

## Building the World's First Commercial Nickel Laterite Heap Leach Operation



### Proactive Investor Presentation

February 2009

Simon Purkiss, Managing Director

W: [www.enickel.co.uk](http://www.enickel.co.uk)

E: [info@enickel.co.uk](mailto:info@enickel.co.uk)

T: +44 (0)20 7290 3130

## DISCLAIMER

This document is for informational purposes only and must not be used or relied upon for the purpose of making any investment decision or engaging in any investment activity. No reliance may be placed for any purpose whatsoever on the information contained in this Presentation nor on assumptions made as to its completeness. No representation or warranty, express or implied, is given by European Nickel PLC or any of its advisers, directors, officers, employees or agents, as to the accuracy, fairness or completeness of the information or opinions contained in this Presentation and no liability is accepted for any such information or opinions (which should not be relied upon) or for any loss howsoever arising, directly or indirectly, from any use of this document or its contents or information expressed in the Presentation. The information contained in this presentation is subject to amendment, revision and updating in any way without any notice or liability to any party.

Certain statements in this document relate to the future, including forward looking statements including but not limited to those with respect to the financial position and strategy of the Company, the price of nickel, the estimation of mineral resources and reserves, the realisation of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage and the timing and possible outcome of pending litigation. These forward looking statements involve known and unknown risks, uncertainties, assumptions and other important factors that could cause the actual results, performance or achievements of be materially different from future results, performance or achievements expressed or implied by such statements. Such risks, uncertainties, assumptions and other important factors include, among other things, general economic conditions, exchange rates, interest rates, the regulatory environment, structural changes in the industries in which the Company operates, competitive pressures, selling price and market demand. The forward looking statements in this document reflect views held only as of the date of this document and the Company expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except in accordance with applicable securities laws.



## EUROPEAN NICKEL OVERVIEW

Emerging mid-tier nickel producer offering:

- ✓ Proprietary, low cost, proven technology
- ✓ Large attributable resource base of  $\approx 2. \text{Mt}$  (JORC +1Mt)
- ✓ Near term financed nickel production of 20,000tpa
- ✓ Strategic alliance with Chinese partners = long-term opportunities
- ✓ Identified pipeline of growth projects
- ✓ Geographic diversification: Turkey, Philippines & Albania
- ✓ Production target 50,000tpa within 5 years
- ✓ Solid management and heavy hitting Board

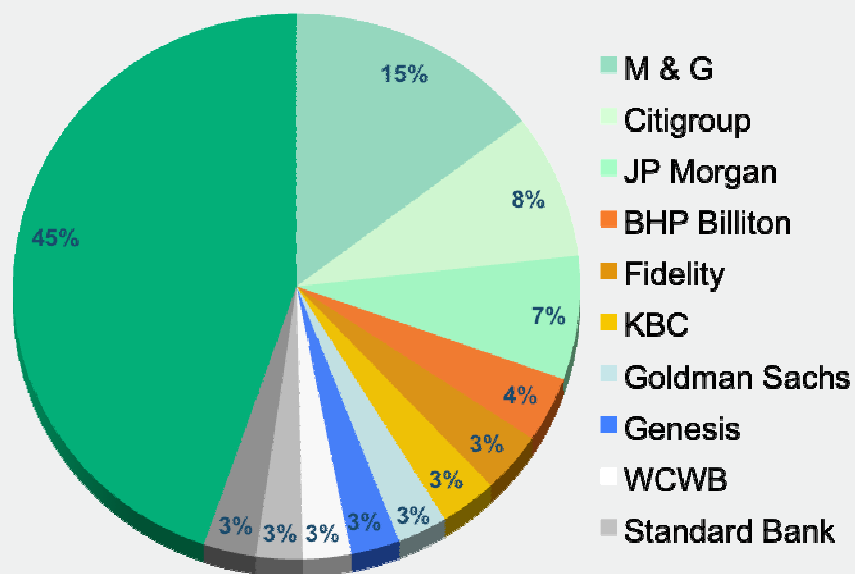


We produce an intermediary mixed hydroxide product (MHP)

## COMPANY INFORMATION

- Listed on AIM and PLUS: ENK
- £115m raised since listing in 2004
- 385m shares in issue, 393m shares, fully diluted
- 6-month price range: 17p – 2p

### Significant Shareholders



### A Strong Board

David Whitehead, Chairman (ex BHP Billiton)  
 Simon Purkiss, MD (ex Impala Platinum, BHP Billiton)  
 Andrew Lindsay, FD (ex Anglo American)  
 Chris Pointon, NED (ex BHP Billiton)  
 Euan Worthington, NED (ex City of London)  
 Sir David Logan, NED (former British Ambassador to Turkey)  
 Paul Lush, NED (ex Rio Tinto & BHP Billiton)

