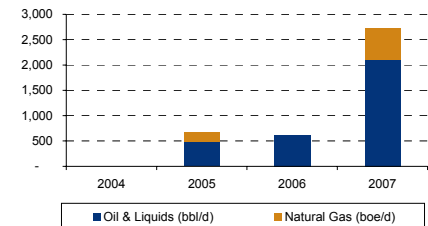
RESERVES		
Proven Reserves	P + P Reserves	
Oil & Liquids (mmbbl)	2,362	Oil & Liquids (mmbbl) 5,424
Natural Gas (Bcf)	9,765.0	Natural Gas (Bcf) 61,410
Total mboe (6:1)	3,990	Total mboe (6:1) 15,659
Proven Reserve Growth	n/a	P + P Reserve Growth n/a
Proven RLI (years)	16.7	P + P RLI (years) 65.6

FINDING & DEVELOPMENT		
Proven	P + P	
Reserve Additions	3,989.5	Reserve Additions 15,659.0
F&D (\$/BOE)	\$12.61	F&D (\$/BOE) \$3.96
Replacement Ratio	16.2	Replacement Ratio 63.5
Recycle Ratio	1.6	Recycle Ratio 5.2

**COMMODITY PRICE ASSUMPTIONS**

WTI (US\$/bbl)	2005	\$56.59	Brent (US\$/bbl)	2005	\$54.51	Foreign Exchange (C\$/US\$)	2005	\$0.83
	2006	\$66.00		2006	\$65.00		2006	\$0.88
	2007	\$60.00		2007	\$57.50		2007	\$0.89

**Production Mix**



**Per Share Growth**

	2006F	2007F
Production per share	-77.2%	335.5%
Cash Flow per share	-51.5%	564.0%

**Net Asset Value**

	2005A	2006F
NAV per Share (\$/share)	\$ 1.06	\$ 1.00
P/NAVPS	0.6 x	0.6 x
Net Land (acres)	301,973	2,478,478

**Sensitivities**

Cash Flow Per Share, Fully Diluted

	2007F
WTI +/- US\$1.00/bbl	\$0.04
Gas +/- \$1.00/mcf	\$0.01
Oil +/- 100 bbl	\$0.01
Gas +/- 1 Mmcf	\$0.00

**Financing History**

Date	Issue Price	# of Shares	Proceeds
22-Nov-04		13,607,000	\$3,401,750
04/14/2005*	\$0.80	82,500,000	\$66,000,000
04/18/2006**	\$1.20	35,497,106	\$42,596,527

\* Units included half a warrant exercisable at \$1.20 for one year  
 \*\* 86% of previously awarded warrants exercised

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3. The analyst has visited the issuers London (UK) and Tunis (Tunisia) offices. No payment or reimbursement was received from the issuer for the associated travel costs.

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