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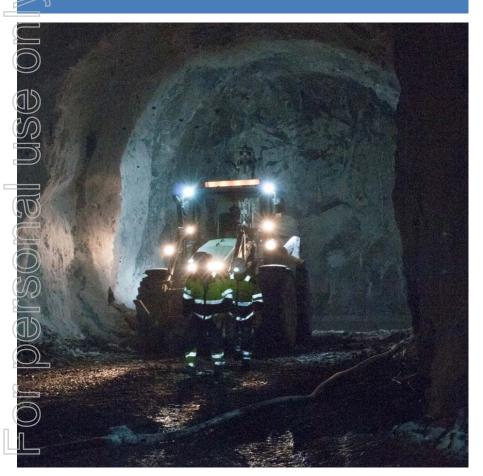
ACN 090 468 018

**ASX: AOH** 



## **Altona's Copper Assets**

### **Outokumpu Project**



**Copper Production in Finland** 

## **Roseby Project**



Major copper development opportunity in Australia

## **Our Strategy**



Delsonal use of

**Expand Outokumpu production and grow** reserves

Continuous cost and safety improvement at Outokumpu

Secure a strategic transaction to assist with development of Roseby

Provide investor exposure to copper production and large copper resources

### **Corporate Snapshot**

#### Major Shareholders

Australian institutions: 30.0%

Foreign institutions: 20.0%

**Board**: 9.0%

German/Swiss retail: 9.0%

Top 20: 57.0%



#### **Market Status**

ASX (Australia) code: AOH

FSE (Frankfurt) code: A2O

Share price: A\$0.25

Average daily turnover: 0.5M shares

Shares on issue: 527M

Market capitalisation: A\$132M

Debt: US\$20M

Cash: (31 Dec 2012) A\$19M

Research coverage: Credit Suisse

Foster Stockbroking

# **Outokumpu Copper Project in Finland**



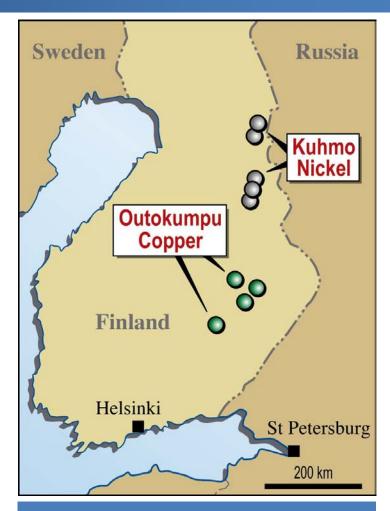
altonamining.com January 2013

### Finland is a Leading Mining Destination



Euro zone country with a history of mining and mining equipment manufacturing, a stable tax regime (26%) and no royalties.

Miners include Agnico Eagle, Anglo American, Inmet, First Quantum and Talvivaara.



Altona's projects are in eastern Finland.

Geology is similar to other Archaean and Proterozoic terrains in Australia and Canada.

#### **Altona's Finnish Assets**



#### **Kylylahti Underground Mine**

At full production of 550,000tpa and considering expansion.



#### Luikonlahti Mill

Targeting 7,000t Cu and 7,000oz Au in concentrates for first full year of production.



#### **Regional Resources**

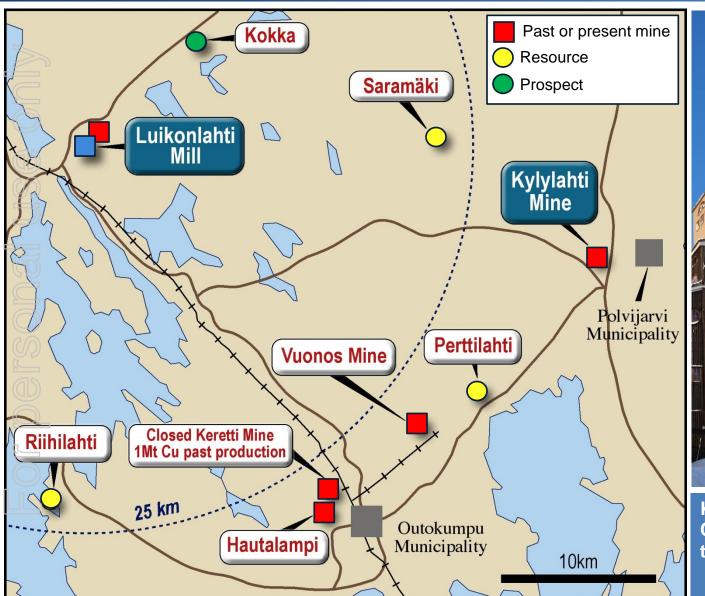
9 million tonnes in 2 closed mines and 4 unmined resources within 30km of mill.



#### **Nickel Deposits**

Nickel-copper-PGE deposits in eastern and south west Finland.

