

# Uranium Sector Review Exploration, Development & Production March Quarter 2012



# **Resource Capital Research**



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#### 27 March 2012

Uranium Sector Review March Quarter 2012

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Disclosure and Disclaimer	

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<sup>\*</sup> Indicates companies with detailed financial projections and valuation available.



## **Overview and Investment Comment**

#### Market performance summary table

The uranium market has now factored in the impact of Fukushima.

Uranium equity prices have been trending up for the past 6 months.

27 March 2012		Current Price*	1 month		6 month ance (%)	12 month
Spot Uranium Price	:US\$/lb	51.0	-1.9	-2.4	-3.8	-3.8
Uranium Participation Corp	:C\$/Share	5.8	-4.9	5.7	-0.3	-17.2
Merrill Lynch Uranium Equity Index		271.6	-5.2	20.0	19.1	-38.4
Share Prices - Select Companies						
Energy Resources of Australia	:A\$/share	1.3	4.4	-0.8	-33.0	-76.4
Extract Resources	:A\$/share	8.6	0.6	1.8	11.4	5.0
Paladin Energy	:A\$/share	1.9	4.1	35.7	46.6	-48.8
Cameco	:C\$/Share	22.5	-9.8	23.5	13.1	-25.1
Denison Mines	:C\$/Share	1.6	-15.3	22.1	30.1	-40.1
Uranium One	:C\$/Share	3.0	-7.6	42.3	27.3	-30.3
Market Indices						
World Markets (all sectors) Morgan Stanley World Index	(	1322.3	2.1	12.4	17.5	2.7
Currencies (compared to USD)						
Australian dollar		1.05	-3%	4%	7%	2%
Canadian dollar		1.00	0%	3%	4%	-2%
Euro		1.33	-1%	3%	-2%	-5%

#### **Equity market performance**

It is over 12 months since the 11 March 2011 Fukushima accident. The impact to the uranium sector has now been factored in and the market is expected to be broadly in balance for the next 12 to 18 months.

Uranium equities have staged a recovery over the past 6 months. A broad sector index, the Merrill Lynch Uranium Equity Index (a global basket of uranium equities) is up 37% (as of 27 March 2012) having bottomed at 202 on 4 October 2011. The uptrend since then, however, has been volatile. The index is down 5% in the last month, up 20% in the past 3 months, and down 38% for the 12 months.

Over the past one month the Australian uranium majors have outperformed their Canadian peers with the Australian stocks up 0 to 5% and the Canadians down 5 to 15%. With the exception of ERA, the global majors in the above table have performed strongly in the past 6 months.

# Uranium Equity Index is up 37% since hitting a low of 202 October 4.

**The Merrill Lynch** 

#### **Uranium price and market outlook**

The spot uranium price is US\$51.00/lb with stable outlook for the next 12 to 18 months.

The uranium spot price is US\$51.00/lb. The spot market has been trading in the range of US\$51-53/lb over the past 6 months, except for a short breakout in November.

Immediately prior to the Japanese earthquake on 11 March 2011, the spot price had been trading at US\$67.75/lb, a 12 month high.

While the sector outlook has stabilised there remains the uncertainty around when Japan will restart its reactors. At present, only 1 of its 54 reactors is operating with the rest shut down for maintenance or safety reviews.



Emergence of strong strategic investor support and acquisition activity in the uranium sector reinforce midterm positive outlook.

The contract price is US\$60.00/lb (29 February).

Over 80 new nuclear power reactors are expected to be commissioned by 2017.

Buying opportunities continue to emerge driven by perceptions of a floor to the uranium spot price holding at around US\$50/lb, and strong strategic investor support and acquisition activity at the large end of the market.

Sector fundamentals appear positive in the mid and long term. Over 80 new nuclear power reactors are expected to be commissioned globally by 2017, with 61 currently under construction. There are 491 new reactors planned or proposed (9 March 2012, WNA) which is 9 more than pre Fukushima (482, 2 March 2011). Current planned and proposed reactors include 171 in China, 56 in India, 41 in Russia, 30 in the USA, and 13 in Ukraine.

The long term contract uranium price is US\$60.00/lb (29 February 2012), down from US\$62.50/lb (30 November 2011) and US\$73.00/lb (28 February 2011).

While it may trend a little weaker in the near term, we expect the contract price to remain around the US\$60-70/lb mark. This level should support development decisions at a number of advanced uranium development projects, particularly in Namibia, eg the large scale Husab project of Extract Resources (ASX:EXT).

WNA forecast's a modest market surplus in 2013 and 2015, and a modest deficit in 2014 – leading to an overall balanced market through 2015. Key factors that could impact the balanced market outlook include disruption and delays to existing and new projects, and the extent of new commercial deals for secondary supply post HEU in 2013.

Indeed, market prices are being closely watched in Kazakhstan where the current installed nameplate production capacity is understood to be 66mlbspa (16mlbs above 2011 production of 50mlbs  $U_3O_8$ ) - officials have said they will cap production at current levels till market prices and demand provide support for additional production.

#### **Events of the past 3 months include:**

Political and regulatory changes in a number of jurisdictions accommodating uranium exploration and/or development:

- In Canada, the **moratorium on Labrador Inuit lands has been lifted** to allow uranium exploration and mining,
- The **new LNP Queensland government** is expected to adopt the federal LNP policy in favour of uranium exploration and mining, though intentions and timing await clarification.
- The **Liberal government in NSW** has a Bill currently being debated in parliament to allow uranium exploration in the state.

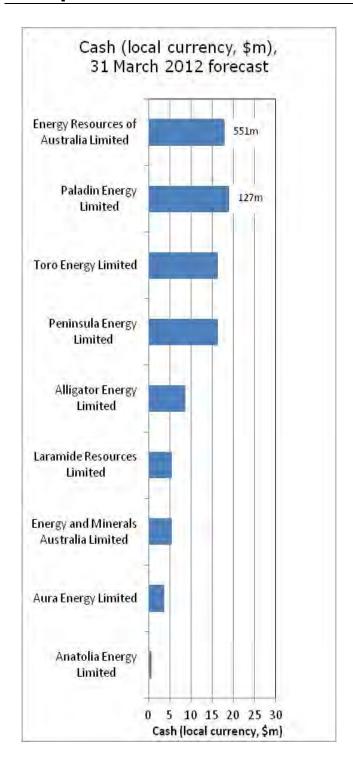


# **RCR March Quarter Featured Company Summary**

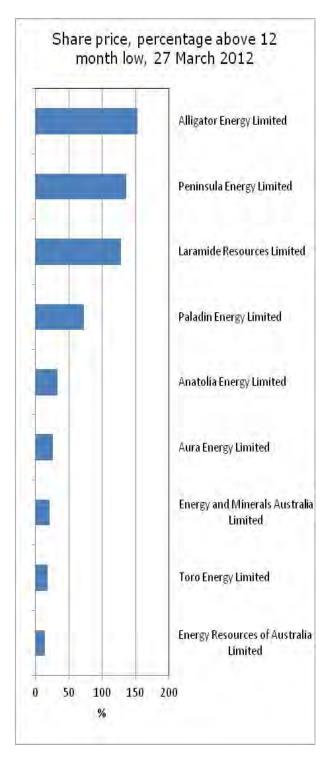
AUSTRALIA	0- 1-	Commont
Company	Code	Comment
Alligator Energy Limited	AGE	Mid exploration  AGE is well funded, focused in ARUP, NT - Australia's premier uranium province. Potential for Ranger-Jabiluka style trend. High grade uranium prospects established on Caramal - South Horn 7km trend. Maiden JORC Resource expected at Caramal Apr '12.
Anatolia Energy Limited	AEK	Advanced Exploration High grade (0.11% U3O8), ISL prospective Temrezli Uranium Project, Turkey. Regional Exploration Target 30-50mlb. Initial hydrology results expected 2Q12; PFS 3Q12. Highly experienced management team led by former Uranerz GmbH executives.
Aura Energy Limited	AEE	Scoping Study AEE is focused on 2 key uranium projects (Häggån and Reguibat); and completed initial drilling 4Q11 at a shale gas project in Sweden. Häggån Scoping Study (Feb '12) confirms economic potential of a promising large scale bioheap leach project; 30mtpa, 25+ year LOM.
Energy and Minerals Australia Limited	EMA	Development Major drill program underway at Mulga Rock (4Q11-1Q12; 20,000m) focused on expanding potential low cost, ISR amenable, sandstone-hosted uranium resources. Potential for rapid resource expansion at low cost. PFS expected 1H13.
Energy Resources of Australia Limited	ERA	Producer  ERA production guidance is 3 to 3.7kt U3O8 in 2012, subject to rain. The company is focused on mining, evaluating and exploring in the highly prospective East Alligator River region (NT). NPV is highly leveraged to exploration, social and environmental outcomes.
Paladin Energy Limited	PDN	Producer PDN announced record production 4Q11 of 1.82mlbs U3O8 from LHM and KM. The company is making progress on cost reductions and improved operating efficiencies at key projects. Near term JV farm-outs of Australian projects expected to stimulate project momentum.
Peninsula Energy Limited	PEN	Prefeasibility Study Lance (Wyoming) DFS and extended economic modelling (Dec '11) indicates a robust ISR project producing 2.2mlbspa U3O8. PEN remains well positioned to receive Lance project permits near term with production visibility 2013. Maiden Karoo resource expected 2Q12.
Toro Energy Limited	TOE	BFS and Exploration Wiluna Project final government approvals expected mid 2012; BFS 2H12. Production potential 4Q13. Exciting Theseus (WA) discovery; \$5m exploration program in 2012 now fully funded - potential for rapid advancement. Could be a second project for TOE midterm.
CANADA Company	Code	Comment
Laramide Resources Limited	LAM	Advanced Exploration/Development Stage  LAM's share price has risen strongly in the past few months, in part reflecting anticipation of the LNP win in QLD in last weekend's election. Westmoreland should be a major beneficiary of the expected change in uranium policy. RCR valuation C\$2.30/share.



## **Comparative Charts**



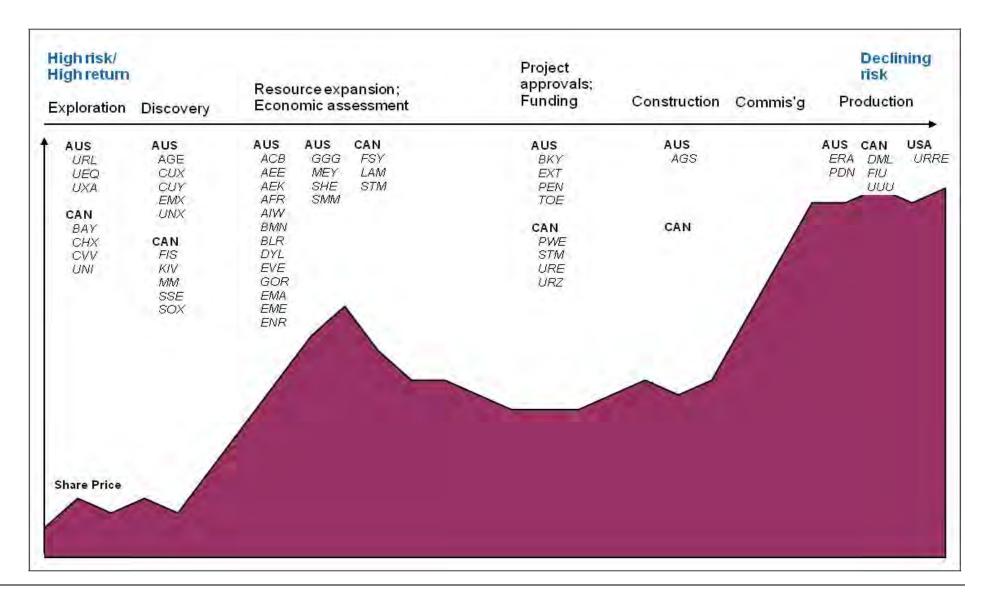
Many companies have completed capital raisings recently and are sitting on comfortable cash positions to fund advancement of their projects in 2012.



Most companies are trading well above their 12 months lows reflecting fundamental advances in their projects, and also stabilisation of the uranium and broader equity markets.



#### Explorers' Development Cycle: Conceptual market capitalisation versus development stage; March Q 2012





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# **Financial Data**

COMPANY				t≏to-b.	Canage	780	Emope	Liter Petiking	Share	Price (L	C\$/share) <sup>3</sup>				<sup>2</sup> Fully Diluted	Market Cap			Book	Enterprise Value
	Code	Status	<sup>1</sup> Yr End		Exc	changes			52	week	Current	Shares	Opt+W <sup>2</sup>	C. Notes <sup>2</sup>	Shares	(undiluted)	Cash	Debt	Value	(Undiluted)
27 M arch 2012									H	Low		(m)	(m)	(m)	(m)	(LC\$m) <sup>3</sup>				
AUSTRALIA (A\$)																				
Alligator Energy Limited	AGE	Е	June	ASX				No	0.20	0.08	0.19	156	21	0	177	30	8.6	0.0	18	30
Anatolia Energy Limit ed	AEK	Е	June	ASX				No	0.20	0.09	0.12	108	0	13	121	13	0.6	0.0	12	13
Aura Energy Limited	AEE	E	June	ASX	TSX			No	0.37	0.14	0.17	160	30	0	189	27	3.6	0.0	18	27
Energy and Minerals Australia Limited	EM A	Е	June	ASX				EMAO	0.25	0.07	0.09	388	129	30	546	33	5.5	7.4	1	40
Energy Resources of Australia Limited	ERA	Р	Dec	ASX				No	5.65	1.14	1.30	518	0	0	518	673	554.5	0.0	1262	673
Palad in Energy Limited	PDN	Р	June	ASX	TSX		NS	E No	3.96	1.11	1.92	836	8	108	952	1604	127.1	775.8	1176	2380
Peninsula Energy Limited	PEN	Е	June	ASX				PENOA, PENO	C 0.10	0.03	0.06	2141	889	19	3049	126	16.3	0.0	69	126
Toro Energy Limited	TOE	Е	June	ASX				No	0.12	0.07	80.0	1042	38	0	1080	82	16.3	0.0	10 1	82
Total: Australia																	732.5	783.2	2657	3372
CANADA (C\$)																				
Laramide Resources Limited	LAM	E	Dec		TSX	AMEX		No	1.61	0.61	1.39	71	8	0	79	98	5.5	0.0	95	98
Total: Canada																	5.5	0.0	95	98
Total: (US\$) <sup>4</sup>																	775	822	2885	3639

<sup>(1)</sup> P: Producer; E: Explorer; I: Imminent - includes companies with bankable feasibility studies and likely to be in production within 3 years; IHC: Investment Holding Company

# **Company Statistics**

COMPANY																	
	Code	Land		Drilling ('	000 m)		(A) E	xploratio	n (L.C.	Sm) <sup>7</sup>	(B) (	Corporate	e (L.C.\$	m) <sup>7</sup>	( <i>A</i>	()/(A+B	) %
27 March 2012		('000 ha) <sup>6</sup>	Sep-11		2011	2012		M ar-12							M ar-12		
AUSTRALIA (A\$)																	
Alligator Energy Limited	AGE	860	1.6	0.0	0.5	6.5	1.3	0.3	2.9	3.8	0.3	0.4	1.6	1.5	42.9	64.1	72.
Anatolia Energy Limited	AEK	140	1.0	1.5	5.0	4.6	0.2	0.3	2.9	1.4	0.1	0.2	1.0	0.6	68	75	69
Aura Energy Limited	AEE	1,648	6.0	6.0	20.0	24.0	1.3	1.0	4.9	3.9	0.4	0.4	1.4	1.6	71.4	77.8	71.
Energy and Minerals Australia Limited	EM A	242	5.3	15.0	30.0	27.8	0.7	2.0	3.2	4.1	1.2	0.8	2.4	2.9	71.4	57.2	58.3
Energy Resources of Australia Limited	ERA	8	5.0	0.0	14.9	27.5	6.0	7.9	19.4	31.7	3.1	3.1	13.7	12.5	71.8	58.6	71.7
Paladin Energy Limited	PDN	na	15.0	15.0	100.0	60.0	3.6	5.0	17.6	19.9	11.8	11.5	54.0	48.7	30.3	24.6	29.0
Peninsula Energy Limited	PEN	272	55.0	75.0	142.0	281.4	3.2	2.0	11.8	11.3	1.3	1.3	5.1	5.2	60.6	69.8	68.
Toro Energy Limited	TOE	3,578	5.8	12.0	25.7	36.0	6.0	2.8	15.5	17.3	0.8	1.1	3.5	4.2	71.4	81.5	80.4
Total: Australia			95	125	338	468	22	21	78	93							
CANADA (C\$)																	
Laramide Resources Limited	LAM	700	0.0	0.0	0.0	5.0	1.4	1.4	5.0	5.6	0.6	0.6	2.3	2.4	70	69	70
Total: Canada			0	0	0	5	1	1	5	6							
Total: (US\$)4							25	24	87	104							

<sup>(6)</sup> To convert hectares to acres, multiply by 2.47; eg 100 thousand hectares ('000 ha) = 247 thousand acres ('000 ac)

<sup>(2)</sup> Fully Diluted (shares, options + warrants (opt. + w), convertible notes (Conv. N), other obligations)
(3) LC. - Local Currency unit; End of quarter forecast. (4) AUD/USD: 105; CAN/USD: 100

