



DUTWA PROJECT– Nickel/Cobalt

Tanzanian Government
Presentation

GAME CHANGER: ELECTRIC VEHICLE MARKET

NICKEL – the commodity poised to most benefit from the battery revolution

Electric cars and nickel demand

A shift of just 10% of the global car fleet to electric vehicles would create additional demand of 400,000 tonnes of nickel, in a 2m tonne market

Lithium-ion batteries

High-purity nickel and cobalt sulphate are key raw material inputs for the rapidly growing battery industry

Dominant chemistries

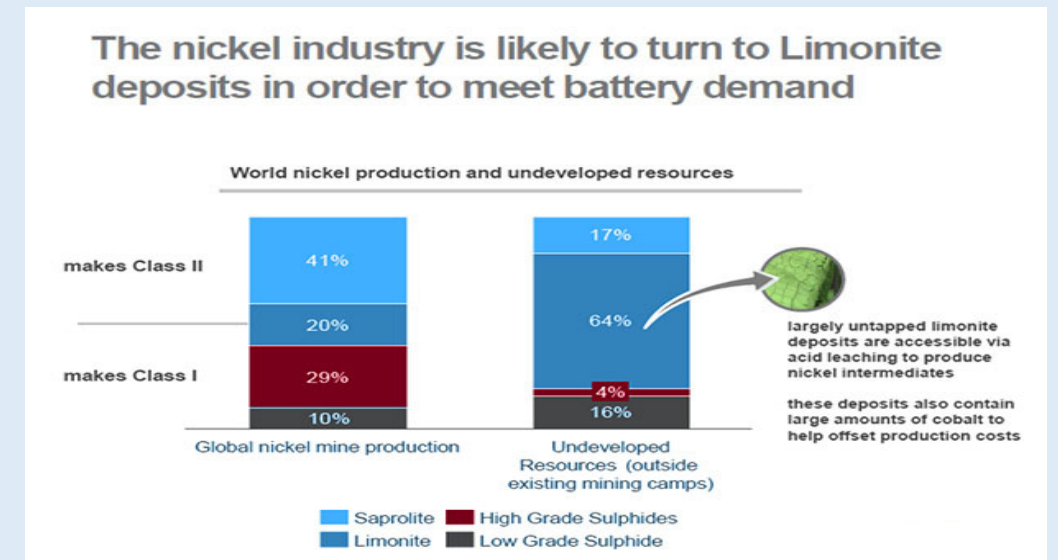
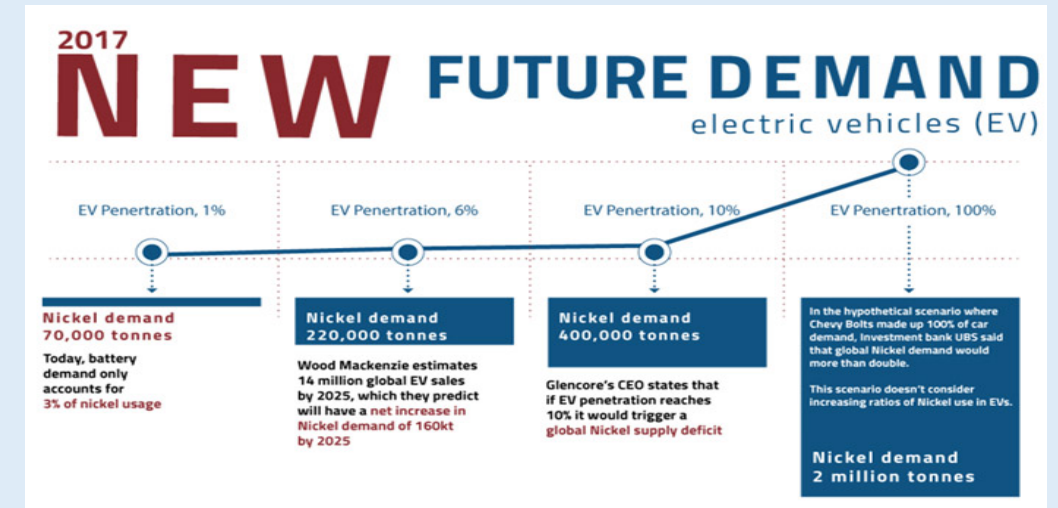
‘Our cells should be called nickel-graphite, because the cathode is nickel and the anode is graphite’ Elon Musk – Tesla 2016