## Mill, Mine and 3 Resources in Historic Outokumpu



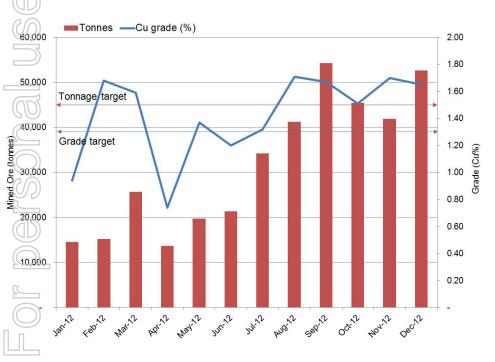


Keretti mine produced 1Mt Cu and 1 Moz Au from 1914 to 1989.

### **Production – A flying start**

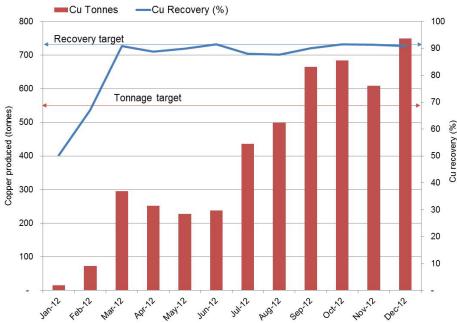
#### Mine

Production above 550,000tpa design rate (46ktpm), grade outperforming



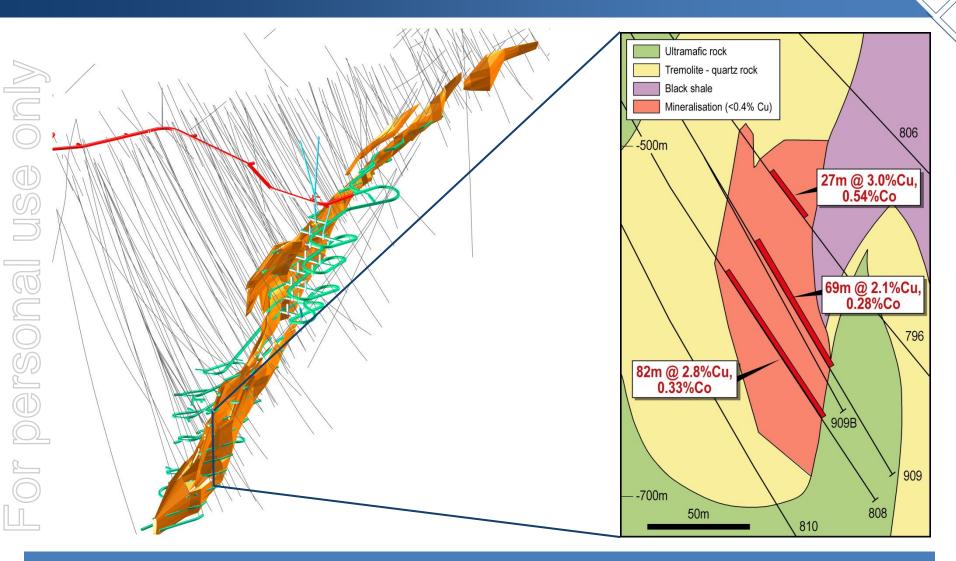
#### Mill

Copper in concentrate production exceeding 8,000tpa (660tpm)



C1 cash cost H2 2012 – US\$1.69/lb

### Kylylahti Mine Open at Depth

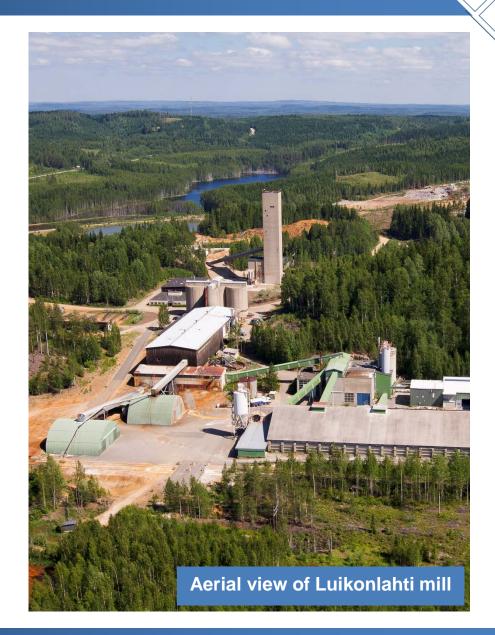


- Simple sulphide orebody up to 50m thick.
- Deep drilling planned to expand resources plus in-mine exploration

## **Outokumpu – Focussed on expansion**

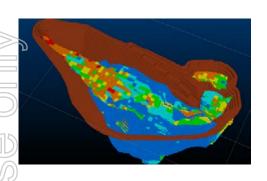
- Continuous cost improvement
- Study to expand production to 12,000tpa copper
- Complete permitting of mill expansion
- Drill Kylylahti mine at depth
- For personal Improve safety performance
  - Near mine exploration
  - 2012 / 2013 guidance:

6,500 -7,000t copper 6,500 - 7,000oz gold US\$1.40 - 1.60/lb





## 3 Elements to the Roseby Project



#### **Little Eva Development Project**

DFS completed on a straightforward 39,000tpa copper in concentrate open pit mine and mill.