<sup>(7)</sup> L.C. - Local Currency unit

# Reserves, Resources and Historic Mineralisation

COMPANY			Res	serves (Ed	uity)²	Re	sources (E	quity)²	Historical/	M ineralise (Equity) <sup>2</sup>	d Material	Total Ura	nium (U <sub>3</sub> O <sub>8</sub> )	Total - Gold	Production
	Code	Status <sup>1</sup>	Uraniun	$1(U_3O_8)$	Other	Uraniur	$n (U_3O_8)$	Other	Uranium	$(U_3O_8)$	Other	(All Mine	ralisation)1	Equivalent <sup>3</sup>	Commencement
27 March 2012			MIb	kt		MIb	kt		M lb	kt		MIb	kt	(Moz)	Year
AUSTRALIA															
Alligator Energy Limited	AGE	Е	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0	na
Anatolia Energy Limited	AEK	Е	0.0	0.0		6.1	2.8		0.0	0.0		6.1	2.8	0.2	na
Aura Energy Limited	AEE	Е	0.0	0.0		683.4	310.0		0.0	0.0		683.4	310.0	20.6	na
Energy and Minerals Australia Limited	EM A	Е	0.0	0.0		59.6	27.0		0.0	0.0		59.6	27.0	1.8	na
Energy Resources of Australia Limited	ERA	Р	178.7	81.0		482.5	218.9		0.0	0.0		661.2	299.9	20.0	1981
Paladin Energy Limited	PDN	Р	155.1	70.4		535.5	242.9		21.9	9.9		557.4	252.8	16.8	2008
Peninsula Energy Limited	PEN	E	0.0	0.0		41.4	18.8		6.1	2.8		47.5	21.5	1.4	na
Toro Energy Limited	TOE	Е	0.0	0.0		53.6	24.3		0.0	0.0		53.6	24.3	1.6	na
Average: Australia															
CANADA															
Laramide Resources Limited	LAM	E	0.0	0.0		62.4	28.3		4.7	2.2		67.1	30.4	2.0	na
Total/Total Average			334	151		1924	873		33	15		2136	969		

<sup>(1)</sup> P: Producer; E: Explorer; I: Imminent - includes companies with bankable feasibility studies, financing and likely to be in production within 3 years; IHC: Investment Holding Company

## **Valuation and Performance Data**

3.4 20.6 7.5 -17.4	na na na na na	/Res'v+resourd US\$/lb	es /Total U <sub>3</sub> O <sub>8</sub> US\$/lb na 2.13 0.0 0.61	\$pot 51.00	Contract 60.00	1 month  27 -8 -19	73 na	6 month  111 -8	12 month 52 -40	%off 1: Hi	2 month Lo 153 33
3.4 20.6 7.5 -17.4	na na na na	na 2.13 0.0	na 2.13 0.0	na 4	na 4	27 -8	73 na	111 -8	52	3	153
20.6 7.5 -17.4	na na na	2.13 0.0	2.13 0.0	4	4	-8	na	-8			
20.6 7.5 -17.4	na na na	2.13 0.0	2.13 0.0	4	4	-8	na	-8			
7.5 -17.4	na na	0.0	0.0	-		-			-40	40	33
-17.4	na			0	0	10					
		0.61	0.61			- 19	7	-18	-43	54	26
			0.01	1	1	9	2	-15	-58	66	21
1.2	0.70	0.26	0.26	1	0	4	-1	-33	-76	77	15
-2.5	15.25	4.42	4.24	9	7	4	36	47	-49	52	73
7.8	na	2.79	2.43	5	5	-6	79	26	-39	41	136
5.0	na	1.3	1.3	3	2	-2	-17	10	-31	34	18
	7.97	1.65	1.57	3	3						
17.7	na	1.49	1.38	3	2	28	93	60	-13	14	128
	na	1.49	1.38	3	2						
	5.32	1.45	1.38	3	2	4	30	18	-30	38	60
		7.97 17.7 na na	7.97 1.65  17.7 na 1.49  na 1.49	7.97 1.65 1.57  17.7 na 1.49 1.38  na 1.49 1.38	7.97 1.65 1.57 3  17.7 na 1.49 1.38 3  na 1.49 1.38 3	7.97 1.65 1.57 3 3 17.7 na 1.49 1.38 3 2 na 1.49 1.38 3 2	7.97 1.65 1.57 3 3  17.7 na 1.49 1.38 3 2 28  na 1.49 1.38 3 2	7.97 1.65 1.57 3 3 3 1 17.7 na 1.49 1.38 3 2 28 93 na 1.49 1.38 3 2	7.97 1.65 1.57 3 3 1 17.7 na 1.49 1.38 3 2 28 93 60 na 1.49 1.38 3 2	7.97 1.65 1.57 3 3 1 17.7 na 1.49 1.38 3 2 28 93 60 -13 na 1.49 1.38 3 2	7.97 1.65 1.57 3 3 3 1 14 17.7 na 1.49 1.38 3 2 28 93 60 -13 14 na 1.49 1.38 3 2

<sup>(2)</sup> Reserves, resources and mineralised material published by the relevant company. Tonnes are metric (2204.6 pounds). The applicable mineral resource codes are by country: Australian: JORC, Canadian: NI 43-101, South Africa: SAM REC

<sup>(3)</sup> For uranium only. Assumes a uranium price of US\$51.00/lb and a gold price of US\$1690/oz

<sup>\*</sup> Mineral resource estimates are inclusive of the mineral reserve. ^ ERA reserves are in addition to resources.

# AGE.AU

27 March 2012 Uranium Mid exploration Exchanges: ASX:AGE

#### **Capital Profile**

Share price (A\$)	0.19		
52 week range (A\$/share)	0.075	to	0.20
Number of shares (m)	155.6		
Options and warrants (m)	21.3		
Convertible notes (m)	0.0		
Fully diluted (m)	176.8		
Market capitalisation (undiluted) (A\$m)	29.6		
Debt (A\$m) - Mar 12F	0.0		
Enterprise value (A\$m)	20.9		
Major shareholders: Macquarie Bank (11.3%)	, Lagoon Creek	Res.	(4.5%),
Mr Robert Sow erby (3.6%), MO U Investments (	2.6%)		
Avg monthly volume (m)	12		
Cash (A\$m) - Mar 12F	8.6		
Price/Cash (x)	3.4		
Price/Book (x)	1.6		
Listed company options:	No		

#### **Investment Points**

Focused on Australia's premier uranium region - Alligator River Uranium Province (ARUP) - host to 950 mlb U<sub>3</sub>O<sub>8</sub>.

Tenements within Arnhem Land, 60 km east of Jabiluka, and in the same host rocks.

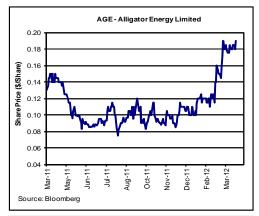
Arnhem Land under-explored due to former government policy, and access restrictions by traditional owners.

AGE prospects contain historical high grade uranium intersections >0.5%. Jabiluka-style setting at Caramal.

33 drill holes (4,500m) completed 2H11 at Tin Camp. Caramal intercepts 2011 include 14m @ 0.707% U<sub>3</sub>O<sub>8</sub>. JORC resource expected Apr '12.

Drilling 2012: Caramal deposit - various targets within 7km Caramal - S. Horn corridor: north of Caramal: and Mamadawerre - Steptoe fault zone

AGE board and management have extensive uranium industry experience



#### **Directors Contacts**

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D Gately (Chairman) R Sowerby (CEO Exec) G Duncan (Exec Alternate) P Dickson (Non Exec) L Curyer (non Exec) A Vigar (Non Exec)

#### Alligator Energy Limited

A\$ 0.19

AGE is well funded, focused in ARUP, NT - Australia's premier uranium province. Potential for Ranger-Jabiluka style trend. High grade uranium prospects established on Caramal - South Horn 7km trend. Maiden JORC Resource expected at Caramal Apr '12.

#### Production and Financial Forecasts

Year End: June	Dec-11a	Mar-12F	2011a	2012F	2013F
Exploration and evaluation (A\$m)	1.30	0.30	2.89	3.80	2.40
Corporate (A\$m)	0.30	0.40	1.62	1.47	1.60
Exploration/(Expl.+ Corporate) (%)	81	43	64	72	60
Funding duration at current burn (years	)		2.8	1.5	1.0
Shares on issue (pr end) (m shares)	155.6	155.6	155.3	155.6	155.6
Drilling - RAB (m)	0	0	0	0	0
Drilling - Other/Diamond (m)	1,560	0	500	6,500	6,000
Land holding ('000 ha)	860	860	705	860	860
Tenement costs (\$k per year)	-	-	-	-	-
Capital raisings (A\$m)	0.0	0.0	17.5	0.0	0.0
Funding from JV partners (A\$m)	0	0	0	0	0.0
Cash (A\$m)	9.3	8.6	12.5	7.7	3.9
Cash backing (Ac/share)	6.0	5.5	8.0	4.9	2.5
Net asset backing (Ac/share)	12.0	11.8	12.3	11.6	10.7
* Uranium prospective properties only.	Quarters refe	er to calendar vea	r.		

#### Company Comment

Overview: AGE listed on the ASX 3rd February 2011, with a focus on uranium exploration in the prolific Overview: AGE listed on the ASX 3rd February 2011, with a focus on uranium exploration in the prolific Alligator River Uranium Province (ARUP) of the Northern Territory (NT), having successfully bid for tenements held by major uranium producer Cameco, in a highly competitive bid process. The project area contains prospects where previous exploration drilling has intersected high grade uranium mineralisation. Mining and Exploration agreements are in place with Traditional Owners. Cameco retains an option to buy back 51% of total resources at 10% of spot price if a deposit >20,000t U<sub>3</sub>O<sub>8</sub> is identified. AGE also holds 11 Exploration Licence Applications (ELAs) in the ARUP totalling 415km<sup>2</sup>.

Alligator River Uranium Province (ARUP): Targets are high grade unconformity style uranium deposits, such as ARUP deposits Ranger orebodies 1 and 3 (multiple pods, 134mlb U<sub>3</sub>O<sub>8</sub>), Jabiluka (312mlb U<sub>3</sub>O<sub>9</sub>) and Nabarlek (single pod of ~24mlb U<sub>3</sub>O<sub>8</sub>). The tenements cover the same units, structural setting and mineralisation as these deposits. Little uranium exploration was undertaken in the ARUP between the 1970's and the 1990's due to low uranium prices and the former 3 mines policy.

mineralisation as these deposits. Little uranium exploration was undertaken in the ARUP between the 1970's and the 1990's due to low uranium prices and the former 3 mines policy. Tin Camp Creek - (NT; uranium): 275km E of Darwin, purchased from Cameco for A\$3m. The tenements include several prospects, the most advanced of which is Caramal, ~60km east of Jabiluka and ~20km south of Nabarlek. 2H11 Caramel 25 holes, 3,200m; South Horn 6 holes, 1000m; Two Rocks 2 holes, 300m. Caramal: Dec '11 drill results (including CAD11-020 14m @ 0.707% U<sub>3</sub>O<sub>8</sub> from 108m, CAD11-019 18m @ 0.338% U<sub>3</sub>O<sub>8</sub> from 116m) confirms continuity and extends historically defined mineralisation. Historical high grade intersections include 21m @ 0.50% U<sub>3</sub>O<sub>8</sub> and 22.7m @ 0.38% U<sub>3</sub>O<sub>8</sub>. Mineralised envelope is now defined over 350m strike, 40m to 80m wide, and 10m to 30m thick, with upside potential beyond this. Suggested similarities with Jabiluka and Ranger in the geological setting, host lithologies and alteration styles. Exploration results in 2011 confirm key structures and host rocks over a 7km trend from Caramal to South Horn and will be the focus of follow up drilling in 2012. Most of the area is under shallow cover (<50m). South Horn and will be the focus of follow up drilling in 2012. Most of the area is under shallow cover (<50m). South Horn (NT; uranium): Drilling is targeted adjacent to the Beatrice Fault, which juxtaposes dolerite and prospective Cahill Formation. Radiometric data highlights elevated uranium. High grade drill intercepts 2011

Two Rocks (NT, Uranium): Historical exploration defined two small zones of uranium and copper with the best historical intersection of 4m @ 0.82% U<sub>3</sub>O<sub>8</sub>. Electromagnetic and radiometric targets representing possible black shales are a priority for 500m of 2H11 drilling.

possible black shales are a priority for 500m of 2H11 drilling.

Mamadawerre JV - AGE has negotiated to earn into Cameco EL24992 (contiguous to other AGE prospects) in the ARUP; high quality, early stage targets spending \$0.5m and drilling 600m by December 2012. AGE can earn 40% spending \$2m in 3 years and 90% spending \$10m within 6 years. A 3km anomalous zone is associated with a regional fault. Rock chip samples 2H11 1300m along the Steptoe Fault and on the Pigeon Fault confirmed extensive uranium mineralisation. Drilling expected 3Q12 along Steptoe Fault.

Investment Comment: AGE's tenements are in one of the world's premier provinces for high grade uranium deposits. Exploration drilling is concentrating on granted tenements with historical high grade intersections.

viz Caramal, South Horn and Two Rocks. Share price drivers are drill results and resource definition in an area of historical high grade uranium discoveries. Potential maiden resource 1H12 at Caramal.

#### Reserves and Resources/Mineralised Material

Code for reporting miner	ral resources - Australian:	(JORC)						
Uranium	Classification/	Project	Ore	U₃O <sub>8</sub>	Cut Off	U₃O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub> Eqty
U <sub>3</sub> O <sub>8</sub>	Geology	Equity	Mt	%	ppm	Kt	Mlb	MIb
Reserves						0.0	0.0	0.0
Resources								

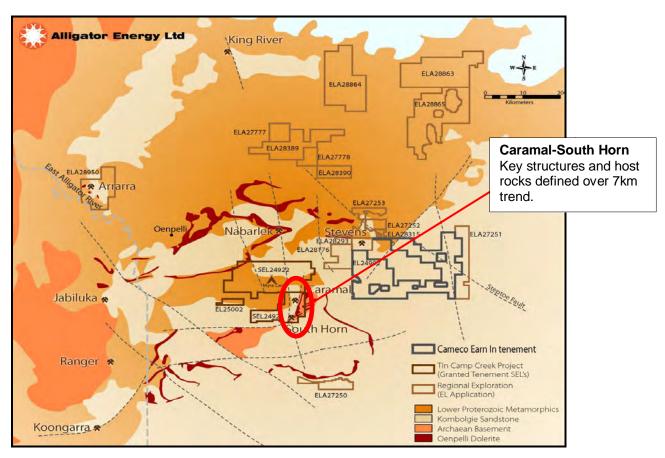
Total	0.0	0.0	0.0
Mineralised Material (est., non compliant with JORC)	0.0	0.0	0.0

	Ownership/		JV	Target	Process	Project	
Project	Option	Metal	Partner	Type	Route	Status	Location
Caramal	100%	U	none*	Unconformity	na	Adv Expl	AUS (NT)
South Horn	100%	U	none*	Unconformity	na	Expl	AUS (NT)
Two Rocks	100%	U	none*	Unconformity	na	Expl	AUS (NT)
Gorrunghar	100%	U	none*	Unconformity	na	Expl	AUS (NT)
Mamadawerre^	0/40/90/40%	U	Cameco	Unconformity	na	Expl	AUS (NT)

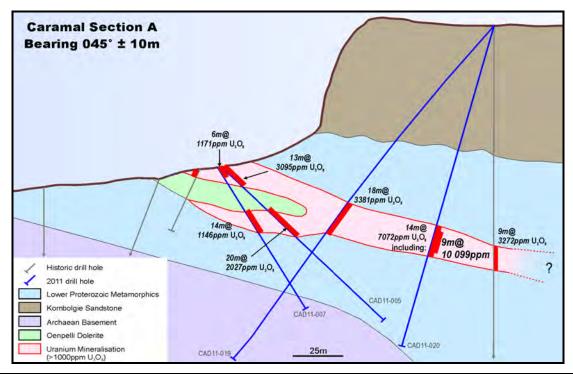
An aboriginal trust holds 2% in two of the three granted tenements. Cameco has back in rights on these projects. 'Initial earn in



AGE's exploration tenements are exclusively in the Alligator River Uranium Province (ARUP, NT), purchased from Cameco (51% claw back), held 100%, and JV (Mamadawerre). ARUP known uranium endowment is 950mlbs of high grade resources (>0.1% U<sub>3</sub>O<sub>8</sub>) – includes Ranger and Jabiluka (ERA).



Caramal Project (NT): December '11 drill results include 14m @ 0.707% U<sub>3</sub>O<sub>8</sub> from 108m (CAD11-20). Drilling 2H11 confirms continuity and extension of historical drill results (1970s). Priority exploration zone established along 7km corridor - from Caramal to South Horn. Shallow cover – mostly <50m. Drilling 2012.



# EE.AU

27 March 2012 Uranium, Base Metals

Sweden, Australia, Mauritania, Niger

Scoping Study Exchanges: ASX:AEE

#### **Capital Profile**

Share price (A\$)	0.17		
52 week range (A\$/share)	0.14	to	0.37
Number of shares (m)	160		
Options and warrants (m)	30		
Convertible notes (m)	0		
Fully diluted (m)	189		
Market capitalisation (undiluted) (A\$m)	27.1		
Debt (A\$m) - Mar 12F	0.0		
Enterprise value (A\$m)	27.1		
Major shareholders:			
USB Nominees (6.78%)			
Avg monthly volume (m)	4		
Cash (A\$m) - Mar 12F	3.6		
Price/Cash (x)	7.5		
Price/Book (x)	1.5		
Listed company options	No		

#### **Investment Points**

AEE exploration budget 100% uranium focused; cash March 2012 forecast A\$3.6m.

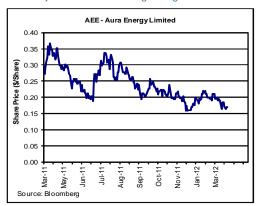
Häggån - Alum Shale, Sweden: 631mlbs U<sub>3</sub>O<sub>8</sub> @ 160ppm; potential co-products Ni, Zn, Mo. Equiv grade 250-300ppm U<sub>3</sub>O<sub>8</sub>.

Häggån: one of the 10 largest uranium resources in the world, covers only 15% of permit area. Long-term potential >1000mlbs U<sub>3</sub>O<sub>8</sub>.

Scoping Study (Feb '12): 30mtpa heap leach; annual production 6.6mlbs U<sub>3</sub>0<sub>8</sub>, 14.8mlbs Ni, 3.6mlbs Mo; opex US\$36/lb net of credits, capex US\$769m LOM.

Mauritania, Reguibat Project: initial calcrete-hosted uranium resource 50mlbs grading 0.034% U<sub>3</sub> O<sub>8</sub> . Drillir 5,000m 1H12. Scoping study 1H13.

