

Dutwa economics update

20.12.2010 | [Globenewswire Europe](#)

African Eagle Resources plc
NEW ECONOMIC MODEL FOR THE
DUTWA NICKEL PROJECT, TANZANIA

African Eagle Resources plc (AIM: AFE; AltX AEA; "the Company") announces that it has received a new economic model for the Dutwa nickel project from independent Perth based consultant Stimulus. The model uses inputs from Snowden Mining Industry Consultants and AMEC Minproc, consultants engaged by the Company for the feasibility study.

This is the first iteration of the feasibility study economic model and it will be progressively refined as better information becomes available with the continued development of Dutwa. Currency in this announcement is expressed in US dollars, unless stated otherwise.

The key headlines are:

- * Pre-tax NPV (10%) of \$650M (£410M) at \$8/lb nickel (currently ~\$11.00/lb)
- * Post-tax NPV (10%) of \$385M (£245M) at \$8/lb nickel
- * IRR post-tax of 20% and capital payback under 5 years
- * Annual production of 23,000t nickel and 582t cobalt over 26-year mine life
- * Estimated initial Capex of \$600M (£380M)
- * Estimated average cash cost of \$3.37/lb nickel
- * Life of mine earnings of \$8.2bn (£5.2bn) at \$8/lb nickel
- * Pre-feasibility study scheduled to be completed Q3 2011
- * Definitive feasibility study to be undertaken in 2012
- * First production anticipated in 2015

African Eagle's Managing Director Mark Parker comments:

"We are delighted with the positive results from the updated economic model. They are a significant improvement over the results of the scoping study completed 18 months ago. The update takes account of all the new information obtained since then, especially the increase in the JORC resource from 32 to 98 million tonnes."

"The Dutwa project is situated 120km east of Mwanza, the second city of Tanzania. It will employ an operating workforce of approximately 400, plus additional contractors. The development can be expected to provide long lasting benefits to Tanzania, delivering significant direct and indirect taxes, and will be a catalyst for further public and private investment in the country."

In July 2010, African Eagle commissioned Stimulus, an engineering company based in Perth WA, to develop an economic model for its feasibility study on Dutwa. Stimulus specialises in dynamic process model simulation and has a reputation as a world leader in nickel laterite process and financial modelling and process design. Inputs for the model were provided by the Company and by consultants engaged in the feasibility study, including Snowden Mining Industry Consultants for the pit optimisation and mine scheduling, and AMEC Minproc (Perth, Western Australia) for plant operating and capital costs.

The results in this announcement assume throughput of 3 million tonnes per year from an indicative unclassified mineable reserve of 80Mt at a diluted grade of 0.97% nickel (based on Whittle pit optimisations of the October 2010 block models of the Inferred Mineral Resources), and processing by atmospheric tank leaching with a mixed hydroxide intermediate product. Alternative throughputs and processes are also being considered. These results are for the whole

project; African Eagle anticipates that it will own about 76% of the project.

The new model has four principal functions:

- * To model the economics of the Dutwa project for the feasibility study
- * To update the mid-2009 scoping study economics
- * To allow testing of the economic impact of alternative strategies for development of the project
- * To demonstrate the benefits of the project to Tanzania, through taxes and indirect effects

The Company regards this first iteration of the new model as a significant update of the July 2009 scoping study, which showed a post-tax NPV of \$238m at \$8/lb nickel. The new model will continue to be refined throughout the feasibility study as more information becomes available. The next major milestones for the Company will be the upgrade of part of the resource from JORC inferred to indicated category, the results of bench-scale metallurgical tests on a bulk ore sample which is currently being shipped and, in Q3 2011, the pre-feasibility study incorporating the results of the metallurgical testing and associated process selection engineering.

With the contained nickel in the Dutwa resource having almost tripled since the scoping study was completed in 2009, the Company has increased the throughput of ore processed from 2Mt/yr to 3Mt/yr.