Chinese demand

The use of nickel cobalt battery solutions is accelerating in China with a number of the major electric vehicle converting to NCM chemistry

Problematic supply chain

65% of global cobalt production originating in the DRC of which 45% is mined artisanally. Significant demand for new supply options



DUTWA PROJECT: TANZANIA

Significant Nickel and Cobalt laterite resources in northern Tanzania

Dutwa project – overview

Comprises 6 licences in the Lake Victoria Goldfields of north Tanzania and the Zanzui project further south – laterite resource and significant sulphide potential

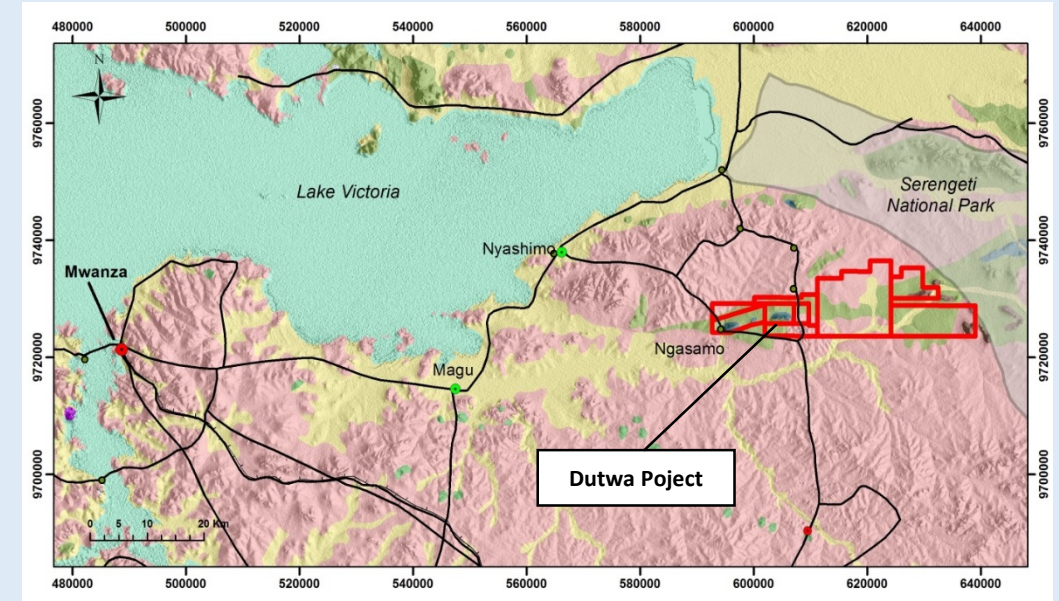
Dutwa and Zanzui – laterite JORC resources

Dutwa resource of 116.7Mt at 0.91 Ni and 0.026 Co for 1Mt Ni and 30kt Co

Zanzui resource of 50Mt at 1.00 Ni and 0.06 Co for 0.5Mt Ni and 30Kt Co

Dutwa Combined Minerals Resource Estimate, as at February 2013, Ni Cut-Off @ 0.55%

JORC (2004) Resource Catagory	Lithology	Tonnes (Mt)	Ni (%)	Co (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	MgO (%)	CaO (%)	Metal t
Indicated	Fer-Sil	79.3	0.89	0.029	72.02	2.41	12.52	5.14	0.21	702,981
	Trans	25.9	0.96	0.021	52.45	1.49	12.08	19.02	0.94	249,639
	Saprock	4.6	0.94	0.022	39.35	0.38	8.16	32.41	0.78	42,792
	Total	109.8	0.91	0.027	66.04	2.11	12.23	9.55	0.41	995,411
Inferred	Fer-Sil	1.5	0.85	0.028	71.72	2.64	12.43	5.42	0.27	21,587
	Trans	2.9	0.98	0.018	53.60	1.56	10.99	20.19	0.80	14,846
	Saprock	2.9	0.86	0.017	41.18	0.48	8.30	31.06	0.82	24,708
	Total	6.9	0.89	0.021	55.09	1.51	10.40	19.29	0.61	61,141
	Grand Total	116.7	0.91	0.026	65.39	2.07	12.12	10.12	0.42	1,056,553



PROJECT COMPARISONS

Valuation comparisons to other similar deposits

Syerston Project 100% owned project by Clean Teq in Australia – laterite rich in nickel, cobalt and scandium.