Sweden, Mauritania and Western Australia are pro uranium jurisdictions with strong mining sectors



#### **Contacts Directors**

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Analyst: John Wilson johnwilson@rcresearch.com.au

#### **Aura Energy Limited**

A\$ 0.17

AEE is focused on 2 key uranium projects (Häggån and Reguibat); and completed initial drilling 4Q11 at a shale gas project in Sweden. Häggån Scoping Study (Feb '12) confirms economic potential of a promising large scale bioheap leach project; 30mtpa, 25+ year LOM.

#### Production and Financial Forecasts

Year End: June	Dec-11a	Mar-12F	2011a	2012F	2013F
Exploration and evaluation (A\$m)	1.32	1.00	4.88	3.95	4.00
Corporate (A\$m)	0.43	0.40	1.39	1.60	1.60
Exploration/(Expl.+ Corporate) (%)	76	71	78	71	71
Funding duration at current burn (years)	)		0.5	0.4	0.3
Shares on issue (pr end) (m shares)	136.8	159.6	132.3	159.6	184.6
Drilling - RAB (m)	1,000	1,000	4,000	4,000	0
Drilling - Other/Diamond (m)	5,000	5,000	16,000	20,000	0
Land holding ('000 ha)	1,648	1,648	1,648	1,648	0
Tenement costs (\$k per year)	-	-	-	-	-
Capital raisings (A\$m)	0.0	3.4	8.8	4.4	5.0
Funding from JV partners (A\$m)	0.0	0.0	0.0	0.0	0.0
Cash (A\$m)	1.6	3.6	3.3	2.3	1.8
Cash backing (Ac/share)	1.2	2.3	2.5	1.4	1.0
Net asset backing (Ac/share)	11.0	11.3	10.7	11.1	11.5

\*Uranium prospective tenements only, both held and under application. Quarters refer to calendar year

#### Company Comment

Overview: Aura Energy listed on the ASX May '06. It has advanced exploration projects for uranium in Sweden and Mauritania, as well as a calcrete resource and exploration assets in WA. **Alum Shale Projects (Sweden):** AEE holds 100% of 147km<sup>2</sup> over the Alum Shale uranium province in

northern Sweden. The shale-hosted deposits are also enriched in vanadium, molybdenum, zinc and nickel

northern Sweden. The shale-hosted deposits are also enriched in vanadium, molybdenum, zinc and nickel Häggån resource (Aug '11) is 631mlbs U<sub>3</sub>O<sub>8</sub> grading 160ppm, 0.155% V<sub>2</sub>O<sub>5</sub>, 0.0214% MoO<sub>3</sub>, 0.032% Ni and 0.054% Zn. The adjacent Viken licence (TSX:CZQ) has an Inferred Resource of 1.04 billion lbs U<sub>3</sub>O<sub>8</sub> grading 0.017%. Häggån is proximal to key infrastructure and is situated in commercial forestry areas. **Scoping Study** (Feb '12, RMDSTEM Ltd) compared heap and agitation leach options, with heap leach giving the best results. Pit shell contains 1bt of mineralization, low strip ratio of 0.65:1, production rate of 30mtpa, and initial LOM of 25 years. Production rate of 6.6mlbspa U<sub>3</sub>O<sub>8</sub>, 14.8mlbspa Ni, and 3.6mlbspa Mo. RCR imputed heap recoveries are 62% U<sub>3</sub>O<sub>8</sub>, 69% Ni, and 25% Mo, supported by bacterial agitation and column leach tests. Column leach tests for uranium achieved recoveries of 85%. Design parameters include metal prices of US\$65/10 U<sub>3</sub>O<sub>8</sub>, 09%. US\$7.9/lb Ni, and Mo US\$14/lb. Zinc and Vanadium were excluded from the modelling and Zinc. in particular, represents upside potential. **Mining:** The deposits are flat Iving and near metal prices of US\$65/lb U<sub>3</sub>O<sub>8</sub>, US\$7.9/lb Ni, and Mo US\$14/lb. Zinc and Vanadium were excluded from the modelling and Zinc, in particular, represents upside potential. **Mining**: The deposits are flat lying and near surface, which support relatively low cost open pit mining at ~US\$2.50-\$3.00/t ore. The Scoping Study indicates opex of US\$13.75/t (US\$36/lb post credits). **Pre-Feasibility**: expected to commence 2012. There is good potential to lift revenues and lower project costs by improvements to metal extractions, production of Zn, reduction of crushing and mining costs, and optimization of project scale. **A comparable project** is **Talvivaara** (LSE:TALV) bio heap leach in Finland. Guidance for ore stacking in 2012 is 18mt (nameplate design 24mtpa), recovering Ni-Co-Cu. A deal with Cameco and recent granting of uranium permits should see production of 0.8mlbspa  $U_3O_8$  from 17ppm head grade commence 2H12. Costs are US\$2.60/t mining and US\$10-11/t for bioleach, i.e. combined ~\$13/t (expected to fall to ~US\$12/t at full production). It is a

smaller scale, higher strip ratio project (>1:1) providing confidence for the initial Häggån opex numbers.

Reguibat Project (Mauritania): focused on the Precambrian Reguibat Shield, AEE is one of the largest uranium landowners, with 40% of known radiometric anomalies in a new uranium field. It holds 100% of nine projects, and can earn 70% of a further two (total 11,300km²). Mineralisation is single, flat lying sheets within 1m of surface and 1m-10m thick of calcrete overlying granitic rocks. The initial JORC resource (Jul ¹11) is 49.9mlbs U<sub>3</sub>O<sub>8</sub> grading 340ppm (cut-off 150ppm), There is high potential to expand the existing resource and define new targets. Establishing economic infrastructure options in this remote area will be a key aspect of the scoping study, expected 1H13.

Investment Comment: AEE Scoping Study modelling for Häggån suggests a likely pretax NPV of ~US\$1bn and confirms that significant advancements have been achieved in relation to project metal recoveries and process. RCR values AEE at A\$0.52/share, including a factored, early stage A\$0.36/share for Häggån (assumes US\$60/lb uranium price; see adjacent valuation table) – there is considerable potential upside to NPV as confidence increases and project milestones are achieved. Share price catalysts in 2012 could include resource extensions at Regulbat, PFS newsflow at Häggån (2m column test results 3Q12), securing a project partner, and exploration results at Motala (gas).

#### Reserves and Resources/Mineralised Material

Code for reporting mine	eral resources - Australian:	(JORC)						
Uranium	Classification/	Project	Ore	U₃O <sub>8</sub>	Cut Off	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub> Eqty
U <sub>3</sub> O <sub>8</sub>	Geology	Equity	Mt	%	ppm	Kt	MIb	Mlb
Reserves						0.0	0.0	0.0
Resources								
Häggån*	Inferred	100%	1791	0.016	100	287	631	631
Reguibat	Inferred	100%,70%	67.3	0.034	150	22.9	50.2	49.8
Wondinong	Inferred	100%	6.5	0.0185	150	1.2	2.6	2.6
Total						310.6	683.8	683.4

Mineralised Material (est., non compliant with JORC) Resource includes 0.0214%  ${
m MoO_3}$ , 0.1551%  ${
m V_2O_5}$ , 0.0324%  ${
m Ni}$  and 0.0545%  ${
m Zn}$ 

	Ownership/		J۷	Target	Process	Project	
Project	Option	Metal	Partner	Type	Route	Status	Location
Häggån	100%	U,Mo,V,Ni	na	Alum shale	na	Adv Expl	Sweden
Mauritania	100%, 70%	U	Ghazal	calcr/granite	na	Mid Expl	Mauritania
Gunbarrel	100%	U	na	sandstone	na	Early Expl	Aus (WA)
Wondinong	100%	U	na	calcrete	na	Adv. Expl	Aus (WA)
Ebadargene	100%	U	na	sandstone	na	Early Expl	Niger
Virka	100%	U	na	vein	na	Mid. Expl	Sweden
Kallsedet	100%	U	na	Alum shale	na	Early Expl	Sweden



#### AURA ENERGY LIMITED VALUATION

		Equity %	Base Resource Val'n US\$/Ib	Base NAV A\$m	NAV Factor %	Adjusted Value A\$m	u	Adjusted Uranium Price Sensitivity A\$m		
Assumptions LT Realised Uranium Price LT Exchange Rate: AUUS	: US\$/lb			<b>60</b> 0.84		<b>60</b> 0.84	<b>40</b> 0.84	<b>50</b> 0.84	<b>70</b> 0.84	<b>80</b> 0.84
<b>Projects</b> Häggån project	: NPV @10%	100%	0.09	346	20%	69	10	10	147	225
Resources and Exploration Reguibat Other Sub-total Exploration	: 49.9mlbs	100%	0.65	32 <u>1</u> 33		32 <u>1</u> 33	10 <u>1</u> 11	30 <u>1</u> 31	40 <u>2</u> 42	50 <u>4</u> 54
Assets + Cash				4		4	4	4	4	4
+ Tax losses				3		3	3	3	3	3
<ul><li>Debt</li><li>Corporate</li><li>Reclamation</li></ul>				0 13 <u>0</u>		0 13 <u>0</u>	0 13 <u>0</u>	0 13 <u>0</u>	0 13 <u>0</u>	0 13 <u>0</u>
AEE Net Assets				373		96	14	34	183	273
Fully diluted shares (m) Cash on Option Conversion				189.1 3.0		189.1 3.0	189.1 3.0	189.1 3.0	189.1 3.0	189.1 3.0
AEE Net Asset Value per share AEE Net Asset Value Diluted	: A\$/share : A\$/share dil			2.34 1.99		0.60 0.52	0.09 0.09	0.22	1.15 0.98	1.71 1.46

#### Comparables

	Shares m	Price LC/sh	Cash LCm	Adjusted EV LC\$m	mt	Uraniur Cut-off ppm	n Resource Grade U <sub>3</sub> O <sub>8</sub> %	mlbs	EV/resource U\$/Ib
Häggån									
Continental Precious Metals Inc	51.7	0.31	15.5	0.5	2855*		0.017	1048	0.00
(TSX:CZQ)	(* Viken (Sw	eden) resoi	urce cut-off	at US\$7.50)					
Reguibat									
A-Cap Resources Ltd (ASX:ACB)	200.1	0.22	6.7	37.3	248^	150	0.0221	121	0.30
	(^ includes L	etlhakane i	higher grad	de primary resource)	84	200	0.0298	55	0.65
LC: local currency									
AUUS: 1.04									
CAUS: 1.01									

#### HÄGGÅN URANIUM PROJECT KEY ASSUMPTIONS (derived from AEE Scoping Study (RMDSTEM Ltd) - Feb 2012)

RESOURCE ESTIMATES	Uranium Reso	ource		Tonnes	Grade	Uranium	Nickel	Moly
			Cutoff	Mt	% U <sub>3</sub> O <sub>8</sub>	Mlbs	Mlbs	Mlbs
Resource (Inferred)	Haggan		100ppm	1791	0.016	631	1277	843
RCR modelling assumptions	Haggan		100ppm	1791	0.016	631	1277	843
MINING METHOD	OPEN F	PIT						
PROCESS METHOD	BACTE	RIAL HEAP	LEACH					
RESOURCE CONVERSION	:%	60%	(Inferred t	to Indicated o	or better)			
TONNAGE DILUTION GRADE UPLIFT	:% :%	na na						
BASE CASE ASSUMPTIONS								
PRODUCTION RATE	:mtpa	30						
AVERAGE HEAD GRADE - U3O8 HIGH GRADE	:% :%	0.016 na						
RECOVERY - URANIUM	:%	62	RCR imp	uted recovery	62%. Column leach	h tests: 85% rec	overy.	
URANIUM PRODUCTION	:mlbspa				on PFS resources			
NICKEL PRODUCTION	:mlbspa				69%. Column leach			
MOLYBDENUM PRODUCTION	:mlbspa			-	y 25%. Column leach	h tests: 25% rec	overy.	
CAPITAL COSTS - INITIAL DEVELOPMEN CAPITAL COSTS - TOTAL	T :US\$m :US\$m		Initial cap		ipex of ~1%pa.			
EVALUATION/PERMIT COSTS - TOTAL	:US\$m				ipex of ~1%pa. nent estimates - PFS	S BES and norm	ittina related	d costs
OPERATING COSTS: (C1)	:US\$/t				eash cost per tonne.		ig roidlet	2 30313.
(-1)	:US\$/lb			oduct credit	•			
less by-product credit	:US\$/lb	36	, ,		dit (Ni and Mo).			
TAX	:%	26.2	Corporate	e tax rate.				
ROYALTY	:%	0.15						
MINE LIFE	:Years	25+ Years						
COMMISSION PROJECT	:	1Q 2018	RCR ass	umptions: 6	year development. 2	4 month ramp-up	D.	

These figures are preliminary in nature and are intended to provide only a general indication of project scale and economic robustness. Considerable refinement may result from ongoing R&D and subsequent feasibility studies.

Quarters refer to cale

ndar yea

# EMA.AU

Uranium, Base Metals, Rare Metals Australia (WA) Development Exchanges: ASX:EMA

### **Energy and Minerals Australia Limited**

A\$ 0.09

Major drill program underway at Mulga Rock (4Q11-1Q12; 20,000m) focused on expanding potential low cost, ISR amenable, sandstonehosted uranium resources. Potential for rapid resource expansion at low cost. PFS expected 1H13.

#### **Capital Profile**

Share price (A\$)	0.09		
52 week range (A\$/share)	0.07	to	0.25
Number of shares (m)	388		
Options, warrants, convertible notes^(m)	129		
Performance Shares* (m)	30		
Fully diluted (m)	546		
Market capitalisation (undiluted) (A\$m)	33.0		
Debt (A\$m) - Mar 12F	7.4		
Enterprise value (A\$m)	40.4		
Major shareholders:			
M. Few ster (73.5%), Acorn Capital (7.6%)			
Avg monthly volume (m)	1		
Cash (A\$m) - Mar 12F	5.5		
Price/Cash (x)	6.0		
Price/Book (x)	51.5		
Listed company options:	EMAO		

\* Subject to PFS. ^ Oct 2011: \$10m secured conv note, \$0.18 cp, 2 year term.

#### **Investment Points**

Mulga Rock Deposits (MRD): possible production 2014 (2.6mlbpa), plus by-product revenues base metals (Ni, Co) and rare metals (Sc, REE) after year 2.

JORC Inferred Resource at MRD is 59.6mlb grading 0.047%-0.059%  $U_3O_8$ , in upper and lower lignite, and sandstone (June 2010).

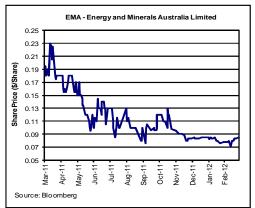
Sandstone-hosted uranium could be amenable to low cost ISR (In Situ Recovery). Exploration Target 7.6kt-13kt U<sub>3</sub>O<sub>8</sub> grading 0.024 to 0.065% (Prospects 1-3).

Drilling ISR Prospects 1-5; JORC Statement expected 2Q12 for Prospects 1-3.

Scoping Study (Nov '10): 2.6mlbpa U<sub>3</sub>O<sub>8</sub> from 2014-2025, split 50/50 between ISR and lignite open cut. Capex A\$260m, opex US\$23/lb with by-product credits.

Funding in place following \$10m convertible note issue (4Q11) to institutional investors.

#### RCR valuation: NAV A\$120m or A\$0.25/share.



#### **Contacts**

## **Directors**

Mr Mike Fewster **Executive Director** Tel: 61 (0) 8 9389 2700 West Perth, WA, Australia

Analyst: John Wilson h.com.au P Golding (Non Exec Chair) M Fewster (Exec) S Penrose (Non-Exec)

#### Production and Financial Forecasts YEAR END: June Mar-12F 2011a 2012F 2013F Exploration and evaluation (A\$m) 0.67 2.00 3.18 4.10 4.00 Corporate (A\$m) 1.16 0.80 2.38 2.94 2.00 Exploration/(Expl.+ Corporate) (%) 57 58 67 36 Funding duration at current burn (years) 387.9 15,000 Shares on issue (prend) (m shares) 387.9 387.9 454 6 Drilling - Other/RAB (m) 5,251 20,000 7,500 Drilling - Other/Diamond (m) 10,000 2,500 2,500 340 Land holding ('000 ha)\* 242 242 242 Tenement costs (\$k per year) Capital raisings (A\$m) 0.00 0.00 10.00 Funding from JV partners (A\$m) 0.0 0.0 0.0 0.0 Cash (A\$m) 8.8 4.0 7.8 1.1 Cash backing (Ac/share) 1.4 0.3 2.3 1.7 Net asset backing (Ac/share) 0.4 1.7

#### Company Comment

\* Uranium prospective properties only granted and under application.

Overview: Energy and Minerals Australia listed on the ASX in May '08. It holds 915km2 in granted tenements in WA, prospective for uranium, precious and base metals, and lignite.

Mulga Rock Deposits (WA): 240km NE of Kalgoorlie. Mulga Rock was discovered in 1980 by PNC

Mulga Rock Deposits (WA): 240km NE of Kalgoorlie. Mulga Rock was discovered in 1980 by PNC Exploration (Japan) and developed as a uranium deposit. It is comprised of three known deposits – Ambassador, Emperor and Shogun. Host rocks are sandstones and lignite below a clay cap, at shallow depths (40m to 70m). Aside from uranium, commodities include base metals (nickel, cobalt), scandium and rare earth elements. Current JORC Inferred resource (Jun '10) is 27.1kt (59.6mlbs) U<sub>3</sub>O<sub>8</sub> grading an average 0.049% at cut-off 100ppm (sandstone) to 200ppm (lignite). The resource is based on uranium-equivalent grades from EMA radiometric data and diamond drilling. An upgrade to Indicated resource will need to address remaining uncertainty with regard to sample integrity during previous drilling (Coffey Micros (Lignage 1.3)). Three sandstone prospects (Prospects 1.3) within 10km of Ampassador, have a Mining, June 2010). Three sandstone prospects (Prospects 1-3) within 10km of Ambassador have a combined **Exploration Target** of 7.6kt to 13kt  $U_3O_8$  at grades of 0.024% to 0.065%  $eU_3O_8$  and a further two sandstone prospects have also been found near the Emperor Deposit.