### Analyst Coverage

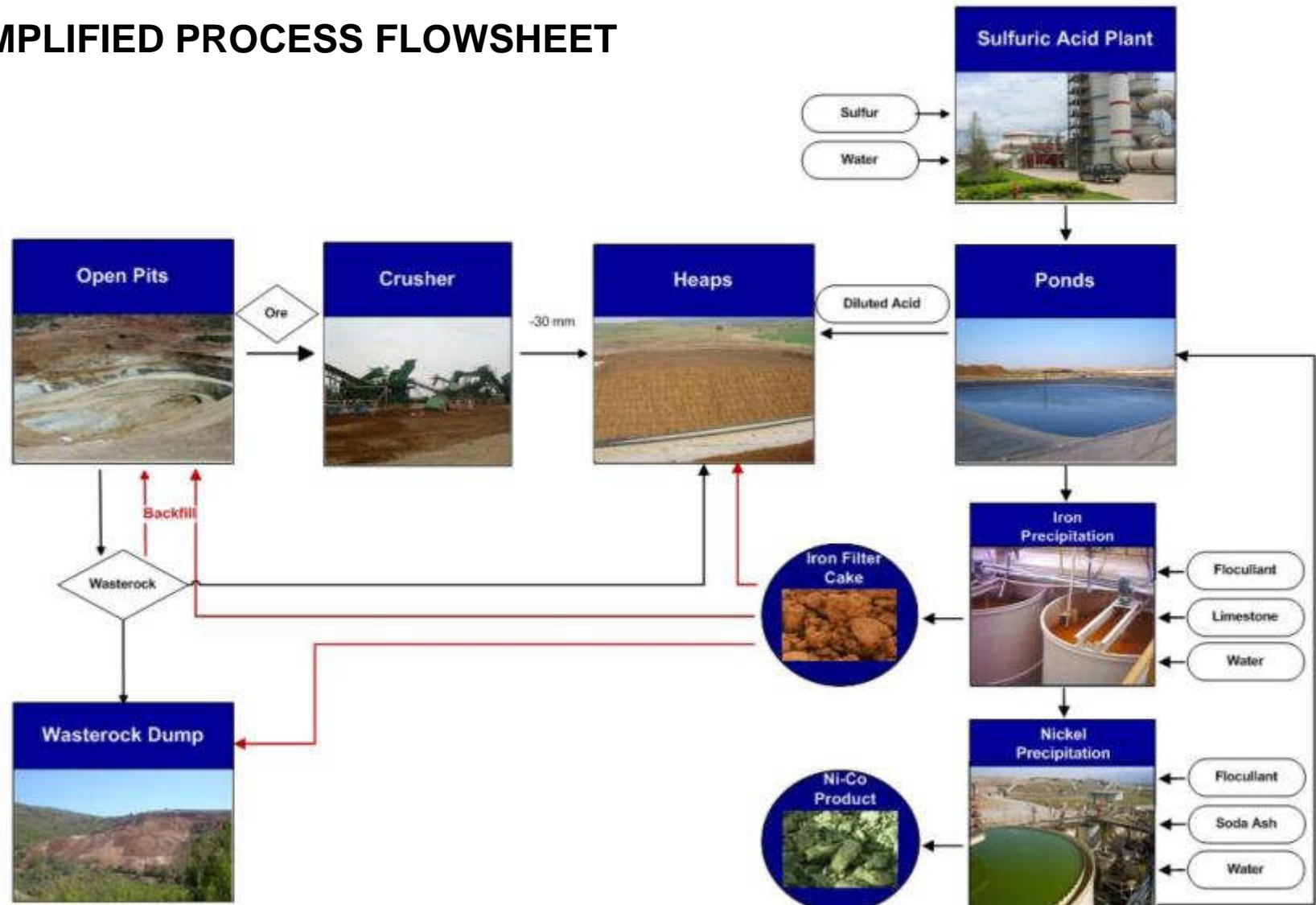
Nick Chalmers, Canaccord Adams (House Broker & NOMAD)  
 Des Kilalea, RBC Capital Markets  
 Marc Elliott, Fairfax  
 Brock Salier, Ambrian  
 Chris Rollanson, BMO (initiation shortly)