#### **Major Resource Inventory**

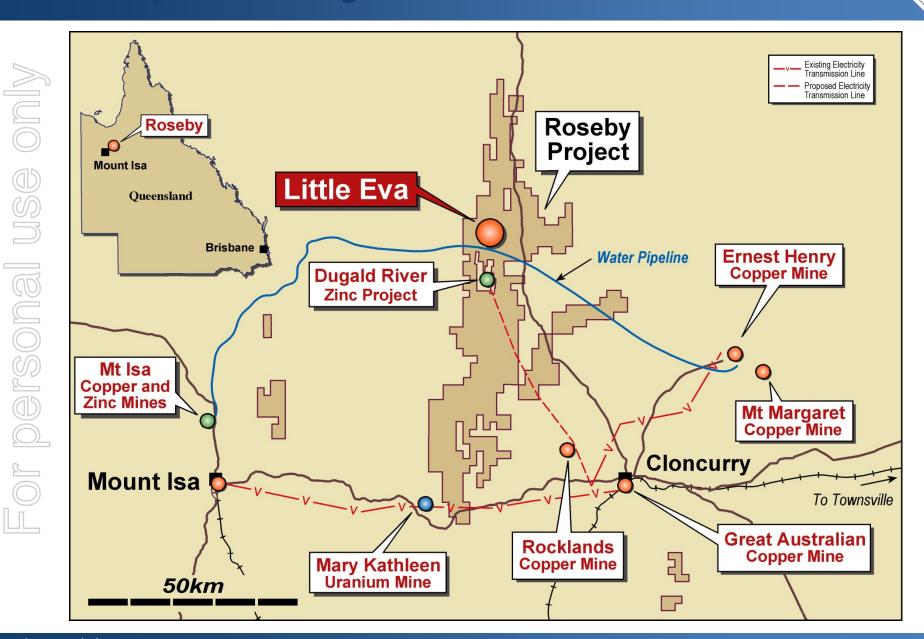
1.52Mt copper including 0.84Mt copper in 7 'native copper' deposits outside Little Eva Project.



#### **Exploration**

1,500km<sup>2</sup> of exploration tenure prospective for copper, gold, molybdenum, uranium and zinc-lead-silver.

## Roseby is a Strategic Asset

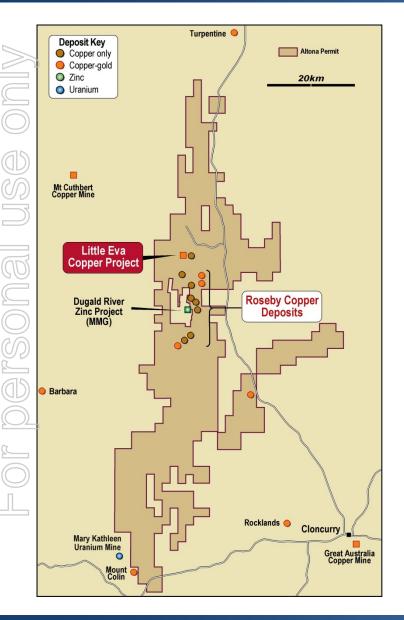




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To view the Little Eva animation go to www.altonamining.com

### Little Eva is Part of the Roseby Project



- Large tenement position:
  - 1,500km<sup>2</sup>
- Large resource:

260Mt at 0.6% Cu, 0.05g/t Au, 1.52Mt contained copper and 0.38Moz contained gold

Major development next door:

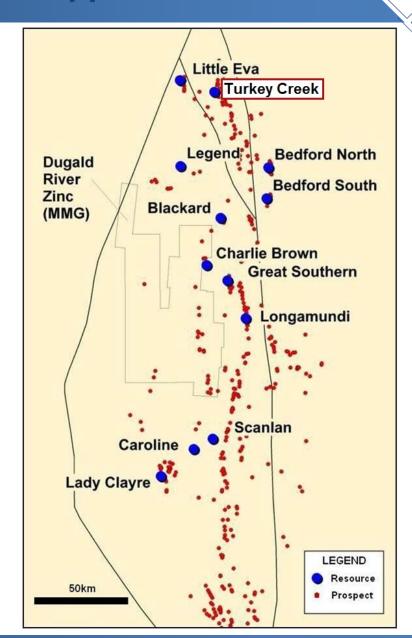
MMG's A\$1.5bn Dugald River zinc development excised from Altona's ground

Little Eva:

A large 100Mt copper-gold sulphide deposit at Roseby

## Can Roseby be bigger than 2Mt copper?

- Altona has grown resource 60% to 1.52Mt of copper in 2 years
- 4 Reserves, 7 Resources and many prospects and workings
- Little systematic exploration for 15 years
- Turkey Creek discovery in August 2012 highlights prospectivity
- All deposits open and growing, many targets for extensions
- Further Resource upgrades pending
- Dugald River zinc and Mary Kathleen uranium highlight that exploration potential not limited to copper