Other WA tenements: Narnoo (surrounding the MRD) and Gunbarrel are prospective for MRD-style,

Calcrete and palaeochannel uranium deposits.

Scoping Study (Nov '10): See following page for a summary of key parameters. Based on production at Ambassador of 12kt U<sub>3</sub>O<sub>8</sub> from 2014-2025, i.e. 1.2ktpa or 2.6mlbs per annum at full production. Assumption is a 50/50 split (600tpa each) between open cut mining of lignite and in situ recovery (ISN) of the sandstone-hosted uranium. Years 1 and 2 would be ISR only; ISR continues to Year 11 and open pit to Santostorie-nosted utaritum. Years 1 and 2 would be 15x only, 15x continues to Year 11 and open pit to Year 13. Processing is solvent extraction (SX) for ISR, and acid leach and RIP (resin in pulp) for lignite. Forecast opex is US\$23/lb U<sub>3</sub>O<sub>8</sub> after by product credits such as base and rare metals. EMA recently lodged Mining Lease applications and is gearing up for a **Pre-Feasibility Study** of the MRD, expected to start in 2H12 and finalised 1H13. The PFS will include a field leach trial to test ISR potential (expected 3Q-1Q13), and advanced metallurgical and mineralogical studies of lignite-hosted mineralisation. Uranium recovery from hyper saline leach liquors is being pioneered by ANSTO (for ASX:USA) and confirms the viability of chelating resins for IX (2Q11) – a development that could have significant opex and capex

benefits for Mulga Rock (both for ISR and lignite projects).

Corporate: EMA raised \$10m via the issue of 10.684m convertible notes Oct '11 to Acorn Capital, Macquarie Bank and Element Resources Fund. Notes have a 2 year term, 10% coupon and conversion price set at an initial \$0.18/note. As part of the company restructure Mike Fewster will reduce his holding in

brice set at an initial \$0.18/hote. As part of the company restructure Mike Fewster Will reduce his holding in EMA to under 45% by Oct '12. Investment Comment: Based on the Scoping Study, our base case DCF valuation at a long-term  $U_3O_8$  price of US\$60/lb and allowing for risk, we estimate NAV<sub>10</sub> is A\$120m or A\$0.25/share fully diluted. EMA share price catalysts include resolution in the Wardens Court of the Yarri Mining Plaints (hearing date TBA), resource statement expected for ISR Prospects 1-3 2Q12, ongoing project de-risking with PFS results, and reduction of Mike Fewster's stake in EMA to under 45% during 2012. Adjusted EV/resource value of US\$0.41/lb appears cheap and represents a buying opportunity with share price near a 12 month low.

#### Reserves and Resources/Mineralised Material

Code for reporting minera	resources - Australian:	(JORC)						
Uranium	Classification	Project	Ore	U₃O <sub>8</sub>	Cut Off	U <sub>3</sub> O <sub>8</sub>	U₃O <sub>8</sub> l	J <sub>3</sub> O <sub>8</sub> Eqty
U <sub>3</sub> O <sub>8</sub>		Equity	Mt	%	ppm	Kt	Mlb	MIb
Reserves						0.0	0.0	0.0
Resources								
Mulga Rock Deposits								
Ambassador*	Inferred	100%	27.6	0.047	100-200	12.9	28.4	28.4
Emperor	Inferred	100%	24.1	0.050	200	12.0	26.4	26.4
Shogun	Inferred	100%	3.7	0.059	200	2.2	4.8	4.8
Total			55.4			27.1	59.6	59.6
Total			55.4				59.6	

Mineralised Material (est., non compliant with JORC)

0.0 0.0 0.0 Includes 10kt  $\rm U_3O_8$  grading 0.06% in Upper Lignite, 1.2kt grading 0.032% in Low er Lignite and 1.7kt grading 0.024% in sandstone

	Ownership/		J۷	Target	Process	Project	
Project	Option	Metal	Partner	Type	Route	Status	Location
Mulga Rock Deposits	100%	U,Ni,Co	na	Lignite	RIP/ISR	Development	Aus (WA)
Namoo regional	100%	U,lignite	na	sandstone	na	Early Expl	Aus (WA)
Gunbarrel	100%	U	na	sandstone	na	Early Expl	Aus (WA)



Our DCF valuation for EMA is based on the Scoping Study of the Ambassador Deposit at the Mulga Rock Deposits (WA), anticipated resource upside, and RCR's uranium price assumptions (base case US\$60/lb long term, A\$/US\$ = 0.84 long term). This gives a target price of A\$0.25/share (fully diluted).

#### **ENERGY AND MINERALS AUSTRALIA, VALUATION**

				Target	Valuation	n Sensitivity
	Uranium Resource/Target	Valuation	Discount	Price <u>A\$m</u>	(Low) <u><b>A\$m</b></u>	(High) <u><b>A\$m</b></u>
Projects	(mlbs)	US\$/lb	for risk			
+ Mulga Rock, Ambassador Resource	28.4	2.58	30%	87	37	134
+ Mulga Rock, Emperor and Shogun	31.2	0.53	40%	20	5	93
+ Ambassador Exploration	<u>45.4</u>	0.06	60%	<u>3</u>	<u>2</u>	<u>4</u>
Sub Total	105			110	44	231
+ Cash				6.0	6.0	6.0
+ Tax Losses				8.7	8.7	8.7
- Corporate				<u>8.1</u>	<u>8.1</u>	<u>8.1</u> 6.7
Sub Total				6.7	6.7	6.7
EMA NET ASSET VALUE				117	51	237
Capital Structure						
Shares				388	388	388
Fully Diluted Shares*				546	546	546
EMA NET ASSET VALUE PER SHARE	:A\$/share			0.30	0.13	0.61
EMA NET ASSET VALUE DILUTED	:A\$/share fully diluted			0.25	0.13	0.47

#### MULGA ROCKS PROJECT, AMBASSADOR DEPOSIT (based on November 2010 Scoping Study)

		<u>Equity</u>			Sensitivity	L	
LONG TERM URANIUM PRICE^	:US\$/lb		40	50	60	70	80
EXCHANGE RATE	:AUUS		0.84	0.84	0.84	0.84	0.84
MULGA ROCKS URANIUM NPV @ 10% NOMINAL*	:A\$m	100%	na	53	125	191	254
MULGA ROCKS URANIUM NPV @ 10% NOMINAL*	:US\$m	100%	na	45	105	161	213
NPV/SHARE	:A\$/share		na	0.14	0.32	0.49	0.65
* Includes a Scoping Study and Inferred Resource project d	iscount of 35%	of valuation:	35%				
^ Uranium contract price forecasts are US\$60/lb to 4Q17, the	ence long term	price indicated.					

#### MULGA ROCKS URANIUM PROJECT KEY ASSUMPTIONS\*

RESOURCE ESTIMATES						
				Uranium		
			Mt	%	Mlbs	Kt
	Conceptual Ura	ınium Target				
		mbassador Resource	27.6	0.047	28.4	12.9
		mperor and Shogun	27.8	0.051	31.2	14.2
	Ambassador exp	oloration targets	<u>42.0</u>	0.049	<u>45.4</u>	<u>10.3</u>
	Total		97.3	0.049	105	37.4
MINING METHOD	ISR (In Situ Reco	overy) for sandstone; op	en pit for lignite	e-hosted urani	um and other m	etals.
PROCESS METHOD	Dual front end, a	nd combined product pr	reparation facili	ty		
	Front end: so	lvent extraction (SX) for	· ISR; acid leac	h and RIP (Re	sin in Pulp) for	lignite
	SX and RIP p	regnant fluids combined	d at RIP plant fo	or uranium pre	cipitation	
PRODUCTION RATE (U <sub>3</sub> O <sub>8</sub> )	:tpa	1,200	Study assur	nes 50/50 ISR	and RIP	
	:mlbspa	2.6				
CAPITAL COSTS	:A\$m	260	Combined IS	R and RIP op	erations	
RECOVERY - URANIUM	:%	65-82	ISR 65%, RI	P 82%. Likely	to change with	further testing.
OPERATING COSTS	:US\$/lb	23	Net of by-pro	duct credits:	base, rare and r	minor metals, gold
			EMA assum	es A\$600m re	evenue over life o	of mine
TAX	:%	30				
ROYALTY (WA)	:%	2.5%, 5%	Royalty rate	for base meta	als 2.5%, uraniu	m 5%.
MINE LIFE	:Years	12	•			
TARGET COMMISSION DATE	:	1Q14				

<sup>\*</sup> These figures are preliminary in nature and are intended to provide only a general indication of project potential scale and economic robustness. Further refinement may result from the Pre-Feasibility Study during 2012.

# ERA.AU

27 March 2012 Uranium Australia (NT) Producer Exchanges: ASX:ERA

#### **Capital Profile**

Share price (A\$)	1.30		
52 week range (A\$/share)	1.14	to	5.65
Number of shares (m)	518		
Options and warrants (m)	0		
Convertible notes (m)	0		
Fully diluted (m)	518		
Market capitalisation (undiluted) (A\$m)	673		
Debt (A\$m) - Mar 12F	0		
Enterprise value (A\$m)	673		
Major shareholders: Rio Tinto (68.39%);			
BlackRock Investment Management (5.03%)			
Avg monthly volume (m)	26		
Cash (A\$m) - Mar 12F	554.5		
Price/Cash (x)	1.2		
Price/Book (x)	0.5		
Listed company options:	No		

#### **Investment Points**

ERA offers 100% exposure to uranium production and exploration in Australia (NT).

Capital raising \$500m @ A\$1.53 Nov '11. Key use of proceeds: brine concentrator \$220m; Ranger 3 Deeps exploration decline A\$120m and evaluation A\$55m.

Ranger 3 Deeps exploration decline approved. Timeline: Box cut 3Q12; exploration drilling from 2Q13, potential production late 2015.

Ranger operating costs under review: \$150m in cumulative cost reductions identified through 2014. Additional initiatives likely.

Ranger Pit No. 3 mining to end 4Q12; treatment of low grade stockpiles to end 4Q16. Potential extension of low grade processing to 2020 subject to costs

Jabiluka mining lease granted - subject to development consent from traditional land owners. 12 year mine life.

NPV \$2.05/share. Outlook remains volatile - increasingly geared to exploration success + development projects

#### Major shareholder is Rio Tinto: 68.39%



#### **Contacts**

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Analyst: John Wilson johnwilson@rcresearch.com.au D. Klinger (Chairman) R Atkinson (Director) M. Coulter (Non Exec Dir) P. Taylor (Non Exec Dir)

**Directors** 

H. Garnett (Non Exec Dir) J. Pegler (Non Exec Dir)

#### **Energy Resources of Australia Ltd**

A\$ 1.30

ERA production guidance is 3 to 3.7kt U<sub>3</sub>O<sub>8</sub> in 2012, subject to rain. The company is focused on mining, evaluating and exploring in the highly prospective East Alligator River region (NT). NPV is highly leveraged to exploration, social and environmental outcomes.

#### Production and Financial Forecasts

YEAR END: Dec	2009a	2010a	2011a	2012F	2013F
Equity Production (t)	5,240	3,793	2,641	3,291	2,587
EBIT (A\$m)	393	75	-179	-113	-119
Net Profit (norm) (A\$m)	273	47	-154	-146	-152
EPS (norm) (A¢/share)	143	25	-48	-28	-29
CFPS (A¢/share)	241	71	9	15	9
Dividends (A¢/share)	39	8	0	0	0
PER (x)	0.9	5.3	-3.0	-5.5	-4.4
P/CF (x)	0.5	1.8	16.0	10.3	14.8
Yield (%)	30.0%	6.2%	0.0%	0.0%	0.0%
EV/EBITDA (x)	1.5	5.0	-12.6	8.5	14.8
Exploration and Evaluation (A\$m)	30.0	38.0	19.4	31.7	31.7
Drilling - RAB (m)	-	-	-	-	-
Drilling - Other/Diamond (m)	14,933	21,081	14,887	27,500	30,000
Land holding ('000 ha)*	7.9	7.9	7.9	7.9	7.9
*Ranger only.	Quarters ref	er to calendar y	ear.		

#### Company Comment

Overview: ERA has mined ore and produced uranium oxide at Ranger (NT) since 1981. Ranger has been

the world's second largest uranium mine with normalised production of ~5.5ktpa of U<sub>3</sub>O<sub>8</sub>, equivalent to 12% of global uranium mine supply. ERA also holds title to the Jabiluka deposit 22km north of Ranger. Ranger Pit No. 3: Ranger is an open cut mine scheduled to operate till year end 2012 after which stockpiled ore will be processed through 2016. Post 2016 low grade ore processing is subject to further cost/processing studies. Mining and processing is due to cease under the current lease arrangement Jan 2021, followed by a 5 years rehab to 4Q25. Rehab will commence after pit closure (4Q12) – annual site rehab budget 2013-2025 is ~\$52mpa. ERA's rehab provision is \$565m as of 31 December 2011.

rehab budget 2013-2025 is ~\$52mpa. ERA's rehab provision is \$565m as of 31 December 2011. **Process water management and treatment:** The current water management capital program and brine concentrator is budgeted at \$367m, following approval of the brine concentrator 1Q12. **Ranger 3 Deeps'** exploration decline board approval announced 3Q11 and regulatory approval received. Capital cost A\$120m. Box cut completion expected Oct '12. Exploration drilling from Apr '13 (35km); results expected 2014. Ranger 3 Deeps resource target is 15m-20mt containing 30k-40kt U<sub>3</sub>O<sub>8</sub> - defined over 1.2km strike (open to the north) and 250m-500m depth. Resource statement includes 34kt U<sub>3</sub>O<sub>8</sub> grading 0.34% (ind and Inf) associated with Ranger 3 Deeps. A decision on the exploration decline reflects a number of factors, including the attitude of the Mirrar, whose support will be important during the EIS for an underground mine, and mining lease extension beyond 2021. The absence of a clear indication in advance by the Mirrar adds to ERA's project risk in committing to the exploration decline. **Exploration:** ERA holds a strategic land position in the prospective Alligator Rivers region (NT), one of the world's most prospective uranium districts - exploration budget in the wider Ranger project area is a

world's most prospective uranium districts - exploration budget in the wider Ranger project area is a cumulative \$40m over 2012-2014. Current drill targets include Georgetown and Ranger 18 East.

Jabiluka: The project remains on long term care and maintenance, and will not proceed without the consent of the traditional owners - the Mirrar. All regulatory permits are granted (some may need to be reviewed). We model production to commence 2020 subject to approval; NPV factored at 40% probability. **Investment Comment:** ERA's share price is expected to remain volatile reflecting Ranger production risk and growing reliance on exploration success. RCR NPV is \$2.05/share (LT uranium price US\$60/lb, LT AUD 0.84). Reported earnings 2011 were a \$154m loss, reflecting lower production (2641t U<sub>3</sub>O<sub>8</sub>), stronger AUD, stockpile net write off of \$99m and higher depreciation charges on diminished ore reserve base. Operating cashflow was \$55m (up 30% from \$42m 2010). Realised uranium price was US\$59.32/lb in 2011, up 23% from US\$48.16/lb in 2010. Share price catalysts in the next 12 months hinge on exploration success. Midterm catalysts include potential for an underground mine at Ranger 3 Deeps (development decision 2014), cost cutting and extension of low grade ore treatment beyond 2016. Risk factors include water management, and potential for a capital raising in 2014/15 subject to level of operating cashflows.

#### Reserves and Resources/Mineralised Material

Code for reporting minera	il resources - Australian:	(JORC); A	s at 31 Dec '11					
Uranium	Classification F	Project	Ore	U₃O <sub>8</sub>	Cut Off	U₃O <sub>8</sub>	U₃O <sub>8</sub>	Eqty
U₃O <sub>8</sub>		Equity	Mt	%	%	kt	MIb	Mlb
Reserves								
Ranger No. 3 pit	Proved and Probable	100%	3.4	0.19	0.08	6.5	14.4	14.4
Ranger Stockpile	Stockpile	100%	5.8	0.12	0.08	7.0	15.3	15.3
Jabiluka	Proved and Probable	100%	13.8	0.49	0.20	67.7	148.9	148.9
Sub total			22.9	0.35		81.2	178.7	178.7
Resources (in addition t	to reserves)				Cut Off*			
Ranger No. 3 pit	Measured and Ind.	100%	138.0	0.08		109.5	241.5	241.5
Jabiluka	Measured and Ind.	100%	4.5	0.36	0.20	16.4	36.2	36.2
Ranger No. 3 pit	Inferred	100%	6.2	0.12		7.7	17.0	17.0
Jabiluka	Inferred	100%	10.9	0.53	0.20	57.5	126.8	126.8
Ranger Stockpile	Stockpile - Measured	100%	64.1	0.04	0.02	27.7	61.1	61.1
Sub total			223.7	0.10		218.9	482.5	482.5
Mineralised Material (	est.)		0.0	0.00		0.0	0.0	0.0

\* Ranger cut-off grades:  $0.02\%~\rm U_3O_8$  open pit;  $0.15\%~\rm U_3O_8$  underground;  $0.02\%~\rm U_3O_8$  stockplie ore.