ASX listed company with a current market capitalisation of over **AUS\$1bn**

Jorc resource presented in the table on the right

Nickel/cobalt resources similar to Dutwa with similar processing characteristics

Classification Category	Tonnage (Mt)	Ni Grade	Co Grade	Ni Metal Tonnes	Co Metal Tonnes
Measured	52	0.73	0.11	380,000	57,000
Indicated	49	0.58	0.10	280,000	49,000
Meas + Ind	101	0.65	0.10	660,000	106,000
Inferred	8	0.54	0.10	50,000	8,000
Total	109	0.65	0.10	700,000	114,000

Dutwa has a better grade at 0.91% - which can be beneficiated to in excess of 1.5% with double the contained metal tonnes

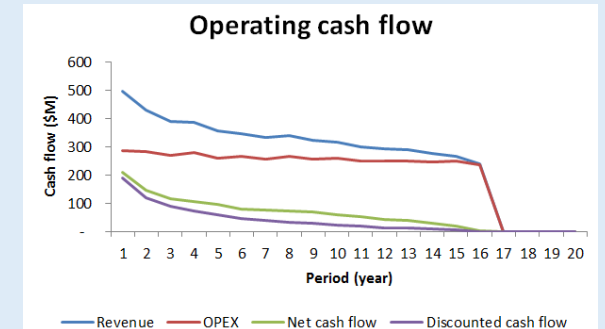
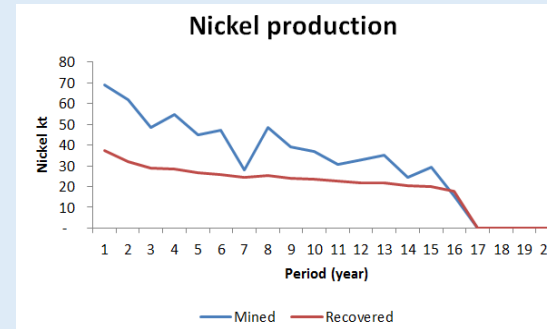
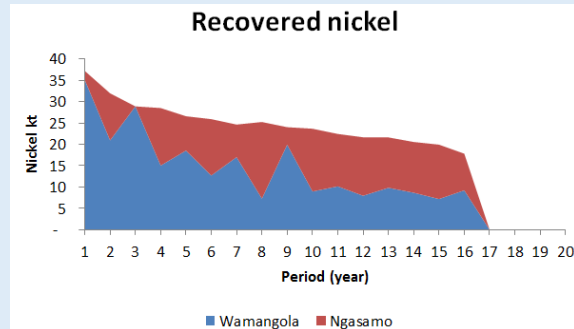
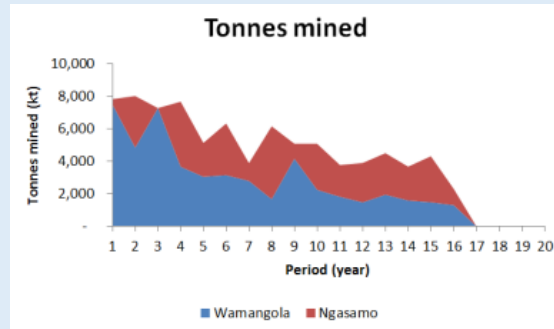
Cobalt grade is lower at Dutwa with 60Kt defined in-situ – but additional drilling is expected to significantly increase the amount of cobalt – drilling had been focused on nickel

OTHER DUTWA PROJECT INFORMATION

High level summary financials based only on the Dutwa laterite reserves

FINANCIALS		TOTAL	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Revenue	(US\$m)	6,645		611	531	479	477	440	427	410	419	400	391	371	362	358	343	330	296
Opex	(US\$m)	(4,172)		(288)	(284)	(272)	(279)	(262)	(267)	(256)	(267)	(256)	(259)	(250)	(249)	(251)	(247)	(249)	(237)
Capex	(US\$m)	(650)	(450)	(200)															
Net cashflow		1,823	(450)	123	247	208	198	179	160	154	152	144	132	121	113	107	96	81	59
Present value	(US\$m)	787																	
IRR	(%)	39.1%																	

Project details - Based on summary 2013 PFS



See Dutwa Project overview for full project summary