## **Roseby Strategy**

- Pursue strategic transaction to develop project
- **Optimise DFS**
- Consider staged (lower capital) development
- -or personal Explore infrastructure and operating synergies with MMG's Dugald River **Project** 
  - Define additional reserves at satellite pits
    - Test major targets at Companion 20km south of Little Eva, Airport and **Turkey Creek**

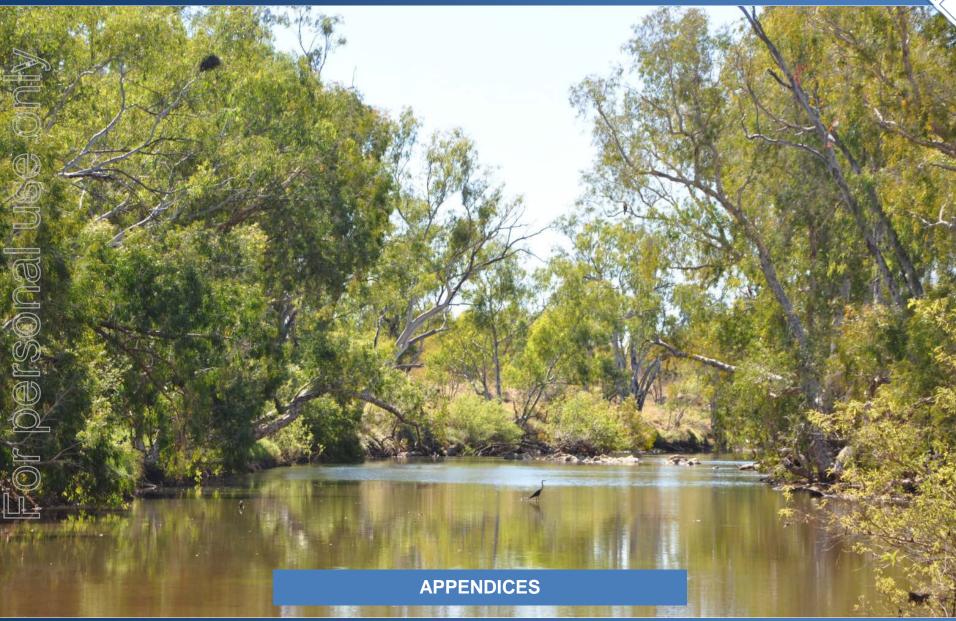


# **The Altona Advantage**

PRODUCTION & CASHFLOW	Copper-gold-zinc mine and mill in Finland ramping in production
COPPER LEVERAGE	1.66Mt copper and 0.76Moz gold in resources
STRATEGIC ASSET	Little Eva copper-gold deposit nearing decision to build / value realisation
GROWTH PIPELINE	Multiple options to expand both projects
EXPLORATION UPSIDE	We control two major copper fields

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# Top 10 Shareholders (48.1%)

<b>≥</b>	Rank	Shareholder	Country	No. of shares	%
	1	Perpetual Investments	Australia	54,493,664	10.3%
15	2	L1 Capital	Australia	52,833,220	10.0%
<i>JV</i>	3	Kevin Maloney (Chairman)	Australia	35,348,000	6.7%
ט,	4	German retail clients through Clearstream Luxembourg	Germany	34,905,605	6.6%
	5	Thomas Roeggla	Monaco	29,626,422	5.6%
(N)	6	Colonial First State - Growth Australian Equities	Australia	11,200,000	2.1%
	7	Renaissance Smaller Companies	Finland	10,715,845	2.0%
	8	Finnish Industry Investment	Norway	10,261,300	1.9%
L	9	Dr Alistair Cowden (MD)	Australia	8,333,334	1.6%
	10	Pareto Growth	Australia	7,399,233	1.4%

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## **Board and Management**

#### Altona Board



#### Alistair Cowden Managing Director

- 30 years experience as a geologist and mining company executive
- Instrumental in listing Vulcan Resources, Rox Resources, Archaean Gold and Magnetic Minerals

**Kevin Maloney** 

 Non-Executive Chairman, founder of The Mac Services. Extensive career in retail banking, finance and resources.

**Fiona Harris** 

 Non-Executive Director, 17 years professional NED, ex KPMG partner.

Peter Ingram

 Non-Executive Director, 45 years mining industry experience.

Heikki Solin

Non-Executive Director, 45 years experience in international mining industry.