Project	Ownership/ Option	Metal	JV Partner	Target Type	Process Route	Project Status	Location
Ranger	100%	Uranium	na	Unconformit	y acid leach	Production	Aus (NT)
Jabiluka	100%	Uranium	na	Unconformit	y acid leach	On hold	Aus (NT)



#### **Energy Resources of Australia Ltd**

YEAR END: Dec			Year		
ASSUMPTIONS	2009a	2010a	2011a	2012F	2013F
A\$/US\$	0.80	0.92	1.04	1.04	1.01
Uranium Price - Spot (US\$/Ib) Uranium Price - Contract (US\$/Ib)	46 66	47 61	56 67	54 62	55 63
Uranium Price Realised (US\$/Ib)	51	48	59	56	51
,					
EQUITY PRODUCTION					
Ranger Production (t)	5,240	3,793	2,641	3,291	2,587
Jabiluka Production (t) ERA Equity Production U <sub>3</sub> O <sub>8</sub> (t)	<u>0</u> 5,240	<u>0</u> 3,793	0	<u>0</u> 3,291	<u>0</u> 2,587
Cash Costs (US\$/lb)	18	42	2,641 61	38	33
PROFIT AND LOSS (A\$m)					
Revenues	78 1	586	668	405	289
Operating costs	-218	-352	-666	-252	-174
Depreciation/amortisation Exploration and evaluation	-67 -30	-61 -38	- 12 6 - 17	-192 -32	-164 -32
Corporate	-14	-12	-14	-13	-13
Other	-59	-48	-25	-31	-25
EBIT	393	75	-179	- 113	- 119
Finance costs	11	16	27	33	33
Operating profit/loss	382	59	-206	-146	- 152
Tax Minorities	-109	-12	53	0	0
Minorities Net profit/loss	0 <b>273</b>	0 <b>47</b>	0 - 15 4	-14 6	0 - <b>152</b>
Net other	0	0	0	0	0
Net profit/loss (reported)	273	47	- 15 4	-146	-152
BALANCE SHEET (A\$m)					
Cash and deposits	254	18 8	633	486	330
Total current assets PP&E	449	412	830	683	528
Total non-current assets	<b>470</b> 910	<b>540</b> 1011	74 1 1119	<b>708</b> 1086	<b>716</b> 1094
Total assets	1359	1423	1949	1769	1621
Total current liabilities	145	122	117	63	53
Reclamation reserves	199	300	543	543	543
Long term debt	0	0	0	0	0
Total non-current liabilities	247	351	543	543	543
Total liabilities	393	472	660	606	596
Equity	967	951	1289	116 3	1025
Total debt	0	0	0	0	0
Net debt	-254	-188	-633	-486	-330
Average shares (fully diluted) (m)	191	191	518	518	518
FLOW OF FUNDS (A\$m) EBITDA^	400	40.0	4.0	70	45
Cash flow from operating activities	460	13 6	46	79	4 3
Operating surplus	560	224	-10	129	96
Corporate	- 14	-12	-14	-13	-13
Net financing cost	-1	-6	10	-9	-14
Net tax paid	-132	-75	12	-1	0
Net exploration paid	-30	-38	-19	-32	-32
Other non cash items	-134 <b>249</b>	-51 <b>42</b>	76 55	29 <b>10 4</b>	21 <b>58</b>
Net cash from operating activitie Cash flow from investing activities	243	72	33	104	30
Capital expenditure	-37	-45	-97	-159	-172
Other non cash it ems	0	0	0	0	0
Net cash from investing activities	-37	-45	-97	- 159	- 172
Cash flow from financing activities  Net proceeds from issue of shares	0	0	500	0	0
Dividends paid	-65	-63	0	0	0
Net proceeds from borrowings	0	0	-13	0	0
Net cash from financing activities	-65	-63	487	0	0
Net change in cash	147	-66	445	-55	- 114
EBITDA in 2011 includes addback for \$99m net	stockpilea	djust ment.			
PRODUCTION STATISTICS Ranger					100%
Ranger Ore Treated (kt)	2268	2400	1624	2200	2400
Head Grade (%)	0.26	0.19	0.18	0.17	0.12
Recovery (%)	88	87	88	88	88
Recovered grade (%)	0.23	0.17	0.16	0.15	0.11
J <sub>3</sub> O <sub>8</sub> Produced (t)	5240	3793	2641	3291	2587
Equity Production (t) Cash Costs (US\$/lb, est.)	5240 17.94	3793 23.14	2641 33.81	3291 37.83	2587 33.04
Jabiluka Ore Treated (kt)	0	0	0	0	<b>100%</b> 0
Head Grade (%)	0.00	0.00	0.00	0.00	0.00
	2.00		0.00	0.00	0.00
Recovery (%)	0	U			-
	0.00	0.00	0.00	0.00	0.00
Recovered grade (%) U <sub>3</sub> O <sub>8</sub> Produced (t)	0.00	0.00	0.00	0	0
Recovered grade (%) $J_3O_8$ Produced (t) <b>Equity Production (t)</b>	0.00 0 <b>0</b>	0.00 0 <b>0</b>	0.00	0 <b>0</b>	0 <b>0</b>
Recovery (%) Recovered grade (%) U <sub>3</sub> O <sub>8</sub> Produced (t) Equity Production (t) Cash Costs (US\$/Ib)	0.00	0.00	0.00	0	0

			Year		
FINANCIAL RATIOS	2009a	2010a	2011a	2012F	2013F
Net debt/equity (%)	-38%	-28%	-94%	-72%	-49%
Net debt/ net debt + equity (%)	-60%	-39%	-1564%	-259%	-96%
Current ratio (x)	3.1	3.4	7.1	10.8	10.8
EBIT/interest (x)	35	5	-7	-3	-4
Debt/operating cashflow (%)	0%	0%	0 %	0%	0%
Exploration/total overhead (%)	68%	76%	55%	72%	71%
EV/EBITDA (x)	1.5	5.0	14.7	8.5	14.8
Market cap/net cash (x)	2.7	3.6	1.1	1.4	2.0
Market cap/book (x)	0.7	0.7	0.5	0.6	0.7

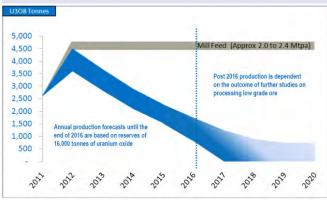
FINANCIAL SENSITIVITIES			
%Change in EPS for a 10 %increase in:			
AUD/USD	-74%	24%	18%
Uranium Price	37%	-28%	-22%
%Change in NIDV for a 40% increase in forecast mine			

%Change in NPV for a 10 %increase in forecast minelife commodity assumptions for:

VALUATION (A\$m)				Q1 12	
Assumptions				Base	What if
Long Term Contract Uranium Price	(from 2	018)	:US\$/Ib	60	70
Long Term AUUS				0.84	0.84
Projects					
Ranger and capital projects	100%	NPV @ 10 %	-US\$5.60/lb	- 16 7	-80
Jabiluka - probability factor 40%	100%	NPV @ 10 %	US\$3.65/lb	544	858
Resources					
Ranger	100%	319.5 mlb	US\$2.00/lb	597	956
Jabiluka - probability factor 40%	100%	163.0 mlb	US\$0.64/lb	98	163
Exploration				55	85
Assets					
Cash and deposits				554	554
Rehabilitation Fund				0	0
Ot her				0	0
Liabilities					
Debt				0	0
Corporate				-79	-79
Reclaimation reserve				-543	-543
Net Assets				1059	19 13
Fully Diluted Shares (m)				518	518
Net assets/share (A\$/share)				2.05	3.70
Valuation/Reserve lb		:US\$/Ib		4.98	9.00
Valuation/Reserve & Resource lb		:US\$/Ib		1.34	2.43

OWNER	Share %
Rio Tinto	68

Ranger Production Forecast Range Current operations including Pit 3 (ending end of 2012) and excludes Ranger 3 Deeps.



Source: ERA

# LAM.CN

27 March 2012 Uranium Australia, USA

Advanced Exploration/Development Stage

Exchanges: TSX:LAM

#### **Capital Profile**

Share price (C\$)	1.39		
52 week range (C\$/share)	0.61	to	1.61
Number of shares (m)	70.7		
Options and warrants (m)	8.2		
Convertible notes (m)	0.0		
Fully diluted (m)	78.8		
Market capitalisation (undiluted) (C\$m)	98		
Debt (C\$m) - Mar 12F	0.0		
Enterprise value (C\$m)	98.2		
Major shareholders: Not disclosed.			

Avg monthly volume (m)	7	
Cash + s-t Inv.(C\$m) - Mar 12F	5.5	
Price/Cash (x)	17.7	
Price/Book (x)	1.0	
Company options:	No	

#### **Investment Points**

Exploration and development budget C\$5m in 2012.

Westmoreland (QLD) resource: 52mlbs  $U_3O_8$  at 0.085% (to 60m depth). Good local and regional exploration upside. Production potential 2015.

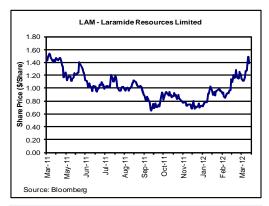
Westmoreland: 11 year mine life, producing 3mlbspa  $U_3O_8$  (GRD Minproc scoping study, Apr '07). Revised scoping study expected 2Q12.

Large pipeline of drill prospects in the NT. Early stage, high value unconformity targets. Drilling expected 2012.

High value URI ISL production royalty at Churchrock (NM). BFS expected 1H12. Key production permits already in place (NRC and state). Production potential

Permitting La Sal (UT). Potential for a small underground mine (<0.5mlbspa  $U_3O_8$ ) to be in production 2012.

QLD election victory for LNP March 2012 - change to uranium policy anticipated in favour of mining.



#### **Contacts Directors**

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J Booth (Non Exec Chair) M Henderson (Dir) P Mullens (Dir) S Patterson (Dir) P Wilkens (Dir)

#### Laramide Resources Limited

C\$ 1.39

LAM's share price has risen strongly in the past few months, in part reflecting anticipation of the LNP win in QLD in last weekend's election. Westmoreland should be a major beneficiary of the expected change in uranium policy. RCR valuation C\$2.30/share.

#### Production and Financial Forecasts

YEAR END: Dec	Dec-11a	Mar-12F	2010a	2011F	2012F
Exploration and evaluation, est. (C\$m)	1.40	1.40	6.29	5.03	5.60
Corporate (C\$m)	0.60	0.60	1.62	2.29	2.40
Exploration/(Expl.+ Corporate) (%)	70	70	79	69	70
Funding duration at current burn (years	s)		0.4	0.2	0.6
Shares on issue (pr end) (m shares)	68	71	68	68	75
Drilling - RAB (m)	0	0	0	0	0
Drilling - Other/Diamond (m)	0	0	0	0	5,000
Land holding ('000 ha)	700	700	700	700	700
Tenement costs (\$k per year)	0	0	0	0	0
Capital raisings (C\$m)	0.0	2.3	0.1	0.6	7.3
Funding from JV partners (C\$m)	0.0	0.0	0.0	0.0	0.0
Cash + s-t inv. (C\$m)	1.2	5.5	3.2	1.2	5.0
Cash +s-t inv. backing (Cc/share)	1.8	7.8	4.7	1.8	6.7
Net asset backing (Cc/share)	131.8	134.7	122.6	131.8	132.4

Quarters refer to calendar year

#### Company Comment

Overview: LAM is a Toronto-based resource company focused on uranium. The company's strategy is to acquire historic, advanced exploration projects in safe jurisdictions. It has a number of near term, production visible projects; viz La Sal - 2012 (Utah, small scale, toll treatment); URI royalty - 2013 (New Mexico, production royalty), a significant value driver with royalty rates ranging from 13-24%; La Jara Mesa - 2014 (NM, underground mine), 10.4mlb @ 0.24% U<sub>3</sub>O<sub>8</sub> resource plus exploration upside; and key project is Westmoreland – 2015 (QLD, large resource, strategic exploration upside). LAM also holds equity interests in a number of listed gold and uranium companies (September 30 market value C\$9.7m). Westmoreland (QLD): The GRD Minproc scoping study (Apr '07) indicates 3 open pits to be mined sequentially over 11 years, conventional acid leach plant of 1.5mtpa capacity producing 3mlbspa U<sub>3</sub>O<sub>8</sub>, plant recovery 90.6%, capex U\$\$214m (assumes contract mining), and opex ranging from U\$\$37.95/t (U\$19/lb) to U\$\$50.40/t (U\$\$25/lb). Pit optimisation uranium price U\$\$50/lb. Previously, RIO completed a pre-feasibility study (mid '90's) for an open cut, acid leach project. An updated scoping study (Jacobs Engineering) is expected 2Q12 with likely expanded production rate on account of the increased resource (Apr '09) – 80% occurs within 50m of surface, and enhanced metallurgical recoveries of 97% (ANSTO Jul '11). Production potential 2015. While the new LNP state government has not yet stated its policy in relation to uranium, it is anticipated that it will follow the federal LNP policy in favour of uranium mining. LAM also has 4 regional, strategic JV exploration projects prospective large scale, unconformity style uranium targets in QLD and the NT, much of which is little explored.

URI royalty (NM, USA): Churchrock Section 8: LAM acquired a production based royalty portfolio (Dec '06) on 3 separate parcels of land in the Churchrock area, in the prolific Grants Mineral District, viz Section 8, Section 17, and Mancos. The properties are owned by URI (NASDAQ: URRE). The project is permitted (NRC and state) for ISL production, and a BFS is expected 1H12, incorporating Section 8 in which LAM holds royalty interest over 6.5mlbs U<sub>3</sub>O<sub>8</sub> (mineralised material non JORC compliant). Production potential 2H13. RCR visited Section 8 3Q11.

Investment Comment: We value LAM at C\$2.30/share and have a 12 month price target of \$2.70, with

Investment Comment: We value LAM at C\$2.30/share and have a 12 month price target of \$2.70, with anticipated positive newsflow from both Westmoreland and Section 8. Following the weekend election win for the LNP in Queensland, we expect to see a new uranium policy introduced in favour of mining. The Westmoreland project should be a significant beneficiary of this expected policy change with production visibility 1H15; updated scoping study expected 2Q12. The URI royalty at Section 8 (NM) is also a significant value driver for LAM. It appears reactivation of the NRC licence (Oct '11) has largely been overlooked by the market in relation to LAM's valuation; release of the BFS, expected 1H12, could trigger the anticipated re-rating.

#### Reserves and Resources/Mineralised Material

Code for reporting mineral re	esources - Canadian:	(NI 43-10°	1)					
Uranium (U₃O <sub>8</sub> )	Classification	Project	Ore	Grade	Cut Off			Eqty
		Equity	Mt	%	ppm	Kt	MIb	MIb
Reserves			0.0	0.00		0.0	0.0	0.0
Resources								
Westland (Redtree)	Inf. and Ind.	100%	17.3	0.084	200	14.6	32.3	32.3
West'land (Junnagunna)	Inf. and Ind.	100%	6.5	0.079	200	5.1	11.3	11.3
West'land (Huarabagoo)	Inf. and Ind.	100%	3.9	0.098	200	3.8	8.4	8.4
Westmoreland - total			27.7	0.085		23.6	52.0	52.0
La Jara Mesa	Inf. and Ind.	100%	2.1	0.24		4.7	10.4	10.4
						28.3	62.4	62.4
Mineralised Material (est	t., non NI 43-101 comp	oliant)						
La Sal	Historical	100%	0.4	0.31		1.2	2.7	2.7
Melrich	Historical	100%					1.0	1.0
Los Ochos	Historical	100%					1.0	1.0
Sub Total							4.7	4.7
Total LAM							67.2	67.1

	Ownership/		JV/	Target	Process	Project	
Project	Option	Metal	Partner	Type	Route	Status	Location
Westmoreland	100%	Cu/Au/U	na	Unconformity	acid leach	Adv. Expl.	Aus (QLD)
URI Royalty	royalty	Uranium	na	Sandstone	ISL	BFS	US (NM)
La Jara Mesa	100%	Uranium	na	Sandstone	convent'l	Adv. Expl.	US (NM)
La Sal	100%	Uranium	na	Sandstone	convent'l	Adv. Expl.	US (UT)
Regional QLD/NT	Various	Uranium	various	Unconfomity	na	Early-Mid Expl	Aus



#### LARAMIDE RESOURCES VALUATION

		Equity (%)	Base Resource Val'n (US\$/Ib)	Base NAV (C\$m)	NAV Factor (%)	Adjusted Value (C\$m)	Adjusted Uranium Price Sensitivity (C\$m)			ity
Assumptions LT Realised Uranium Price LT Exchange Rate: CAUS	: US\$/Ib			<b>50</b> 0.84		<b>50</b> 0.84	<b>40</b> 0.84	<b>60</b> 0.84	<b>70</b> 0.84	<b>80</b> 0.84
Projects										
+ Westmoreland + URI royalty* + US projects + Exploration + Investments (market value, Ser	: NPV @10%		2.17 3.77 0.99	161 35 15 10 9.7	70% 70%	113 25 15 10 9.7	53 8 5 5 9.7	209 34 15 10 9.7	305 38 25 15 9.7	400 53 35 20 9.7
Sub Total		,		231		172	81	278	393	518
Assets + Cash + Tax losses				1.2 18	50%	1.2 9	1.2 5	1.2 9	1.2 18	1.2 18
Liabilities										
- Debt				0		0	0	0	0	0
- Corporate				19		19	19	19	19	19
- Reclamation				<u>0</u>		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
LAM Net Assets				230		163	67	268	392	517
Fully diluted shares (m) Cash on Option Conversion				78.8 12.6		78.8 12.6	78.8 12.6	78.8 12.6	78.8 12.6	78.8 12.6
LAM Net Asset Value per share	. C¢/shara			3.26		2.30	0.95	3.80	5.55	7.32
LAM Net Asset Value per snare	: C\$/share dil			3.26		2.22	1.01	3.56	5.14	6.72
Sensitivity of Net Asset Value to Equity Raising Price:  LAM Net Asset Value (assuming C\$140m capex raised through share issue at C\$2.00)						2.12	1.47	2.83	3.66	4.50
LAM Net Asset Value (assuming C LAM Net Asset Value (assuming C	C\$140m capex ra	aised thro	ough share is	sue at CS	\$1.50)	1.83 1.44	1.27 1.00	2.45 1.92	3.17 2.49	3.89 3.06

<sup>\*</sup> We have modelled LAM's URI royalty value at Section 8 assuming production of 1mlbspa from 2014 rising to 3mlbspa in 2018, tax 35%, discount rate 10%, and a 30% project discount pending BFS and resolution of current litigation. Royalty rates are sliding scale subject to uranium price, eg., 13% at US\$50/lb, 18% at US\$60/lb, and 24% at US\$80/lb. We have added C\$15m for LAM's other royalty holdings, including the Mancos property which contains 11.3mlbs U<sub>3</sub>O<sub>8</sub> (mineralised material, non JORC compliant) and which is not part of the current URI BFS.