## EUROPEAN NICKEL'S USP – SIMPLE, LOW COST HEAP LEACHING

- Heap leaching technology commercialised by European Nickel
- Low cost production
- Continuous testing over 3 year period at Çaldağ
  - Full height trial heaps
  - Demonstrate permeability and recovery
- Heap recovery 75%
- Precipitation plant
  - Generates plant design data
  - Mixed hydroxide product is bagged and shipped
- Partnering with BHP Billiton
  - Joint technology development
  - “Take or pay” off-take agreement for Çaldağ



# ÇALDAĞ SIMPLIFIED PROCESS FLOWSHEET



## OUR COMPETITIVE EDGE OVER OTHER LATERITE TECHNOLOGIES

### Atmospheric acid heap leach

- ✓ Low cost so viable for 'smaller' deposits
- ✓ Capex per annual lb Ni \$6/lb
- ✓ Simple process = straightforward engineering
- ✓ No army of specialists or expensive skills required
- ✓ Proprietary = 1<sup>st</sup> mover advantage
- ✓ Applicable to 'wet' and 'dry' clay laterites
  
- ✓ Produces intermediate product – oversupply of global smelting capacity
  
- ✓ Generates own power
- ✓ Low carbon footprint

### Conventional Technologies

- High capex demands large deposits
- Ferronickel = high energy consumption
- HPAL = engineering complexity & high energy consumption
- Expensive personnel & contractors
- All big projects facing cost pressure & execution delays
- Avg. capex per annual lb Ni \$20 - 30/lb & rising

## GEOGRAPHIC DIVERSIFICATION



## OUR FLAGSHIP PROJECT – ÇALDAĞ

- ✓ Forestry permit approved
- ✓ Ready for construction
  - Major mine infrastructure projects complete
  - Construction permit granted
  - Engineering design work 80% complete
  - US\$70m spent & long lead items purchased
  - EIA granted
  - LOM off-take agreement with BHP Billiton & JXTC
- ✓ Financing agreement in place with TCC & JXTC
- US\$16m sustainable development programme over 3 years agreed with local Govt.
- Targeting start of construction in 2H 2009

Open pit, low cost, heap leach operation

JORC Proven Reserve: 33.2Mt @1.13% Ni = 375,000t

Production 20,400tpa Ni & 1,000 Co in MHP

14 year Life of Mine

Total Ni Production 257,000t



## OUR SUSTAINABLE DEVELOPMENT INVESTMENT PROGRAMME

- Social “licence to operate”
  - imperative to success of the project
  - improves broader sustainable development in the local community
- In partnership with the local government
- US\$16m investment over 3 years (included in total project capital cost)
  - Planting of city forest by rehabilitating river bank area
  - Building local educational and cultural facilities
  - Construction of a waste water treatment plant
- Programme begins on receipt of project finance

Our corporate  
sustainability report is  
available online



## OUR CHINESE PARTNERS

### **Jiangxi Rare Earth & Rare Metals Tungsten Group Corp (“JXTC”)**

Large state-owned industrial enterprise based in the Jiangxi province

Focus is rare earth & rare metals, with vertical integration from mining, metallurgy, processing, sales to equipment manufacturing

This is JXTC’s first investment into an international mining project

In 2007, revenues were RMB4.4 billion (US\$640 million), Group’s total assets are worth ≈ RMB8.6 billion (US\$1.3 billion) with a net asset value of RMB3.8 billion (US\$558 million)

Building world’s first dedicated MHP nickel refinery, due to come on stream in 2010



**2009 is the Year of the Ox**

Symbolises prosperity through fortitude and hard work

### **China Tianchen Engineering Corporation (“TCC”)**

Engineering design, EPC and other engineering services company based in Tianjin, China

1 of top 225 Global International Contractors (American publication Engineering News Records)

Currently undertaking 22 projects outside of China

International clients include ExxonMobil, Shell, Dow, DuPont, GE, Procter & Gamble, Mitsubishi Heavy Industries



## FINANCING FRAMEWORK AGREEMENT SIGNED

- ✓ Financing agreement in place with TCC & JXTC
  - TCC to arrange credit guarantee insurance for +/- \$350m
  - Debt financing from predominantly Chinese banks
  - JXTC to acquire 20% of Çaldağ for US\$20m
  - JXTC to off-take 50% Çaldağ nickel production at market related prices (verbal agreement with BHP Billiton)
  - TCC will be the EPC contractor
  - TCC will get 2% interest in Çaldağ project
  - Çaldağ ownership: ENK:78%, JXTC:20%, TCC:2%
- ✓ Positive impact
  - Mitigates shareholder dilution
  - Strategic alliance with long-term potential
  - China less credit constrained than Western markets
- Expect to conclude financing in 2009