#### **Altona Management**



Eric Hughes
Chief Financial Officer

- Accountant, formerly BHP Billiton
- 20 years experience in financial management of resources companies
- 10 years experience as CFO of listed companies



## Jarmo Vesanto General Manager Finland

- Geologist
- 25 years Outokumpu Oyj in Finland, Canada and Australia
- 6 years as Manager in Finland



lain Scott Chief Operating Officer

- Metallurgist, formerly Straits, Renison
- 25 years experience in mining and processing
- 15 years experience at COO and MD levels



Craig Pickett
Project Development Manager

- Engineer
- 25 years experience in the mining industry
- Senior international project development roles

### **Kylylahti Mine Key Facts**



**Status** 

Achieved design production rates in H2 2012, expansion under consideration

Mine

5.5m x 5.5m decline tunnel, longhole open stopes with cemented waste fill

Life of mine average production

Ore: 550,000tpa
Copper: 8,000tpa
Gold: 8,400ozpa
Zinc: 1,600tpa

Mine life

8 years

Reserves

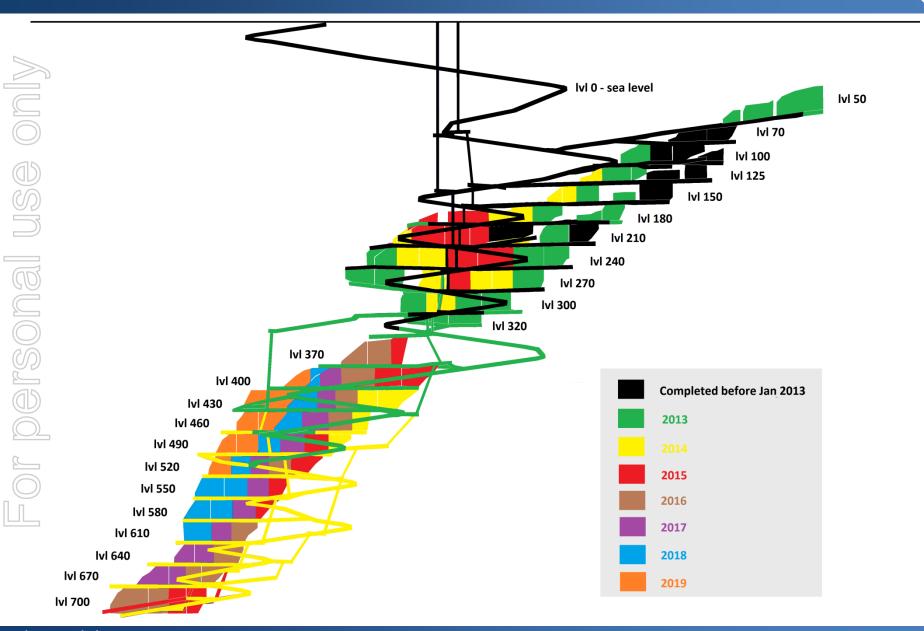
4.3Mt at 1.6% Cu, 0.7g/t Au, 0.5% Zn

Resources

8.4Mt at 1.3% Cu, 0.7g/t Au,

0.6% Zn

## Kylylahti Mine Plan



### **Luikonlahti Mill Key Facts**



**Status** 

Achieving design, throughput copper recovery and availability

**Products** 

Copper-gold concentrate
Zinc concentrate

**Sales** 

Boliden's Harjavalta smelter 400km by truck, monthly payments

**Plant capacity** 

550,000tpa

**Expansion** 

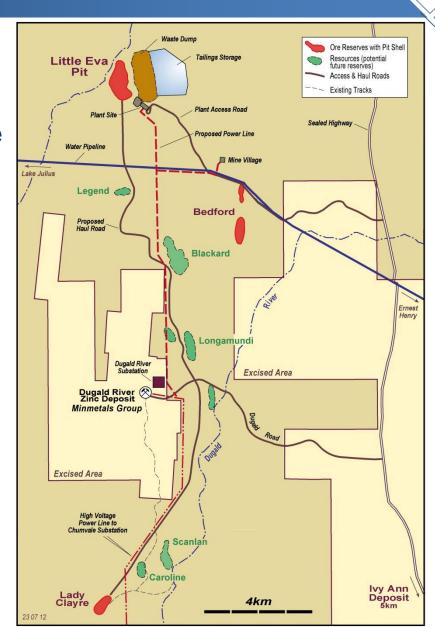
Capacity can expand to 800,000tpa for approx. A\$7.5M capital

Potential by-product

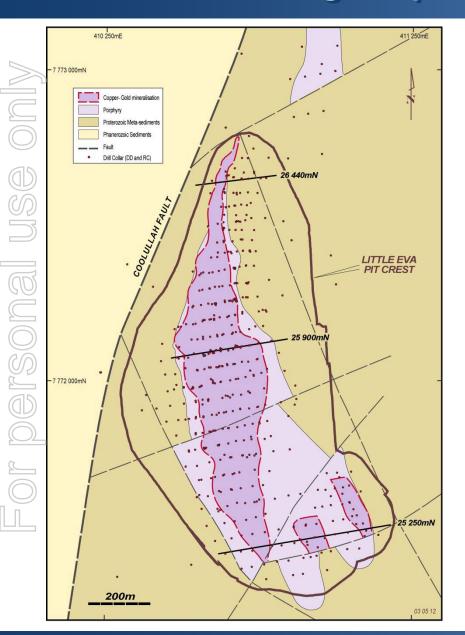
Low grade Co-Ni concentrate stored pending treatment solution