#### **WESTMORELAND URANIUM PROJECT KEY ASSUMPTIONS\***

RESOURCE ESTIMATES											
	Uranium Reso	urce		Tonnes	Grade	Uranium					
			Cutoff	<u>Mt</u>	<u>% U₃O</u> 8	<u>Mlbs</u>					
LAM resource (Ind & Inf)	Westmo	reland	200ppm	23.6	0.085	52.0					
RCR modelling assumptions	Westmo	reland		17.0	0.100	37.5					
MINING METHOD	OPEN F	PIT MINE									
PROCESS METHOD	3 pits sequentially mined over an 11 year period. Contract mining - 50t trucks and excavator. DEDICATED URANIUM PLANT Conventional acid leach and solvent extraction.										
BASE CASE ASSUMPTIONS											
PRODUCTION RATE	:tpa :mlbspa	1,500,000 3.0									
CAPITAL COSTS	:US\$m	214	Plus susta	aining capex	of US\$1.5mpa (US	\$1.00/t).					
RECOVERY - URANIUM	:%	90.6									
OPERATING COSTS		37.95	(yrs 1 to 6	5)							
	US\$/lb	17.86	(yrs 1 to 6	5)							
TAX	:%	30%									
MINE LIFE	:Years	11 years									
TARGET COMMISSION DATE	:	1H15									

<sup>\*</sup> These figures are preliminary in nature and are intended to provide only a general indication of potential project scale and economic robustness. Figures include resource category material which have yet to be demonstrated to be economically viable and classified as reserves. Considerable refinement may result from subsequent feasibility studies.

# PDN.AU

27 March 2012

Uranium

Australia (WA,QLD,NT), Namibia, Malawi, Niger, Canada (CMB)

Exchanges: ASX:PDN; TSX:PDN; NSX (Namibia):PDN

#### **Capital Profile**

Share price (A\$)	1.92		
52 week range (A\$/share)	1.11	to	3.96
Number of shares (m)	836		
Options and warrants (m)	8		
Convertible notes + incentive shares (m)	108		
Fully diluted (m)	952		
Market capitalisation (undiluted) (A\$m)	1604.4		
Debt* (US\$m) - Mar 12F	814.6		
Enterprise value (A\$m)	2372.9		
Major shareholders: CDS & Co (19.95%), HSBC C	Cus. Nom. Aust	(16.13	3%)
National Nom (9.15%), JP Morgan (8.48%), L1 Ca	pital (5.3%)		
Avg monthly volume (m)	180		
Cash (US\$m) - Mar 12F	132.5		
Price/Cash (x)	12.8		
Price/Book (x)	1.4		
Listed company options:	No		
* Convertible notes due Mar '13 (US\$325m) and N	Nov '15 (US\$300	Om).	

#### **Investment Points**

PDN is 100% focused on uranium. Exploration budget ~US\$16m FY12.

LHM: Stage 3 (5.2mlbspa) nameplate production. Ramp-up underway: 1.19mlbs produced 4Q11 (92% capacity).

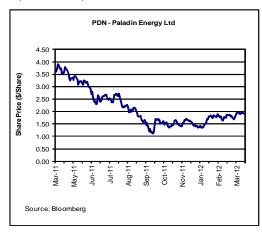
LHM: Stage 4 expansion: to 8.7mlbspa + 1.3mlbspa heap leach; LOM opex ~US\$25-30/lb U<sub>3</sub>O<sub>8</sub>; onsite capex +US\$350m. DFS expected 4Q12.

Kayelekera (KM) Dec Q production 632klb U<sub>3</sub> O<sub>8</sub>. Expected to achieve 825klb/q nameplate during 2012.

Cost optimisation study and initiatives underway company wide: KM mining contract restructured. Target corporate cost cuts of 10-15% in FY12.

Extensive global pipeline of exploration projects, Initiative underway to attract JV partners to Aust. projects (2-3Q12).

PDN NPV \$2.39/share (US\$60/lb uranium, AUD 1.06). We expect a maiden profit FY13.



#### **Contacts**

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#### **Directors**

R. Crabb (Non-Ex Chair) Borshoff (MD)

S. Llewelyn (Non-Ex Dir)

D. Shumka (Non-Ex Dir)

. Baily (Non-Ex Dir)

P. Donkin (Non-Ex Dir)

#### Paladin Energy Ltd

A\$ 1.92

PDN announced record production 4Q11 of 1.82mlbs U<sub>3</sub>O<sub>8</sub> from LHM and KM. The company is making progress on cost reductions and improved operating efficiencies at key projects. Near term JV farmouts of Australian projects expected to stimulate project momentum.

#### Production and Financial Forecasts

YEAR END: June	2010a	2011a	2012F	2013F	2014F
Equity Production (kt)	1898	2435	3232	3839	3867
EBIT (US\$m)	3.4	-43.6	30.7	134.0	140.8
Net Profit (norm) (US\$m)	-45.6	-82.3	-19.7	57.1	35.1
EPS (norm) (US\$/share)	-0.07	-0.11	-0.02	0.07	0.04
CFPS (US\$/share)^	0.11	0.08	0.13	0.24	0.23
Dividends (US\$/share)	0.00	0.00	0.00	0.00	0.00
PER (x)	nmf	nmf	nmf	30	52
P/CF (x)	19	26	16	8	9
Yield (%)	0	0	0	0	0
EV/EBITDA (x)	nmf	nmf	0.0	0.0	12.3
Exploration and evaluation (	US\$m) 17.1	17.6	19.9	16.0	17.0
Drilling - RAB (m)	-	-	-	-	-
Drilling - Other/Diamond (m)	105,000	100,000	60,000	60,000	80,000
Land holding ('000 ha)	-	-	-	-	-
^ EBITDA	Quarters refer to calendar y	ear.	AU/U	S: 1.06	

#### Company Comment

Overview: Paladin Energy Ltd is an Australian company listed on the ASX and TSX. It is a mid tier producer with two mines in production. PDN holds 19.98% of Deep Yellow (ASX:DYL). RCR visited LHM Feb '11. **Langer Heinrich Mine**: Dec Q production 1.193mlb  $U_3O_8$  (**Stage 3** nameplate production 1.3mlb/q; 5.2mlbpa Langer Heinrich Mine: Dec Q production 1.193mlb U<sub>3</sub>O<sub>8</sub> (Stage 3 nameplate production 1.3mlb/q; 5.2mlbpa U<sub>3</sub>O<sub>8</sub>). C1 opex US\$31/lb AQ11; with ongoing ramp-up to Stage 3 nameplate production C1 costs are expected to fall to US\$28/lb. This compares with Stage 2 nameplate production of 3.7mlbspa (+41%), and C1 costs of US\$28/lb FY11. Stage 3 benefits from economies of scale have been partially offset by the stronger Namibian dollar. Stage 3 modelling assumes mill throughput head grade of 0.079% U<sub>3</sub>O<sub>8</sub>. Stage 4 potential expansion to 8.7mlbspa U<sub>3</sub>O<sub>8</sub> (+92% over Stage 3) ex ROM (8mtpa) grading ~0.053% U<sub>3</sub>O<sub>8</sub>; and possible additional production of 1.3mlbspa from low grade material ~ cut-off and process yet to be defined, though potential heap leach. Stage 4 capex ~US\$400m; opex US\$25-30/lb; heap leach capex ~US\$50m, opex US\$35/lb. Stage 4 BFS results expected 4Q12 ~ decision put back awaiting completion of Stage 3 ramp-up. However, in relation to Stage 4, management flagged it "will not waste a good ore body" on sub-par returns-suggesting Stage 4 may be deferred till the market strengthens. LHM reserves stated using US\$60/lb U $_3$ O $_8$ . Kavelekera: Dec Q production of 632klbs U<sub>2</sub>O<sub>0</sub> was well up on the Sep Q production of 395klbs (+60%) Kayelekera: Dec Q production of 632klbs U₃O₅ was well up on the Sep Q production of 395klbs (+60%) though remains below nameplate (825klbs) primarily due to the acid plant being offline for nearly 2 weeks. Ramp-up commenced Apr '09 and nameplate production of 3.3mlbpa U₃O₆ is anticipated 2Q12. Optimised production of 3.8mlbspa planned for late 2012. There is still a long way to go to achieve the target opex of US\$30/lb. C1 costs were US\$46/lb 4Q11 (down from US\$50/lb FY11). Pit design used US\$30/lb U₃O₆. With production currently running at 77% of nameplate, C1 unit costs will improve as throughput increases. PDN is also making progress on reducing opex − reductions announced to date include: restructured mining contract (US\$4mpa saving), transport (US\$1mpa), acid (proposal received for US\$3.6mpa saving).

OS\$4mps saving), itarisport (US\$ impa), acid (proposal received no US\$5.0mps asaving).

Other projects: Moratorium on uranium development and production lifted by Nunatsiavut Government will support advancement of Michelin. Odin (IUJV) resource upgrade 1Q12: 17.6mlbs U<sub>3</sub>O<sub>8</sub>, up from 10.3mlbs.

Investment Comment: Our NAV for PDN is A\$2.39/share at spot AUD/USD 1.06 (market long term uranium price US\$60/lb, 10% discount rate). We expect positive results from the company wide cost reduction initiatives to continue, as well as achievement of increasing production targets through 2012. PDN announced a profit of US\$3.2m 4Q11 reflecting advances in both these areas. Admin costs 4Q11 fell to US\$11.8m (-15%) from US\$13.9m 3Q11. Placement Oct '11 raised A\$68m @ A\$1.20/share. Newmont holds 6.7% of

PDN. PDN, as an unaligned producer, remains a strategic acquisition target.

Reserves and	l Resource	s/Min	eralise	d Ma	terial			
Code for reporting mineral reso	ources Aust/Canadian	: (JORC/I	VI 43-101)					
Uranium (U₃O <sub>8</sub> )	Classification/	Project	Ore	Grade	Cut Off			Eqty
Reserves	Geology	Equity	Mt	%	(ppm)	Kt	MIb	MIb
Langer Heinrich	P+P and stockpile	. 100%	109.2	0.055	250	59.7	131.7	131.7
Kayelekera	Proved and Prob.	100%	10.9	0.098	400	10.6	23.4	23.4
Sub total			120.1	0.059		70.3	155.1	155.1
Resources (includes proved	and probable reserve	s)						
Langer Heinrich	M.Ind.Inf/calcrete	100%	144.5	0.055	250	79.0	174	174
Kayelekera	M.Ind.Inf/sndst-rf	100%	24.6	0.077	300	19.0	42	42
Aurora (Mich. +5 CMB dep)	M,Ind,Inf /IOCGU	100%	69.3	0.09	*	62.1	137	137
Valhalla + Odin (IUJV)	M,Ind,Inf./Ir ox vein	91%	57.7	0.074	230/250	42.6	94	85
Skal (S+E) (IUJV)	Ind,Inf/ Ir ox vein	91%	12.7	0.052	250	6.6	15	13
Takardeit	Inferred	100%	23.0	0.021	120	4.8	11	11
Bigrlyi	Ind. & Inf./sndst	42.1%	7.5	0.128	500	9.6	21	9
Angela/Pamela	Inf./Sandstone	50%	10.7	0.13	300	14.0	31	15
Other (6 projects)^						23.1	52	49
Sub total						261	576	535
Mineralised Material (est.,	non JORC compliant)							
Oobagooma	Historic/sndst.	100%	8.2	0.12	350	10.0	22	22
* Cut-off: 200ppm open cut; 50	Oppm underground.					22.0	22	22

Manyingee (24mlbs U<sub>3</sub>O<sub>8</sub>), Andersons (4.7mlbs), Watta (3.8mlbs), Bikini (11.5mlbs), Duke Batman (3.1mlbs), Honey Pot (3.96mlbs)

Project	Ownership/ Option	Metal	JV Partner	Plant (ktpa)	Process Route	Project Status	Location
Langer Heinrich	100%	U	na	1500	alk. leach	Production	Namibia
Kayelekera	85%	U	Malawi Gov.	1500	acid leach	Production	Malawi
Manyingee	100%	U	na	na	ISR	Adv. Expl.	Aust (WA)
Oobagooma	100%	U	na	na	ISR	Adv. Expl.	Aust (WA)
Mt Isa Uranium	91%	U	SMM	na	convention'l	Adv. Expl.	Aust (QLD)
Michelin + Jacques L.	100%	U	na	na	convention'I	Scoping Study	Can (NL)
Angela and Pamela	50%	U	CCO	na	convention'I	Adv. Expl.	Aust (NT)



#### Paladin Energy Ltd

YEAR END: June			Year						Year		
ASSUMPTIONS	2010a	2011a	2012F	2013F	2014F	FINANCIAL RATIOS	2010a	2011a	2012F	2013F	2014F
A\$/US\$	0.88	1.00	1.05	1.02	1.00						
Uranium Price - Spot (US\$/Ib)	44	57	52	55	55	Net debt/mkt equity (%)	22%	35%	40%	39%	35%
Uranium Price - Contract (US\$/lb) Uranium Price Realised (US\$/lb)	61 54	66 55	6 2 5 4	62 57	63 57	Net debt/ net debt + mkt equity (%) Current ratio (x)	18% 4.3	26% 4.4	29% 3.7	28% 4.0	26% 4.8
oranium Frice Realiseu (03\$/1b)	34	33	34	31	57	EBIT/interest (x)	0	-1	1	2	2
						Debt/operating cashflow (%)	na	na .	1444%	517%	642%
EQUITY PRODUCTION						Exploration/total overhead (%)	20%	5%	7%	6%	6%
Langer Heinrich Production (t)	1521	1599	2 16 0	2503	2408	EV/EBITDA (x)	nmf	nmf	22.8	11.7	11.6
Kayelekera Production (t)	<u>378</u>	<u>836</u>	<u>10 73</u>	<u>1336</u>	<u>1459</u>	Market cap/net cash (x)	-4.2	-2.7	-2.5	-2.5	-2.7
PDN Equity Production U <sub>3</sub> O <sub>8</sub> (t)	1898	2435	3232	3839	3867	Market cap/book (x)	1.7	1.2	1.4	1.3	1.3
PDN Equity Production U <sub>3</sub> O <sub>8</sub> (mlbs) Cash Costs (US\$/lb)	4.2 31.45	5.4 33.54	7.1 36.21	8.5 28.91	8.5 29.78						
·											
PROFIT AND LOSS (US\$ m)						FINANCIAL SENSITIVITIE	S				
Revenues	214	271	432	517	524						
Operating costs Depreciation/amortisation	-132 -14	-180 -36	-258 -79	-245 -74	-254 -64	%Change in EPS for a 10 %increase i	n:				
Exploration	-9	-3	-4	-74	-3	AUD/USD			0%	0%	0%
Corporate	-39	-54	-49	-46	-46	Uranium Price			-43%	89%	113%
Other	17	41	13	15	16						
EBIT	3	-44	31	13 4	141						
Interest	21	62	57	58	57	%Change in NPV for a 10%increase	inforecas	st minelife			
Operating profit/loss	- 18	-105	-26	76	84	commodity assumptions for:	_	40.07			
Tax Minorities	-29 -1	17 -6	7	-17 2	-46 3		Base	+ 10 % U S\$/ sh	%		
Net profit/loss	-46	-82	-20	57	35	AUD/USD	2.54	3.10	-22%		
Net other	-7	0 *	-133	0	0	Uranium Price	2.54	3.10	22%		
Net profit/loss (reported)	-53	-82	-153	57	35						
*Net adjust ment for abnormal impairment cha	rges										
BALANCE SHEET (US\$m)	0.10	44=	40.7	400		VALUATION (US\$ m)				Q1 12	
Cash and deposits Total current assets	<b>348</b> 516	<b>117</b> 329	13 7 4 0 4	16 6 434	<b>256</b> 523	NPV Assumptions				Base	'What if
PP&E	541	630	469	423	374	Long Term Realised Uranium Price	9		:US\$/Ib	59	70
Total non-current assets	1442	2074	1934	1904	1872	Currency A\$/US\$	2		.000,10	1.06	0.84
Total assets	1958	2404	2339	2338	2396	Projects					
Total current liabilities	121	119	109	109	109	Langer Heinrich + phase III, IV	100%	NPV @ 10%		978.8	1321.4
Reclamation reserves	0	0	0	0	0	Kayelekera	85%	NPV @10%		399.2	519.0
Long term debt Total non-current liabilities	<b>682</b> 880	<b>676</b> 930	768 998	<b>781</b> 1011	<b>794</b> 1024	Resources Kayelekera	85%	25.0 mlb	US\$5.50/lb	116.9	151.9
Total liabilities	1001	1049	110 7	1120	1133	Manyingee	100%	24.0 mlb	US\$3.00/lb	72.0	93.6
Equity	956	13 55	1232	12 17	1262	Oobagooma	100%		US\$3.00/lb	65.7	85.4
1						Isa Uranium (100%, 81.9%SM M)	various	125.0 mlb	US\$4.50/lb	562.5	731.3
Total debt	730	720	8 18	831	844	Angela and Pamela	50%	26.4 mlb	US\$5.00/lb	66.0	89.1
Net debt	382	602	681	665	588	Michelin + 5 CM B deposits	100%	136.8 mlb	US\$5.00/lb		923.4
Average shares (fully diluted) (m)	697	752	836	851	894	Other + Exploration				125.0	168.8
FLOW OF FUNDS (US\$m)						Assets Cash and deposits				132.5	132.5
EBITDA	18	-8	109	208	205	Other				42.0	56.7
Cash flow from operating activities						Liabilities					
Operating surplus	71	87	16 9	267	263	Debt				-814.6	-814.6
Corporate	-39 -35	-54 -42	-49	-46	-46	Corporate				-148.2	-148.2
Net interest paid Net tax paid	-35	-42	-61 -12	-63 -7	-64 -36	Other liabilities Reclaimation reserve				-191.2 0.0	-230.5 <u>0.0</u>
Net exploration paid	-17	-18	-20	-16	-17	Net Assets				2090	3080
Other non cash items	2	-42	29	26	31	Shares (m)				952	952
Net cash from operating activities	-35	- 10 2	57	161	13 1	Net NPV/share (US\$/share)				2.54	3.58
Cash flow from investing activities						Net NPV/share (A\$/share)				2.39	4.26
Capital expenditure	-170	-129	-73	-27	-16	Valuation/Reserve lb		:US\$/lb		13.48	19.85
Other non cash items  Net cash from investing activitie	-9 : <b>-180</b>	-3 - <b>13 3</b>	-20 -92	-16 -43	-17 -33	Valuation/Reserve & Resource Ib		:US\$/lb		3.90	5.75
Cash flow from financing activities	- 100	- 133	-32	-43	-33	OWNER				Shares	
Net proceeds from issue of shares	375	1	65	0	65					00	
Dividends paid	0	0	0	0	0						
Net proceeds from borrowings	120	0	53	-88	-74						
Net cash from financing activitie		-233	117	-88 20	- <b>9</b>						
Net change in cash	281	-233	82	29	90						
PRODUCTION STATISTICS											
Langer Heinrich					10 0 %						
Ore Treated (kt)	1995	2240	2840	3600	3600						
Head Grade (%)	0.10	0.09	0.09	0.08	0.08						
Recovery (%)	80	80	84	88	88						
Recovered grade (%) U <sub>3</sub> O <sub>8</sub> Produced (t)	0.08 1521	0.07 1599	0.08 2160	0.07 2503	0.07 2408						
Equity Production (t)	1521	1599	2160	2503 2503	2408						
Cash Costs (US\$/Ib)	25.91	28.00	24.50	22.54	24.14						
Production Costs (US\$/t)	43.54	44.06	41.07	34.55	35.60						
Kayelekera					85%	DIRECTOR'S INTERESTS					ares
Ore Treated (kt)	571	1023	12 5 4	1620	1750	Mr. John Darahatt	Managir	Director		(m shares	
Head Grade (%)	0.13	0.15	0.12	0.11	0.11	Mr. John Borshoff	ıvı anagın	Director		21.5	2.6%
Recovery (%) Recovered grade (%)	59 0.08	72 0.10	8 4 0 . 10	89 0.10	90 0.10						
U <sub>3</sub> O <sub>8</sub> Produced (t)	444	984	1262	1572	1717						
			1073	13 3 6	14 59						
Equity Production (t)	378	836									
Equity Production (t) Cash Costs (US\$/Ib)	na	836 50.00	38.15	34.71	33.21						