Jiangxi Rare Earth & Rare Metals Tungsten Group Corp (“JXTC”)  
China Tianchen Engineering Corporation (“TCC”)



Signing ceremony in China with JXTC, TCC and ENK

## UPDATED PROJECT ECONOMICS

	2006	2009	
Production (tpa)	20,400 Ni in conc.		
Construction cost (US\$m)	238*	277	Construction Cost ↑US\$39m \$21m - processing plant, escalation & forex \$10m - acid plant cost escalation & forex \$5m - earthworks & engineering optimisation \$3m - IFC storage plan change
Long-term Ni price (US\$/lb)	4.25	6.00	
Capital intensity cost (US\$/lb)	5.57	6.12	
Annual cash operating cost (US\$m)	70	103	Cash Operating Costs ↑US\$33m \$25m increase in processing costs - \$5m sulphur - \$9m soda ash - \$8m IFC transport \$6m increase in mining costs
Unit cost to Ni in concentrate (\$/lb)	1.41	1.99	
NPV (US\$m at 10% discount)	180	207	
Project IRR (%)	23.4	20.5	
Total project capital cost (US\$m)	300	428	Total Project Capital Cost ↑US\$128m \$36m - decrease in Ni production resulting from schedule changes & increase in operating costs \$33m - increase in finance fees & interest \$7m - sustainable development projects during max exposure period \$6m - mine environmental management during start-up \$4m - increase in acid costs (\$125/t)
Equity/Debt (US\$m)	120/180	78/350	
Payback (years)	5.0	5.5	
Free annual cashflow (US\$m)	46	51	



9 year period of full production

\* Previously US\$254m in 18 April 2006 update included pre-operating expenditure which is now included in working capital

## PROJECT FINANCING

	US\$m
Project finance	350
Equity	
– Already spent	70
– From JXTC equity injection*	8
	<u>428</u>

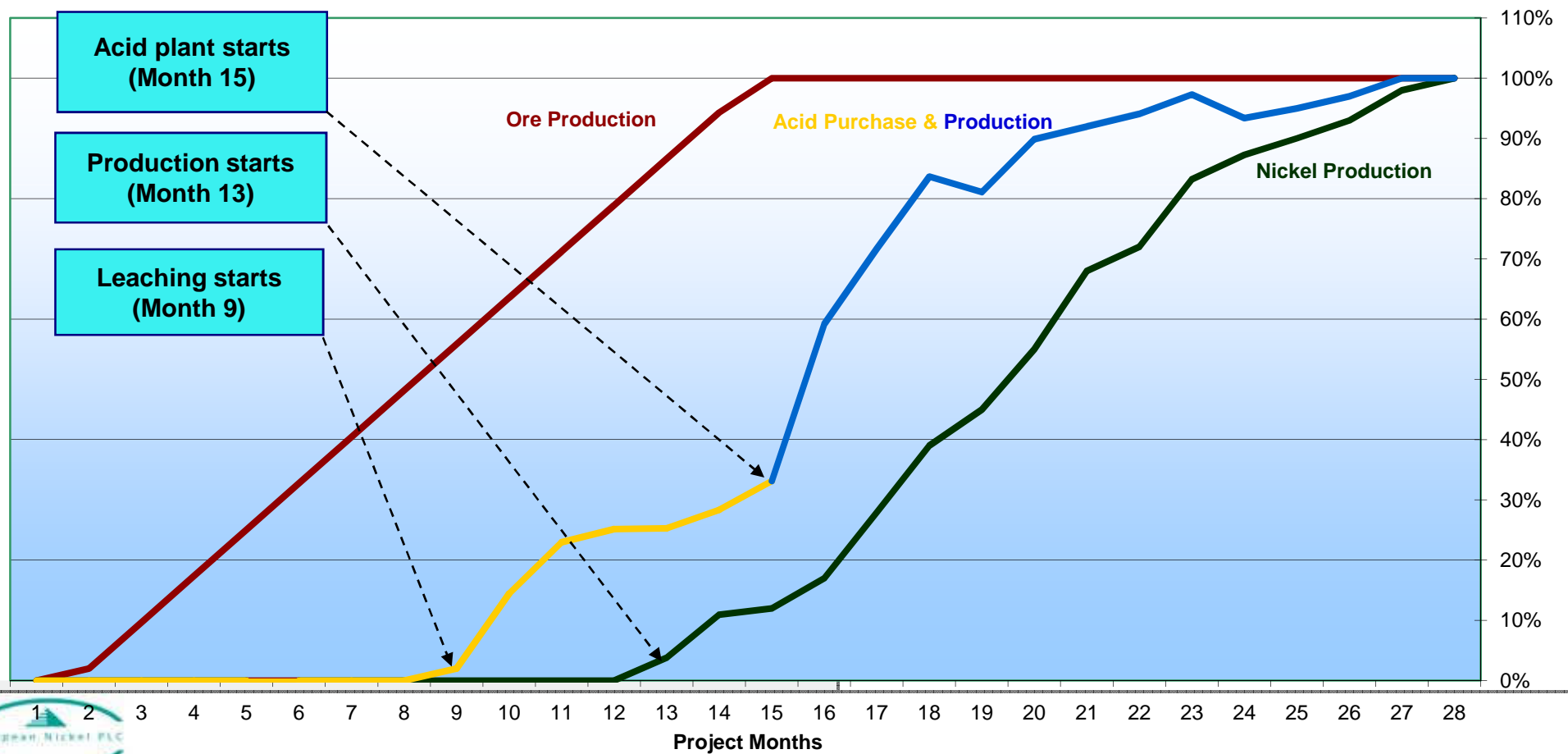
Conditions precedent to JXTC equity:

1. Approval of the forestry permit - ✓
2. BHP Billiton formal approval to release 50% of off-take
3. Jiangxi Provincial Govt. approval for foreign equity investment



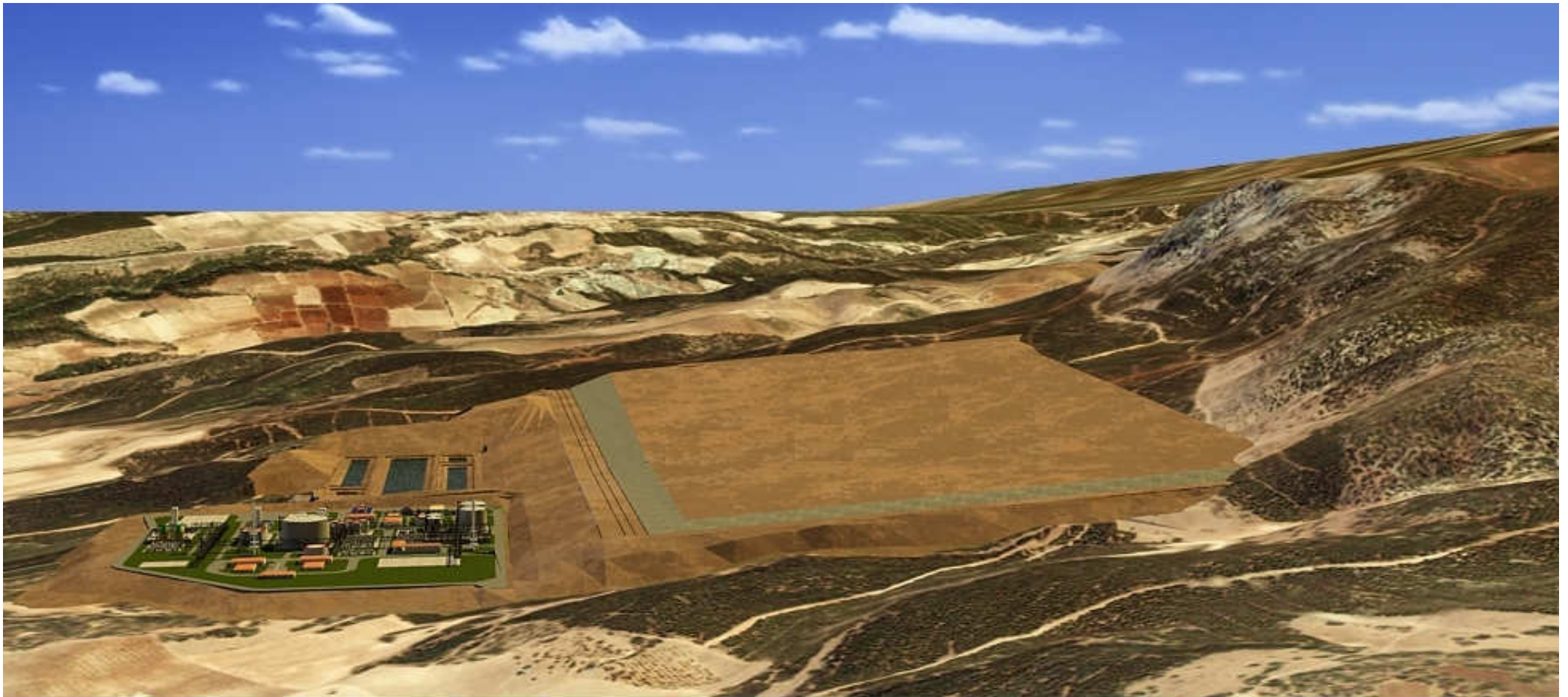
# ÇALDAĞ PROJECT TIMELINE AFTER FINANCING