Other key model data includes:

Mine life years 26

Throughput million tonnes / year 3

Ore mined and processed million tonnes 80

Strip Ratio 0.43

Nickel payability % of LME nickel price 75

Average nickel grade % 0.97

Total contained nickel in product '000 tonnes 603

Average cobalt grade % 0.03

Total contained cobalt in product '000 tonnes 15

Life of mine capital cost \$M 659

Using these assumptions, the model gives the following results on a 100% project basis at 10% discount rate:

Nickel price	\$/lb	\$10	\$9	\$8	\$7
Net earnings (life of mine EBIT)	\$bn	10.2	9.2	8.2	7.2
NPV pre-tax	\$M	1,340	995	650	310
IRR pre-tax	%	36	30	24	17
NPV post-tax	\$M	870	630	385	140
IRR post-tax	%	29	25	20	14
Pay-back period	years	3.1	3.8	4.9	4.9
Estimated initial capital expenditure	\$M	600			

Capital intensity \$/lb nickel / yr 11.7
Estimated operating cash cost \$/lb 3.37
(after cobalt credits)

Estimated operating Costs

\$/tonne of ore \$/lb of contained
nickel

Consumables 1.4 0.08

General & Admin 3.5 0.20

Labour 2.0 0.12

Maintenance 4.3 0.26

Mining 3.9 0.23

Power 0.2 0.01

Reagents 27.8 1.63

Transportation 16.9 0.99

Cobalt credits (2.6) (0.15)

TOTAL 57.4 3.37

The model also includes the following elements and assumptions:

- * Whittle pit optimisations by Snowden using the October 2010 resource block model
- * A mining schedule from Snowden with accumulated ore stockpiles to allow optimal grade scheduling and blending
- * Operating and capital cost estimates provided by AMEC Minproc
- * Contract mining
- * Transport costs based on a comprehensive internal study including an extensive logistics survey within Tanzania
- * Road transport of reagents and products
- * Royalty of 4% of gross revenue
- * Corporation tax rate of 30% before capital allowances

Over the coming months, the economic model will be used to evaluate alternative processing options such as:

- * Heap leaching, which may reduce the initial capital cost
- * Higher throughputs up to 5Mt/yr production
- * Production of a mixed Ni-Co sulphide intermediate as opposed to mixed hydroxide
- * The economic impact of using rail transport as opposed to road.

Transport costs currently comprise roughly one quarter of the average operating cost and represent a key area for potential improvement. Currently it is assumed that all materials will be transported to site from Dar es Salaam via road, but infrastructure improvements planned in East Africa could have a significant positive impact on the project economics, and these will be examined in the coming months.

Technical terms

A glossary of technical terms used by African Eagle in this announcement and other published material may be found at www.africaneagle.co.uk/p/glossary.asp.

Qualified Person

The information in this report which relates to the Dutwa Mineral Resource has been reviewed and approved for release by Mr Richard Sulway, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Sulway is a full-time employee of Snowden Mining Industry Consultants and has sufficient experience in relation to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined by the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and is hence a Qualified Person under AIM Rules. Mr Sulway has consented to inclusion in this release of his information in the form and context in which it appears.

For further information on African Eagle, see the Company's web site www.africaneagle.co.uk or contact one of the following:

Mark Parker
Managing Director
African Eagle
+44 20 7248 6059
+44 77 5640 6899

Nicola Marrin
Seymour Pierce Limited, London
Nominated Adviser
+ 44 20 7107 8000

David Banks
Seymour Pierce Limited, London
Corporate Broking
+ 44 20 7107 8000

Guy Wilkes
Ocean Equities Limited, London
Corporate Broking
+ 44 20 786 4370

Charmane Russell / Marion Brower
Russell & Associates, Johannesburg
+ 27 11 8803924
+27 82 8928052

Ed Portman / Leesa Peters
Conduit PR, London
+44 20 7429 6607
+44 77 3336 3501

Dutwa Project Overview

The project consists of two nickel laterite deposits which form the caps of two ridges about 7km apart. Strip ratios are very low. It is anticipated that contract mining will be used.