Uranium, Molybdenum, Gold USA (WY), South Africa, Australia (WA), Fiji Prefeasibility Study Exchanges: ASX:PEN

#### **Capital Profile**

Share price (A\$)	0.059							
52 week range (A\$/share)	0.025	to	0.10					
Number of shares (m)	2141							
Options and warrants (m)	889							
Performance shares (m)	19							
Fully diluted (m)	3049							
Market capitalisation (undiluted) (A\$m)	126.3							
Debt (A\$m) - Mar 12F	0.0							
Enterprise value (A\$m)	126.3							
Major shareholders: Pala Investment Holdings (13.96%)								

Avg monthly volume (m)	180
Cash (A\$m) - Mar 12F	16.3
	7.8
Price/Book (x)	1.8
Listed company options:*	PENOA PENOC

\* PENOA (3c, exp 30 June 2012); PENOC (3c, exp 31 December 2015).

#### **Investment Points**

Focused on uranium - CY12 exploration budget A\$9m, drilling 350,000m (split between Karoo and Lance).

Lance: DFS (Lyntek, Dec '11) and EES: Production 2.19mlbspa U<sub>3</sub>O<sub>8</sub>; C1 opex US\$19.93/lb or US\$11.93/lb with Vn credit; initial capex US\$79m

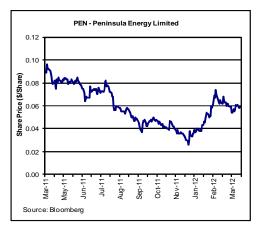
Lance mine permits and EIS lodged Dec '10. Production potential 2013. LOM 10+ years. Next JORC statement . expected Mar-Apr '12.

Long term additional Lance resource target is 95-145mlb U<sub>3</sub>O<sub>8</sub> grading 0.036-0.05%.

Final NRC permits granted 3Q11 to 2 further companies with WY ISR projects (TSX: URE, URZ)

Karoo Project: shallow, high grade uranium and moly.

Initial Karoo JORC Resource expected 2Q12 - target up to 30mlb U<sub>3</sub>O<sub>8</sub>.



#### **Contacts Directors**

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J Simpson (Chairman) M James (Exec Dir) W Grigor (Non Exec Dir) M Barton (Non Exec Dir) A Gillman (Tech Dir)

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#### Peninsula Energy Limited

A\$ 0.059

Lance (Wyoming) DFS and extended economic modelling (Dec '11) indicates a robust ISR project producing 2.2mlbspa U<sub>3</sub>O<sub>8</sub>. PEN remains well positioned to receive Lance project permits near term with production visibility 2013. Maiden Karoo resource expected 2Q12.

#### Production and Financial Forecasts

YEAR END: June	Dec-12a	Mar-12F	2011a	2012F	2013F
Exploration and evaluation (A\$m)	3.16	2.00	11.80	11.28	9.00
Corporate (A\$m)	1.33	1.30	5.10	5.18	5.20
Exploration/(Expl.+ Corporate) (%)	70	61	70	69	63
Funding duration at current burn (years)			1.6	0.8	2.8
Shares on issue (pr end) (m shares)	2136.0	2136.0	2093.4	2136.0	2636.0
Drilling - RAB (m)	0	0	0	0	0
Drilling - Other/Diamond (m)	55,000	75,000	142,000	281,423	295,000
Land holding ('000 ha)*	272	272	272	272	272
Tenement costs (\$k per year)	-	-	-	-	-
Capital raisings (A\$m)	0.0	0.0	35.6	0.3	40.0
Funding from JV partners (A\$m)	0	0	0	0	0
Cash (A\$m)	19.3	16.3	26.7	12.6	39.9
Cash backing (Ac/share)	0.9	8.0	1.3	0.6	1.5
Net asset backing (Ac/share)	3.3	3.2	3.4	3.2	4.0
*Uranium prospective tenements only, both held	and under appli	cation.	Quarters refer to ca	alendar vear.	

#### Company Comment

Overview: Formerly Peninsula Minerals (name change Nov '10), PEN is listed on the ASX and has operated

under the current management team since 2007 when key US projects were vended into the company.

Lance Uranium Project (USA, WY): Located in the northeast part of the Powder River Basin comprises 13 project areas (12,000 ha) including the Ross, Kendrick and Barber prospects - targeting roll front style uranium. The project area was discovered in the '70's by JV partners Nuclear Dynamics and Bethlehem Steel (NuBeth) and drilled between 1970 and 1979. NuBeth drilled 5000 holes (912,000m). PEN acquired the project 2H07 with a database of drilling and pilot plant data (from Ur-Energy). Initial forward sales contract (Feb '11): 1.15mlbs U<sub>3</sub>O<sub>8</sub>, priced at ~US\$70/lb, 7 year term. DFS (Lyntek, Dec '11) confirms development potential for Ross at an initial production rate of 0.75mlbsps  $U_3O_6$ ,

based on the Measured and Indicated Resource of 8.8mlbs (June '11). Includes a centralised processing plant at Ross (expandable to 3mtpa), but excludes the vanadium circuit. Initial capex US\$63m. Production is expected to

ramp up to 2.19mlbspa over 3 years with production from Kendrick and Barber.

EES (PEN, Rockbury Dec '11). The expanded economic study extends the DFS parameters (well field parameters, operating and development costs) for Ross to conceptual satellite IX (ion exchange) resin production at Kendrick and then Barber. PEN (and RCR) modelling assumes a resource of 14.5mlbs U<sub>3</sub>O<sub>8</sub>, including an assumed 40% conversion of 30mlbs Inferred Resource to 12mlbs Measured and Indicated, Opex (C1) is US\$11.93/lb, including a vanadium credit of US\$8/lb (vanadium price US\$10/lb). Total production cost is US\$38.26/lb. Initial capex US\$79m. The EES assumptions seem reasonable given the homogeneity of the ore body, though are subject to confirmation and inclusion of the vanadium circuit remains subject to further testwork.

Next steps: The next interim resource statement is anticipated Mar-Apr '12 uplifting and extending resources

Next steps: The next interim resource statement is anticipated Mar-Apr '12 uplifting and extending resources based on 2011 and 1012 drilling. The Source Material License could be issued as early as 4Q12 with permitting progress ahead of the NRC's more conservative timeframes (Dec '13).

The outlook for permitting in Wyoming is positive: Uranium One (TSX:UUU) received its NRC operating license (Oct '10) for Moore Ranch; and 2 other companies received final NRC permits recently: Uranerz (TSX:URZ, July '11) and Ur-Energy (TSX:URE, Aug '11). URZ has commenced construction at Nichols Ranch.

Karoo Project (South Africa): Located in the Karoo Basin of the Western, Eastern and Northern Cape Provinces; tenements comprise 6 project areas (198,000ha) with defined I-Mo mineralisation across stacked sandstone units identified from surface to 40m. The region hosts Areva's historic Ryst Kuil uranium mine (est. 40mlbs @ 0.1% U<sub>2</sub>O<sub>8</sub>). Three of PEN's project areas shost historic resources drilled by JCl and Union Carbide (~1.300 holes) in 1970-80's. PSN has an exploration target of 90. — 150mlbs U<sub>2</sub>O<sub>8</sub> grading 0.07 to 0.14%. Drill (-1,300 holes) in 1970-80's. PEN has an exploration target of 90 – 150mlbs  $U_3O_8$  grading 0.07 to 0.14%. Drill results (2011) confirm high grade uranium and molybdenum from surface to ~75m depth: Interim resource target 30mlbs grading 0.07 to 0.14%  $U_3O_8$  expected 2012.

Investment Comment: PEN base case NPV, with full de-risking of Lance post commissioning is A\$0.10/share fully diluted (see adjacent table; assumes US\$60/lb realised uranium price, AUD/USD 0.84 and 10% discount rate). Base case sensitivities: AUD/USD 1.00: NPV A\$0.086/share; No vanadium credit: NPV A\$0.086/share.

#### Reserves and Resources/Mineralised Material

Code for reporting mineral resourc	es - Australian:	(JORC)							
Uranium	Classification	Project	Ore	eU <sub>3</sub> O <sub>8</sub>	Cut Off	eU <sub>3</sub> O <sub>8</sub>	eU₃O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub> Eq	
U <sub>3</sub> O <sub>8</sub>		Equity	Mt	%	ppm	Kt	MIb	Mlb	
Reserves						0.0	0.0	0.0	
Resources									
Lance - Ross Permit Area^	M,I,I	100%	5.4	0.050	200	2.7	5.9	5.9	
Lance - Ross	M,I,I	100%	22.7	0.041	200	9.2	20.3	20.3	
Lance - Barber	M,I,I	100%	16.5	0.042	200	6.9	15.2	15.2	
Total Lance*			44.5	0.041		18.8	41.4	41.4	
Mineralised Material (est., non	compliant with JORC)								
Karoo - Site 22	Historic	74%		0.146		1.3	2.8	2.1	
Karoo - Site 29	Historic	74%		0.111		0.3	0.6	0.4	
Karoo - Site 45	Historic	74%		0.076		2.2	4.8	3.6	
^ Ross Permit Area includes a Van	adium resource (MII):	2.33mlbs V <sub>2</sub> O <sub>5</sub>	grading 0	.0196%.		3.7	8.2	6.1	

Inferred Resource is 30.2mlbs grading 0.042% U<sub>3</sub>O<sub>a</sub>. Measured and Indicated Resources are 11.25mlbs U<sub>3</sub>O<sub>a</sub> grading 0.045%

Project	Ownership/ Option	Metal	JV Partner	Target Type	Process Route	Project Status	Location
Lance Uranium Projects	100%	U	na	Roll front	ISR	PFS	US (WY)
Karoo Projects	74%	U (Mo)	BEE	S'stone	acid	Mid Expl.	S. Africa
Western Australia	100%	U	na	various	na	Early Expl.	Aus (WA)
Raki Raki	50%	Au	ASX:GPR	na	na	Mid Expl.	Fiji



#### PENINSULA ENERGY LIMITED VALUATION

		Equity (%)	Base Resource Val'n (US\$/Ib)	Base NAV (A\$m)	NAV Factor (%)	Adjusted Value (A\$m)	Uı	anium Pri	ısted ce Sensitiv ≸m)	ity
Assumptions LT Realised Uranium Price LT Exchange Rate: AUUS	: US\$/Ib			<b>60</b> 0.84		<b>60</b> 0.84	<b>40</b> 0.84	<b>50</b> 0.84	<b>70</b> 0.84	<b>80</b> 0.84
Projects Lance project	: NPV @10%	100%	5.85	217	75%	163	85	124	202	240
Resources and Exploration Lance (resource est. +100%) Karoo/other Sub-total Exploration	: NPV @10%	100%	2.83	105 <u>10</u> 115	75%	79 <u>10</u> 89	46 <u>5</u> 51	63 <u>7</u> 70	93 <u>12</u> 105	108 <u>15</u> 123
Assets + Cash + Tax losses				16 8		16 8	16 8	16 8	16 8	16 8
Liabilities - Debt - Corporate - Reclamation PEN Net Assets				0 42 <u>0</u> <b>314</b>		0 42 <u>0</u> <b>234</b>	0 42 <u>0</u> <b>119</b>	0 42 <u>0</u> <b>176</b>	0 42 <u>0</u> <b>289</b>	0 42 <u>0</u> <b>346</b>
Fully diluted shares (m) Cash on Option Conversion				3048.7 28.0		3048.7 28.0	3048.7 28.0	3048.7 28.0	3048.7 28.0	3048.7 28.0
PEN Net Asset Value per share PEN Net Asset Value Diluted	: A\$/share : A\$/share dil			0.15 0.112		0.109 0.086	0.056 0.048	0.082 0.067	0.135 0.104	0.162 0.123
Sensitivity of Net Asset Value to PEN Net Asset Value (assuming A	. ,		ah shara issu	ıa at Δ¢∩	) (7)	0.083	0.052	0.067	0.099	0.114
PEN Net Asset Value (assuming A PEN Net Asset Value (assuming A PEN Net Asset Value (assuming A	A\$40m capex rai	sed throu	gh share issu	ue at A\$0	0.06)	0.083 0.081 0.078	0.052 0.050 0.049	0.067 0.066 0.063	0.099 0.096 0.093	0.114 0.111 0.108

#### LANCE URANIUM PROJECT KEY ASSUMPTIONS (derived from DFS (Lyntek)\* and EES (PEN)^ - Dec 2011)

RCR modelling assumptions  MINING METHOD  PROCESS METHOD  C  1. 2.  RESOURCE CONVERSION  TONNAGE DILUTION  GRADE UPLIFT  BASE CASE ASSUMPTIONS  PRODUCTION RATE  AVERAGE HEAD GRADE - U308  HIGH GRADE  RECOVERY - URANIUM  19	CENTRALI . Ion exch . Satellite % % % tpa tpa %	ECOVERY SED URAN nange and v facilities 40-60% na 6	NIUM PLA anadium		0.041 0.046 or better)	41.4 23.3	(as at June 2011)
PROCESS METHOD  C. 1. 2.  RESOURCE CONVERSION TONNAGE DILUTION GRADE UPLIFT  BASE CASE ASSUMPTIONS  PRODUCTION RATE AVERAGE HEAD GRADE - U308 HIGH GRADE RECOVERY - URANIUM  C. 1.  1.  1.  1.  1.  1.  1.  1.  1.  1.	CENTRALI . Ion exch . Satellite % % % tpa tpa %	ISED URAN nange and v facilities 40-60% na 6	NIUM PLA anadium	circuit	or better)		
RESOURCE CONVERSION TONNAGE DILUTION GRADE UPLIFT  BASE CASE ASSUMPTIONS PRODUCTION RATE AVERAGE HEAD GRADE - U308 HIGH GRADE RECOVERY - URANIUM  1.	. Ion exch 2. Satellite % % % tpa %	nange and v facilities 40-60% na 6	anadium	circuit	or better)		
TONNAGE DILUTION :9 GRADE UPLIFT :9  BASE CASE ASSUMPTIONS  PRODUCTION RATE :tt AVERAGE HEAD GRADE - U308 :9 HIGH GRADE :9 RECOVERY - URANIUM :9	% % tpa %	na 6 na na	(Inferred	to Indicated o	or better)		
PRODUCTION RATE :ttp AVERAGE HEAD GRADE - U308 :9 HIGH GRADE :9 RECOVERY - URANIUM :9	% %	na					
AVERAGE HEAD GRADE - U3O8 :9 HIGH GRADE :9 RECOVERY - URANIUM :9	% %	na					
	%						
EES URANIUM PRODUCTION :n	mlbspa mlbspa	76 3.0 2.19 1.75	Expanda Producti	able in 0.75kt ion rate based	n-situ; then 95% plai modular increments d on PFS resources im circuit: productio	s to 3mlbspa. I	Initial capacity 1.5mlbsp
	US\$m US\$mpa	79 19	Initial ca	pital including sustaning ca	te project recovers v g central processing apex of US\$19mpa a	plant.	gh IX circuit.
OPERATING COSTS: (C1) :L	US\$/Ib	19.93	•	93/lb with vana	adium credit.		
less by-product credit :U	US\$/lb	8.00	EES ass	sumes vanadi	um production of 1.	75mlbspa; pric	e US\$10.00/lb.
Total production costs :U	US\$/Ib	38.26		alties and tax ex US\$8.82/I		reciation US\$6	6.71/lb and ongoing well
TAX :9 ROYALTY :9 MINE LIFE :Y COMMISSION PROJECT ::		30 6 10+ Years 2013	36 montl	h ramp-up.			