Çaldağ Project Ramp-up (%)



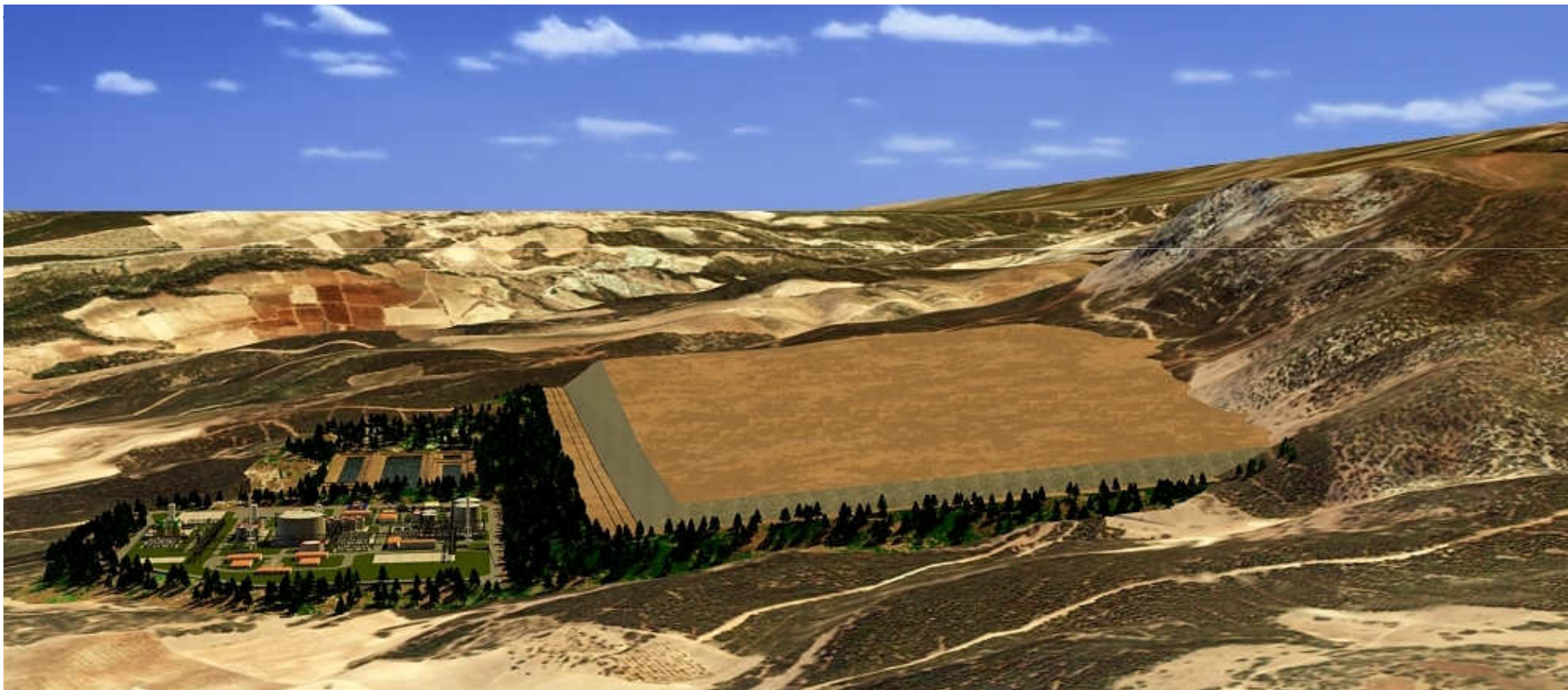


## OUR REHABILITATION – YEAR 1



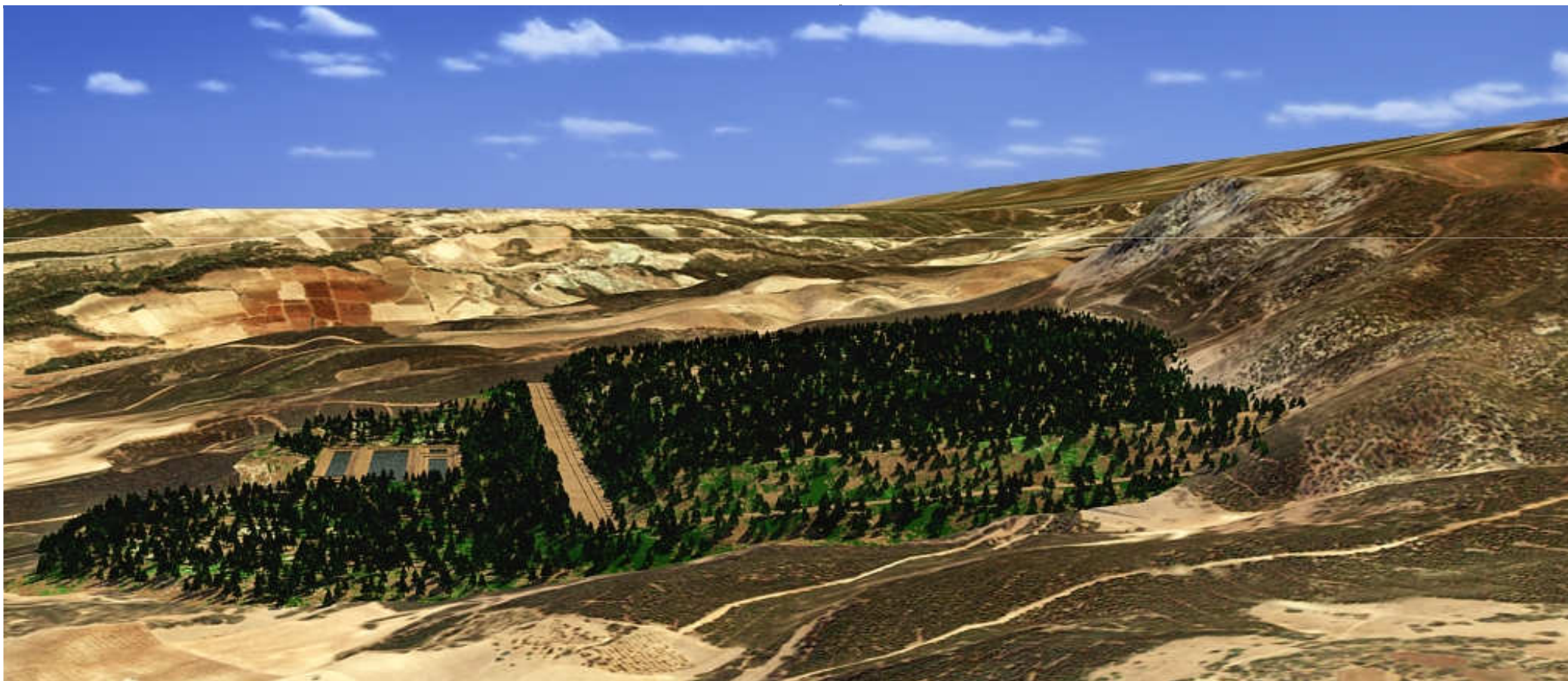


## OUR REHABILITATION – DURING OPERATION





## OUR REHABILITATION – LAST YEAR



## THE PHILIPPINES - ACOJE & ZAMBALES DEPOSITS

- JV with Rusina Mining
- Acoje is the next "cab off the rank"
- **Highlights from the Acoje Pre-Feasibility Study**
  - Production of 24,500tpa Ni & 930tpa Co
  - Cash cost of US\$3.10/lb of nickel, net of by-products
  - Total development cost US\$498 million
  - Capital cost per annual pound of nickel of US\$7.84
  - Post-tax NPV US\$375 million (at a 10% discount rate, US\$6/lb Ni price, US\$10/lb Co price)
  - IRR 28.3%
  - 3 year payback period
  - Further upside from converting additional Acoje & Zambales Chromite resources to JORC
- Heap leach trials at site to start in May 2009
- Permitting for commercial development underway



### JV with Rusina (AIM: RMLA, ASX:RML)

Current interest 10%, 40% earn-in right

ENK will fund first US\$10m of Feasibility Study

Then ENK 40%, Rusina 40%, Local Partner 20%

## THE PHILIPPINES – BERONG & IPILAN

- 19.3% strategic stake in Toledo Mining (AIM:TMC)
- Berong & Ipilan will fuel long-term growth & production increase
- Berong is one of the world's largest deposits
  - pre-JORC resource: 275Mt @ 1.3% Ni (3.6 Mt Ni)
  - ENK direct 18.7% interest
  - Direct ore shipping contract with BHP Billiton (depending on Ni price)
- **Positive Heap Leach Concept Study at Berong:**
  - Capital cost per annual pound of nickel of US\$7.62
  - Production of 25,000tpa Ni @ cash cost of \$2.99/lb (incl. by-product credits)
  - LOM +33 years
  - Capital cost \$420 million, incl. port & infrastructure upgrades
  - Project NPV \$625 million & ungeared IRR of 25%