The current Inferred Mineral Resources, classified using the guidelines of the JORC Code (2004) at a 0.43% nickel metal equivalent cut-off, are 98.6 million tonnes grading 0.93% nickel and 0.02% cobalt, containing in total 948,000 tonnes nickel equivalent. The Ni equivalent grade (NiEq) is calculated using the following formula:

$$\text{NiEq} = \text{Ni} + [\text{Co} * (\text{RCo}/\text{RNi}) * (\text{PCo}/\text{PNi})]$$
$$= \text{Ni} + (\text{Co} * 1.32)$$

using one year average metal prices of US \$10/pound Ni and US \$17/pound Co, and metal recovery factors of 90% for Ni and 70% for Co, provided by African Eagle Resources plc and derived from metallurgical test work conducted by African

Eagle Resources plc.

The Company believes that the resources can be increased by another 8 to 10 million tonnes by further drilling. There is future upside at Nyawa, 15km west of Dutwa and at Zanzui, 50km to the south, where the Company is evaluating another significant nickel laterite resource.

Metallurgical work to date has indicated that the laterite can be processed with standard heap or tank leaching at atmospheric pressure, with no need for a costly high pressure acid leach (HPAL) facility.

The project economic model is based on the treatment of 3Mt/yr by sulphuric acid tank leaching at atmospheric pressure, for the production of a mixed hydroxide product which will be shipped by road for export via the Indian Ocean port of Dar es Salaam, located 800 kilometres to the southeast of Dutwa. Metallurgical test work indicates an estimated overall process recovery of 75.8% nickel. Sulphuric acid will be manufactured on site using elemental sulphur brought by road or rail from Dar es Salaam, or possibly sulphides obtained within the Lake Victoria Goldfield.

African Eagle currently holds a 90% interest in the eastern Wamangola deposit, which holds approximately 60% of the total resource, with an option to acquire 100%. The Company has signed a joint venture with the SAFINA Group of the Czech Republic under which African Eagle will earn between 50% and 75% interest in the western Ngasamo deposit by conducting and funding evaluation work. On completion of the feasibility study, the two companies' joint venture interests will be converted into equity in the combined project. African Eagle estimates that it will then hold about 76% of the equity.

About African Eagle

African Eagle Resources plc is a UK-incorporated mineral development company traded on London AIM (AFE) and Johannesburg AltX (AEA). As at 17 December 2010, the Company has 384,762,128 shares in issue.

African Eagle is developing the major Dutwa nickel laterite in Tanzania. The Company discovered Dutwa in 2008, completed a scoping study on in June 2009, and is now conducting a feasibility study. African Eagle is also evaluating a second promising nickel laterite deposit at Zanzui in Tanzania, 50km south of Dutwa which is currently in the drilling and testing phase.

In December 2008, African Eagle resolved to prioritise the Dutwa project, because the Board believes that, of all the Company's projects, it offered the greatest potential to add value. To take its other discoveries into production, African Eagle is seeking industry partners with records of successful mine development, by means of joint ventures, farm-ins, spin-outs or other mechanisms. These include: a 49% interest in the Mkushi Copper Mines joint venture project in Zambia, for which a draft feasibility study was completed in Q4 2008; the Miyabi gold project in Tanzania which has a half a million ounce JORC gold resource; the Ndola and Mokambo projects in the Zambian Copperbelt; and the Igurubi gold project in Tanzania.

Zambia, Tanzania and Mozambique, the sites of African Eagle's projects, are all countries which have highly prospective geology, relatively low above-ground risks and track records of successful major investments in the metals and minerals industries.

This announcement is distributed by Thomson Reuters on behalf of Thomson Reuters clients. The owner of this announcement warrants that:
(i) the releases contained herein are protected by copyright and

other applicable laws; and
(ii) they are solely responsible for the content, accuracy and originality of the information contained therein.

Source: African Eagle Resources PLC via Thomson Reuters ONE

[HUG#1473749]

Unternehmen: African Eagle Resources PLC - ISIN: GB0003394813

Dieser Artikel stammt von [Rohstoff-Welt.de](https://www.rohstoff-welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/97479--Dutwa-economics-update.html>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer](#)!

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).