These figures are preliminary in nature and are intended to provide only a general indication of project scale and economic robustness. Considerable refinement may result from subsequent feasibility studies.

# TOE.AU

27 March 2012 Australia (WA,NT,SA), Namibia BFS and Exploration Exchanges: ASX:TOE

#### **Capital Profile**

Share price (A\$)	0.08		
52 week range (A\$/share)	0.07	to	0.12
Number of shares (m)	1042		
Options and warrants (m)	38		
Convertible notes (m)	0		
Fully diluted (m)	1080		
Market capitalisation (undiluted) (A\$m)	82.3		
Debt (A\$m) - Mar 12F	0.0		
Enterprise value (A\$m)	82.3		
Major shareholders: OZ Minerals Ltd (39.4%),	ANZ Nominees	(2.3%	%),
HSBC Nominees (1.5%), Allarrow Pty Ltd (1.0%)			
Avg monthly volume (m)	15		
Cash (A\$m) - Mar 12F	16.3		
Price/Cash (x)	5.0		
Price/Book (x)	0.8		
Listed company options:	No		

#### **Investment Points**

100% uranium focus. Expl. + Eval. budget ~A\$15m pa.

Wiluna Project and regional resources 53.6mlbs U<sub>3</sub>O<sub>8</sub> at 440ppm (200ppm cut-off). Centipede resource upgrade (Feb '12, +17%) to 14.4mlbs U<sub>3</sub>O<sub>8</sub> grading 504ppm.

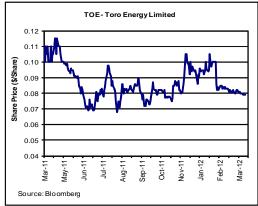
State and Federal government approvals expected mid 2012. BFS expected 2H12. Production potential 4Q13.

Wiluna economic parameters (Nov '11): Plant throughput 1.3mtpa, 1.8mlbpa U<sub>3</sub>O<sub>8</sub>, LOM 14 years, capex A\$280m, opex US\$33/lb, head grade ~720ppm (years 1-10).

NPV breakeven US\$58/lb U $_3$ O $_8$ , AUD 0.84, 10% r/i - on first 10 years of operation. ~US\$50/lb with LOM extension.

Theseus Project (WA): potential ISR. Exploration Target 22m to 44mlbs U<sub>3</sub>O<sub>8</sub> grading 400-500ppm. Initial met tests indicate high U recoveries (>95%). Maiden resource expected 3Q12.

HoA for Northern Minerals (ASX:NTU) to explore for HREE (and other non U minerals) on TOE's Tanami properties.



#### **Directors Contacts**

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A Coles (Non Exec Dir)

#### **Toro Energy Limited**

A\$ 0.08

Wiluna Project final government approvals expected mid 2012; BFS 2H12. Production potential 4Q13. Exciting Theseus (WA) discovery; \$5m exploration program in 2012 now fully funded - potential for rapid advancement. Could be a second project for TOE midterm.

#### Production and Financial Forecasts

YEAR END: June	Dec-11a	Mar-12F	2011a	2012F	2013F
Exploration and evaluation (A\$m)	5.98	2.75	15.50	17.26	15.00
Corporate (A\$m)	0.82	1.10	3.53	4.22	4.40
Exploration/(Expl.+ Corporate) (%)	88	71	81	80	77
Funding duration at current burn (years)	1.5	4.2	1.6	0.6	-0.3
Shares on issue (pr end) (m shares)	975.4	1041.9	965.4	1041.9	1041.9
Drilling - RAB (m)	5,500	12,000	24,847	34,500	48,000
Drilling - RC/Sonic/Diamond (m)	250	0	840	1,500	1,500
Land holding ('000 ha) ^	3,578	3,578	4,690	3,578	3,578
Tenement costs (\$k per year)	-	-	-	-	-
Capital raisings (A\$m)	0.0	5.3	0.0	5.3	0.0
Funding from JV partners (A\$m)	0	0	0	0	0
Cash (A\$m)	10.5	16.3	29.7	12.7	-6.5
Cash backing (Ac/share)	1.1	1.6	3.4	1.5	-0.8
Net asset backing (Ac/share)	9.5	9.7	11.3	11.5	12.0
Quarters refer to calendar year.			^ Uranium tene	ments held or at	oplied for.

#### Company Comment

Overview: TOE listed on the ASX in March '06 and is a pacesetter in advancing calcrete style uranium Projects in Australia. Wiluna is at BFS stage and could be WA's first new uranium producing project. **Aspirational Targets:** TOE has ambitious growth targets: 100mlb U<sub>3</sub>O<sub>8</sub> resources by 2015 (currently 50mlb) and production of 5.5mlbpa by 2020 – targets may be achieved with backing from OZ Minerals. **Wiluna Regional Resource Consolidation:** TOE has been expanding its regional resource base through

Wiluna Regional Resource Consolidation: TOE has been expanding its regional resource base through strategic acquisitions/alliances to great effect. Wiluna area resources now stand at 53.6mlbs U<sub>2</sub>O<sub>8</sub>, more than doubled from 24mlbs 4Q10. Upgraded Centipede Resource (Feb '12) 14.4mlbs grading 504ppm U<sub>3</sub>O<sub>8</sub>, a 17% increase in contained metal. The Wiluna Project – Lake Way and Centipede deposits - contains 23.94mlbs grading 516ppm U<sub>3</sub>O<sub>8</sub> of which 66% is in the Measured and Indicated categories. A ROM head grade of ~720ppm is scheduled for the first 10 years of production.

Wiluna BFS: The improved economic parameters released Nov '11 supplements the PFS (Sep '08) and the Optimisation Study (Sep '09). The BFS is expected 2H12. The revised parameters indicate: plant throughput 1.3mtpa (previously 2mtpa), production 1.8mlbpa U<sub>3</sub>O<sub>8</sub>, capex A\$280m (inclusive of all supporting infrastructure), C1 opex U\$\$33/lb (average for first 10 years), mill recovery 85%, LOM 14 years. The new mining plan indicates a series of shallow open pits to 10m depth, progressively backfilled. 3 to 1

The new mining plan indicates a series of shallow open pits to 10m depth, progressively backfilled, 3 to 1 strip ratio, 250ppm cut-off for mining and 500ppm cut-off for processing giving ~720ppm head grade in the first 10 years. Parameters are based on selective mining and use of mining contractors. Plant is alkaline tank leach heated to 90°C producing uranium as UO<sub>2</sub>. TOE reported pilot plant test recoveries (Sep '11) of 83-86% uranium. Additional project enhancement could come from further resource upside, potentially

83-86% uranium. Additional project enhancement could come from further resource upside, potentially higher ROM head grade, reduced capex and lower AUD. RCR modelling indicates NPV breakeven at US\$58/lb U<sub>3</sub>O<sub>8</sub>, AUD 0.84 using a 10% r/i over first 10 years, plus upside with LOM extension. At the current exchange rate of ~AUD 1.00, NPV breakeven is US\$68/lb U<sub>3</sub>O<sub>8</sub> over the first 10 years operation. Theseus Project (WA). Large ISR prospective discovery (2009) located 650km west of Alice Springs. Similar lithologies to 4 Mile and Beverley uranium projects (SA). Exploration Target Range (ETR) 20-40mt grading 400-500ppm U<sub>3</sub>O<sub>8</sub> for 22mlb to 44mlbs U<sub>3</sub>O<sub>8</sub> (Nov '11). This ETR relates to one of 3 proximal palaeovalleys – the other 2 offer additional bluesky upside. Theseus mineralisation is defined over an interpreted palaeochannel exceeding 10km x 2km at ~90m to 130m depth, and consists of unconsolidated sand capped by clay layers. Initial met test (bottle roll) results 1Q12 indicate high uranium recoveries (>95%), fast extraction times (over 75% in 12 hours), and low reagent consumption. Further results awaited. Hydrology tests 1H12. Resource statement expected 3Q12. Exploration budget \$5m in 2012 and multiple drill rios (20.000m mud rotary, 5.000m aircore, 2.000m sonic). The project could advance rapidly multiple drill rigs (20,000m mud rotary, 5,000m aircore, 2,000m sonic). The project could advance rapidly in 2012 adding significant value to TOE. By comparison, the similar size and grade but more advanced Lance ISR Project (WY, ASX:PEN) has an NPV<sub>10</sub> of ~A\$150m (US\$60/lb U<sub>3</sub>O<sub>8</sub>, AUD0.84. **Investment Comment:** 2012 could see significant developments for TOE with government approvals

expected mid 2012 for the Wiluna Project, BFS 2H12, potentially securing a cornerstone equity investor and initial off-take agreements. The exciting Theseus Project has potential to emerge as a key, new project for TOE. An aggressive exploration program is planned 2012; maiden resource expected 3Q12. TOE's activities for 2012 are fully funded with \$16.3m in cash after the March SPP raised \$5.3m at \$0.08/share.

#### Reserves and Resources/Mineralised Material

Code for reporting mineral r	esources - Australian	: (JORC)						
Uranium	Classification	Project	Ore	U₃O <sub>8</sub>	Cut Off	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub>	Eqty
U₃O <sub>8</sub>		Equity	Mt	%	ppm	Kt	MIb	MIb
Reserves						0.0	0.0	0.0
Resources								
Wiluna: L. Way & C'pede	Meas Ind & Inf.	100%	22.9	0.052	200	11.8	26.0	26.0
Millipede	Ind and Inf	100%	7.3	0.050	200	3.7	8.1	8.1
Dawson-Hinkler Well	Inferred	100%	13.1	0.031	200	4.1	9.0	9.0
Nowthanna^	Inferred	100%	11.9	0.040	200	4.7	10.5	10.5
Total Resources			55.1	0.044		24.3	53.6	53.6
Mineralised Material (es	st., non compliant w	ith JORC)				0.0	0.0	0.0

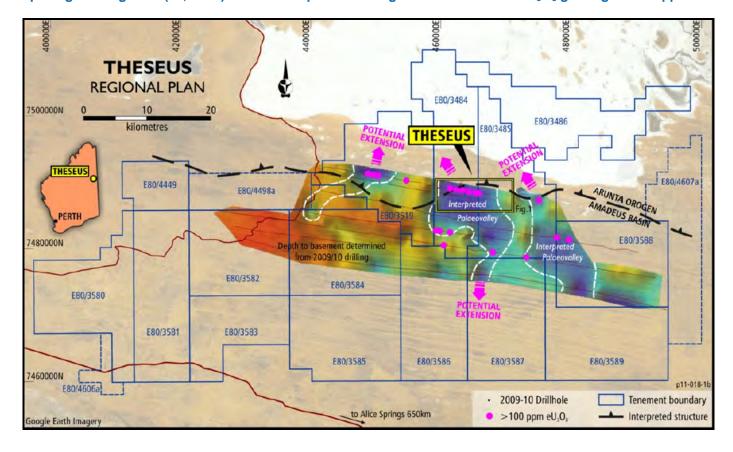
#### Toro owns 100% of two tenements which comprise the major portion of the Now thanna deposit – Toro's resource shown here.

Project	Ownership/ Option	Metal	JV / Partner	Target Type	Process Route	Project Status	Location
Wiluna	100%	U	none	Calcrete	Alk. Leach	BFS	Aus (WA)
Theseus (Lake Mackay)	100%	U	none	Palaeo/IOCG	na	Early Expl.	Aus (WA)
Namibia	25%	U	DYL	Calc/Alask	na	Early Expl.	Namibia
Reynolds Range	100%	U	none	Sandstone	na	Early Expl.	Aus (NT)
Lake Mackay (regional)	100%	U, REE, Fe	none	various	na	Early Expl.	Aus (WA)

Flagship Wiluna Project (WA): Key Project Parameters - the enhanced economic study (Nov '11) indicates improved project economics with higher head grade (720ppm) and lower opex (US\$33/lb), and indicates potential for a 14 year mine life. Toro's value-enhancing strategy of building Wiluna into a significant uranium production hub over the past 18 months has seen the consolidated regional resource climb to 54mlb (+125%). This will give a significant boost to the Wiluna NPV and project viability.

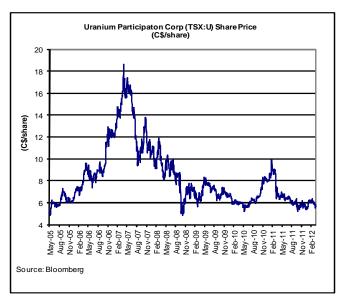
Parameter	Optimisation Study September 2009	November 2011 Economics
Processing Plant	1.6mtpa – 2.0mtpa	1.3mtpa
Head grade	668ppm U <sub>3</sub> O <sub>8</sub>	720ppm
Recovery	86%	~85%
C1 Cash Cost	~US\$40/lb	US\$33/lb
Capital Cost	~A\$264m	A\$280m
Product	700-1000t U <sub>3</sub> O <sub>8</sub>	820t U <sub>3</sub> O <sub>8</sub>
Mining Duration	8-10 years	Up to 14 years

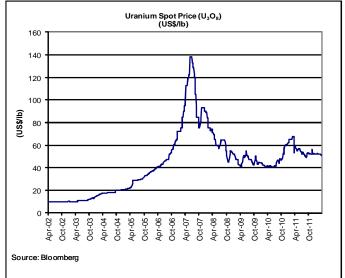
Theseus Project and regional palaeovalleys (WA): The map shows two additional, discrete palaeovalley systems with potential to be as prospective as Theseus. Each reports anomalous intercepts at kilometre spacing. Drilling 2012 (27,000m). Theseus Exploration Target is 22mlb - 44mlbs U<sub>3</sub>O<sub>8</sub> grading 400-500ppm.



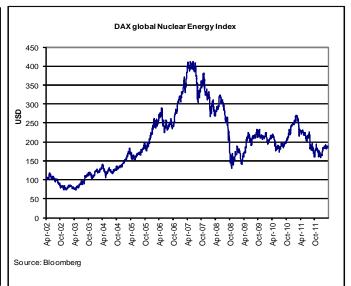


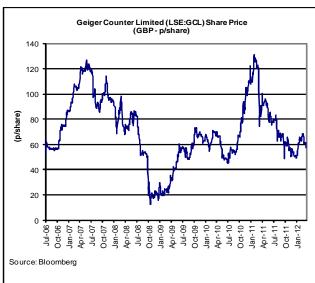
## **Selected Uranium Sector Performance Charts**

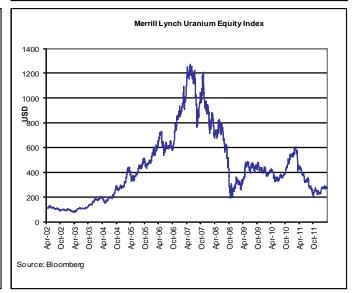




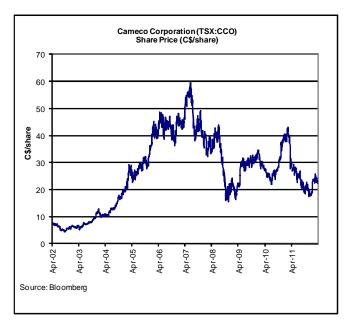


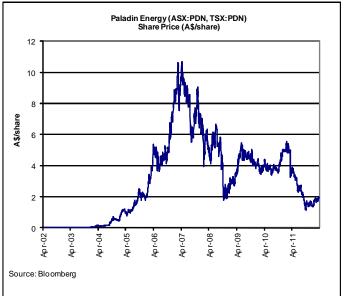


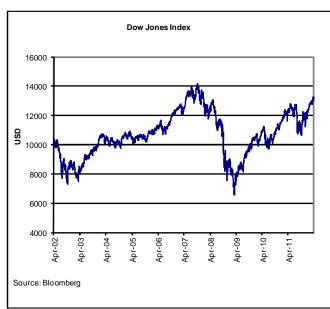


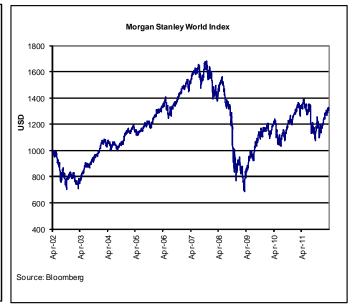


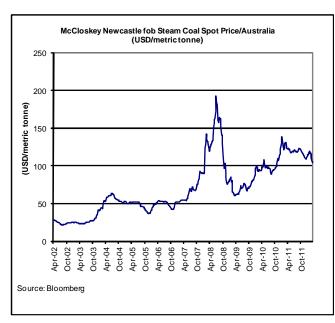


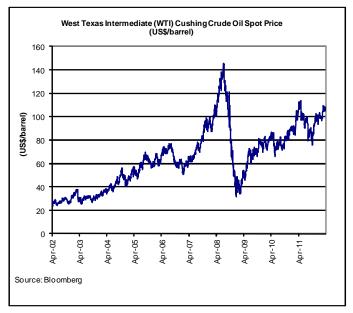














## **Report Contributors**

John Wilson: John has a background in mining, finance and equity research. He worked on Wall Street for 6 years and has covered US, Australian and Latin American mining stocks. He has also worked with BHP in their minerals division. Qualifications include an MBA from the Wharton School of the University of Pennsylvania and a Bachelor of Engineering from the University of Sydney.

Tony Parry: Tony has extensive experience in metallurgical process development, (working with MIM Limited for five years) and in mining equity research, equity sales and mining corporate finance (working in London for five years and subsequently Perth). He was a founding Director and CEO of an ASX listed exploration company and has been engaged extensively as a strategic planning consultant to many small-medium enterprises. Tony's qualifications include a BSc (Hons) in Metallurgy and a PhD in Metallurgy from the University of NSW.

Murray Brooker: Murray has a background in mining and consulting as a geologist. He worked for North Limited (now part of Rio Tinto) for 10 years and for Parsons Brinckerhoff (a global engineering consultancy). He has 20 years' experience assessing exploration projects in Australia, New Zealand, Mexico and South America. Murray has an MSc in Geology (James Cook University, Qld) and an MSc in Hydrogeology. He was also a founding Director of an unlisted Australian geothermal company.



## **Disclosure and Disclaimer**

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