## Little Eva Definitive Feasibility Study

- Positive DFS to bankable standard by GR Engineering Services
- Large, simple and well drilled resource
  - Straightforward 7Mtpa open pit mining and processing
  - Large scale production 39ktpa copper, 17kozpa gold
  - Quality copper-gold concentrate
  - Stable, skilled mining jurisdiction
  - Native title, environmental permits and mining licences all complete
  - Potential to expand production, resources and reserves
- ✓ NPV A\$253M



### Little Eva is a Large Deposit



- 1.3km long, 20-370m wide
- Drilled up to 300m deep (436 drill holes, 66km)
- Large bulk IOCG style deposit similar to Ernest Henry
- Strip ratio of 1.8:1 after 15Mt prestrip
- Reserve: 53Mt ore at 0.6% copper, 0.1g/t gold
- Additional 6Mt reserves in 3 satellite pits
- 15Mt of low-grade ore stockpiled and treated at end of mine life

# Little Eva Definitive Feasibility Study Key Metrics

**Published** 

May 2012

Project life

11 years

**Throughput** 

7,000,000tpa

Copper grade

0.6%

Gold grade

0.1g/t

Copper production

38,800tpa

Gold production

17,200ozpa

Capital expenditure

A\$320M

Life of mine revenue

A\$2,973M

**Project NPV** 

A\$253M

Internal rate of return

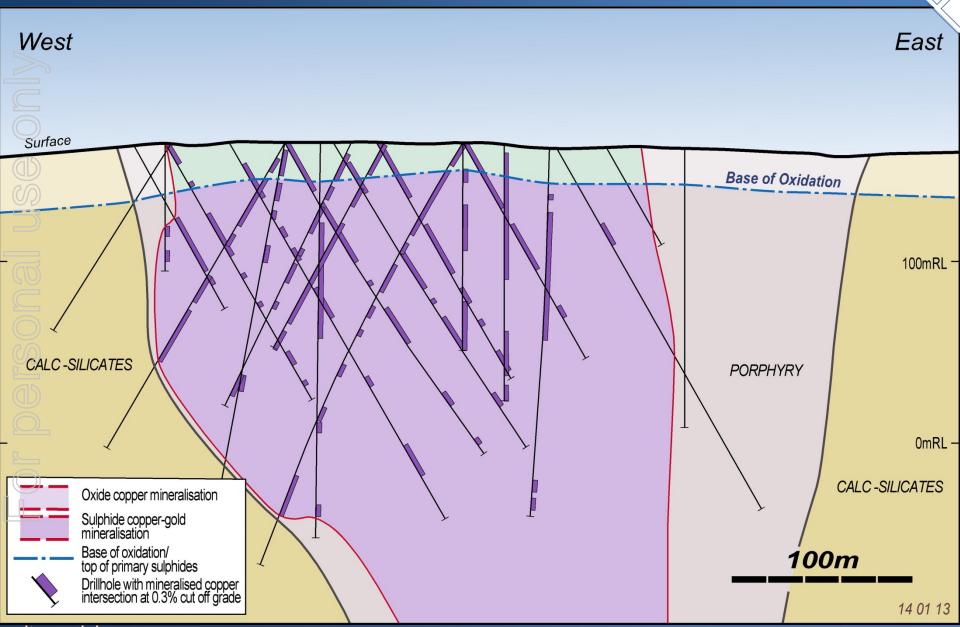
22%

C1 cash cost

US\$1.73/lb

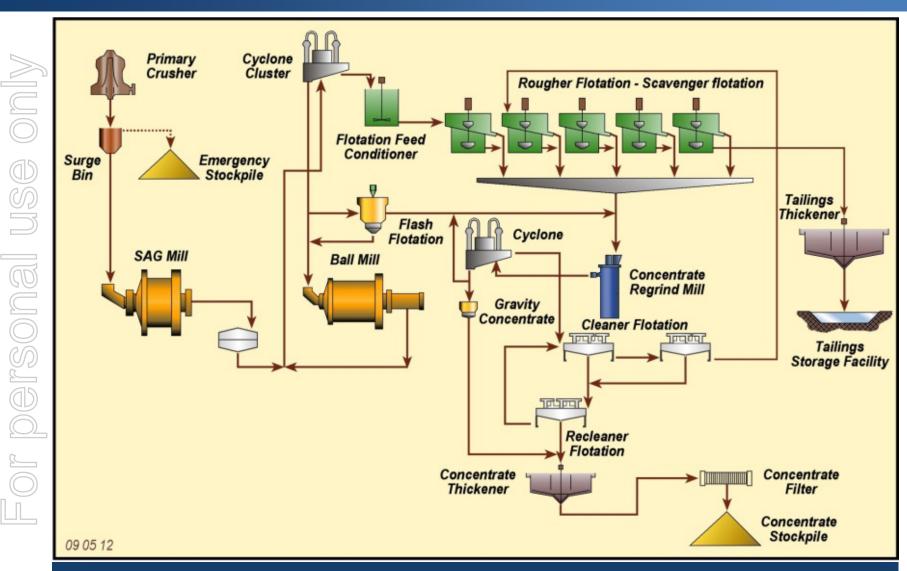
Production metrics are for years 1-5

# Little Eva Cross Section (25900mN)



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### **Straightforward Little Eva Plant**