European Nickel has a 19.3% stake in Toledo Mining and an 18.7% direct interest in Berong



Toledo Mining's Deposits in the Philippines

## ALBANIAN JV WITH BALKAN RESOURCES

- 50:50 JV with Balkan Resources
- Balkan contributes Koko deposit & completes PFS
- Devolli JORC resource 427,000t Ni (35.6Mt at 1.20% Ni)
- Koko historic resource estimate of  $\approx 30$ Mt at 1.2% Ni
- PFS estimated to cost US\$5-7 million
- Ni production potential 15,000-20,000tpa
- PFS expected to be completed by end 2009



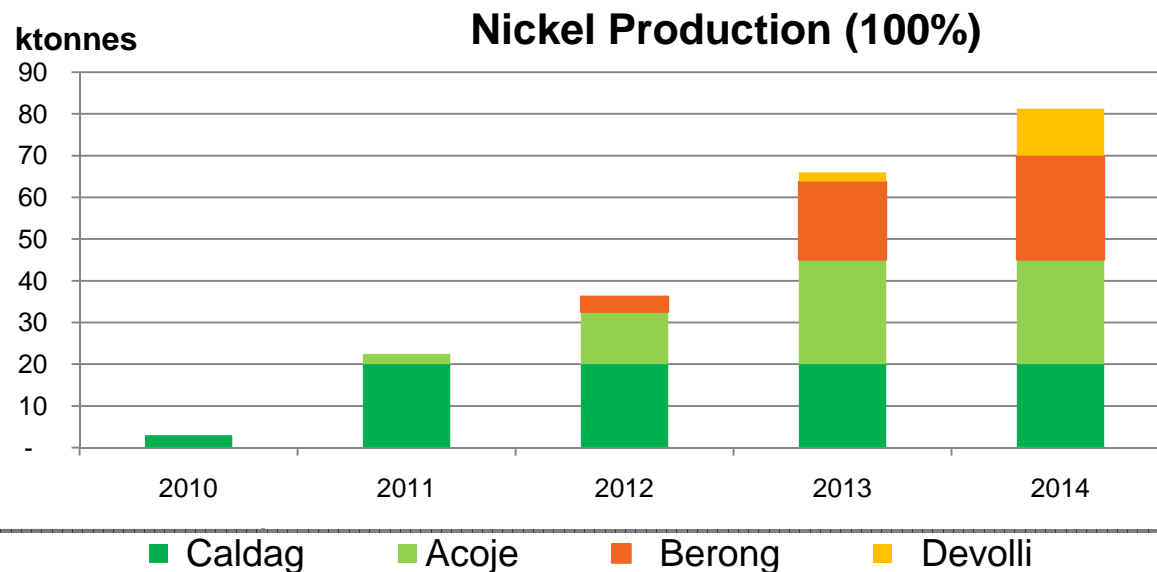
## IDENTIFIED PIPELINE OF GROWTH TOWARDS 80,000TPA NICKEL PRODUCTION



	Project NPV	EN - Attributable NPV
<b>Caldag*</b>	78.0%	227
<b>Acoje</b>	40.0%	375
<b>Berong</b>	29.5%	664
<b>Devolli**</b>	100.0%	100
<b>TOTAL</b>	<b>1,366</b>	<b>623</b>

\* Caldag NPV includes the \$20m for 20% of project

\*\* In 50/50 JV now which doubles the projects size



## POSITIVE OUTLOOK AND FUNDAMENTALS FOR NICKEL

- Current financial turmoil is setting the stage for a price recovery
  - Marginal cost producers shut down
  - ≈150,000 tonnes of Ni supply cut
  - Consensus is positive for 2010 onwards, coinciding with 1<sup>st</sup> production from Çaldağ
- BRIC economies still need to urbanise & modernise
- JXTC building new refinery – sign of positive Ni outlook
- Best Insurance: good deposits & cost effective technology
  - Conventional entry point is high cost
  - Project approval to production at least 5 years
  - Development costs continue to be high & funding tight
- Survivors will need to have low capex & opex to weather the lows and take full advantage of the highs



## INVESTMENT CASE

- ✓ Low cost technology offers competitive edge
- ✓ Near term financed nickel production
- ✓ Identified pipeline of projects & growing resource
- ✓ Strategic alliance with Chinese partners = long-term opportunities
- ✓ Geographic diversification: Turkey, Philippines & Albania
- ✓ Solid fundamentals for nickel post-2009 times well with 1<sup>st</sup> production from Çaldağ