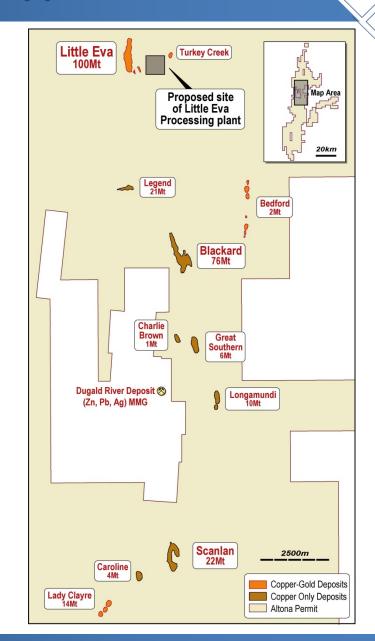
Simple and rapid flotation with coarse grind. 96% copper and 85% gold recoveries to a clean 25% copper and 4g/t gold concentrate.

## Little Eva Production Expansion Opportunities

#### 1. Little Eva Reserves

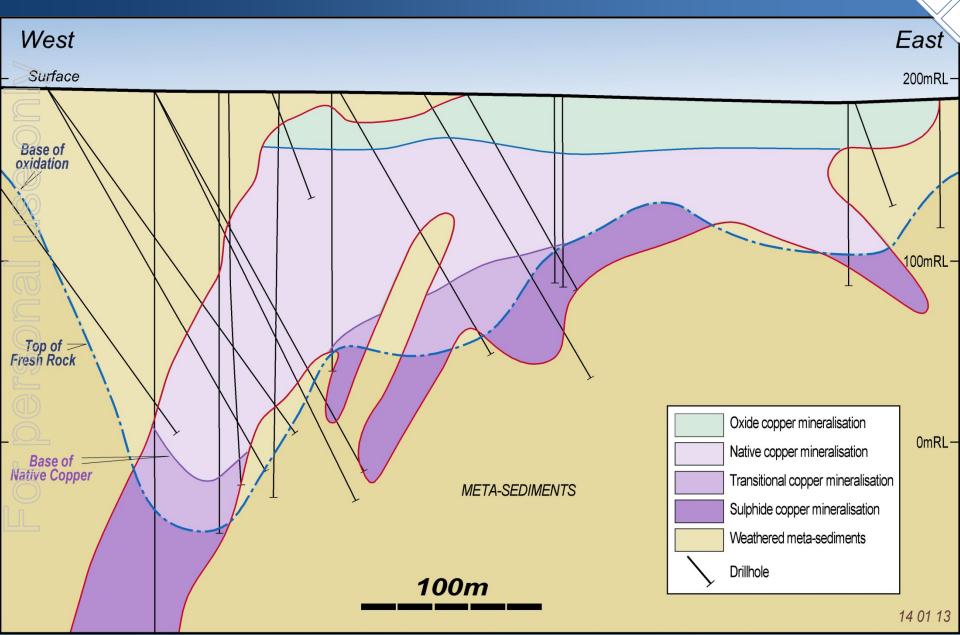
- Reserve extensions likely
- Targets such as Turkey Creek discovery and Airport will provide additional feed to Little Eva mill

  2. Copper-only Deposits
  - - 7 copper-only deposits (137Mt) in addition to Little Eva and satellites
    - Copper only deposits comprise 'Native copper ore' in weathered rocks overlying fresh copper sulphide ore
    - Sulphide ore will be treated through Little Eva mill
    - Options to treat native copper ore:
      - Gravity + flotation at Little Eva mill
      - Ammonia heap leach of native copper ore and some oxide ore



or personal

# Blackard: 76Mt Copper-only Deposit at Roseby



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# **Outokumpu Resource Estimates**

Deposit	Classification	Tonnes (m)	Cu (%)	Co (%)	Ni (%)	Zn (%)	Au (g/t)
Kylylahti	Measured	0.50	1.50	0.27	0.18	0.54	0.59
	Indicated	7.33	1.26	0.23	0.21	0.55	0.68
	Inferred	0.31	0.97	0.24	0.18	0.70	0.57
$\bigcirc$	Total	8.14	1.27	0.23	0.20	0.56	0.67
Saramäki	Inferred	3.40	0.71	0.09	0.05	0.63	-
Vuonos	Inferred	0.76	1.76	0.14	-	1.33	-
	Measured	1.03	0.47	0.13	0.47	0.06	-
∰Hautalampi	Indicated	1.23	0.30	0.11	0.42	0.07	-
Ji lautalampi	Inferred	0.90	0.30	0.10	0.40	0.10	-
	Total	3.16	0.36	0.11	0.43	0.07	-
Riihilahti	Indicated	0.14	1.69	0.04	0.16	-	-
Valkeisenranta	Indicated	1.54	0.29	0.03	0.71	-	-
Särkiniemi	Indicated	0.10	0.35	0.05	0.70	-	-
Sarkalahti	Inferred	0.19	0.33	-	1.02	-	-
TOTAL		17.43	0.91	0.15	0.26	0.45	-
<b>Kylylahti</b>		Tonnes (m)	Cu (%)	Co (%)	Ni (%)	Zn (%)	Au (g/t)
RESOURCES							
Measured		0.50	1.50	0.27	0.18	0.54	0.59
indicated		7.33	1.26	0.23	0.21	0.55	0.68
Inferred		0.31	0.97	0.24	0.18	0.70	0.57
TOTAL		8.14	1.27	0.23	0.20	0.56	0.67
Contained metal (t)			103,100	19,100	16,500	45,250	175,000oz
RESERVES							
Probable		4.23	1.57	0.29	0.17	0.58	0.65
Contained metal (t)			66,254	12,350	7,210	24,610	88,494oz

### **Roseby Resource Estimates**

		тс	TAL		CONTAI MET		MEA	SURE	D	INDI	INDICATED		INFERRED		
	DEPOSIT	Tonnes	Gra	ade	Copper	Gold	Tonnes	Gr	ade	Tonne	Gra	ade	Tonnes	Gra	de
		million	Cu %	Au g/t	tonnes	ounces	million	Cu %	Au g/t	million	Cu %	Au g/t	million	Cu %	Au g/t
	COPPER-GOLD DEPOSITS														
(D)	Little Eva	100.3	0.54	0.09	538,000	271,000	36.3	0.63	0.08	41.4	0.48	0.08	22.6	0.49	0.11
	Ivy Ann	7.5	0.57	0.07	43,000	17,000				5.4	0.60	0.08	2.1	0.49	0.06
	Lady Clayre	14.0	0.56	0.20	78,000	85,000				3.6	0.60	0.24	10.4	0.54	0.18
	Bedford	1.7	0.99	0.20	17,000	11,000				1.3	1.04	0.21	0.4	0.83	0.16
	Sub-total	123.4	0.55	0.10	675,000	384,000	36.3	0.63	0.08	51.7	0.52	0.09	35.5	0.51	0.13
	COPPER ONLY DEPOSITS														
	Blackard	76.4	0.62		475,000		27.0	0.68		6.6	0.60		42.7	0.59	
	Scanlan	22.2	0.65		143,000					18.4	0.65		3.8	0.60	
	Longamundi	10.4	0.66		69,000								10.4	0.66	
	Legend	17.4	0.54		94,000								17.4	0.54	
	Great Southern	6.0	0.61		37,000								6.0	0.61	
	Caroline	3.6	0.53		19,000								3.6	0.53	
2	Charlie Brown	0.7	0.40		3,000								0.7	0.40	
	Sub-total	136.7	0.61		840,000		27.0	0.68		25.0	0.64		84.7	0.59	
	TOTAL	260.1	0.58	0.05	1,515,000	384,000	63.2	0.65	0.05	76.7	0.55	0.06	120.1	0.56	0.04

See ASX release of 26 July 2011, 19 December 2011, 23 April 2012, 3 July 2012 and 22 August 2012 for full details of resource estimation methodology and attributions.

Note: All figures may not sum exactly due to rounding.

Little Eva is reported above a 0.2% copper lower cut-off grade, all other deposits are above 0.3% copper lower cut-off grade.

# Resources and Reserves (Little Eva Project)

	Tonnes (m)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
RESOURCES					
Measured	36.3	0.63	0.08	228,000	90,000
Indicated	51.7	0.52	0.10	266,000	152,000
Inferred	35.5	0.51	0.13	180,000	141,000
Total	123.4	0.55	0.10	675,000	384,000
RESERVES					
Proven	31.2	0.64	0.08	198,000	85,000
Probable	28.1	0.53	0.10	149,000	90,000
Sub Total	59.3	0.59	0.09	347,000	174,000
Probable (stockpile)	15.3	0.18	0.06	28,000	31,000
Total	74.7	0.50	0.08	375,000	204,000
Mining Inventory	1.9	0.51	0.23	10,000	14,000

Little Eva Project comprises Little Eva, Bedford, Lady Clayre and Ivy Ann.

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This Presentation contains certain "forward-looking statements". Forward looking words such as, "expect", "should", "could", "may", "plan", "will", "forecast", "estimate", "target" and other similar expressions are intended to identify forward-looking statements within the meaning of securities laws of applicable jurisdictions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this Presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Such forward-looking statements, opinions and estimates are not guarantees of future performance.

This Presentation contains statements that are subject to risk factors associated with the mining industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates. Such forward-looking statements only speak as to the date of this Presentation and Altona assumes no obligation to update such information.

#### **Competent Person Statement**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled and reviewed by Dr Alistair Cowden BSc (Hons), PhD, MAusIMM, MAIG who is full time employee of the Company and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Cowden consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.