

### **Leveraged to zinc**

### **Important information**



The information in this presentation is designed as an aid to a spoken explanation. It is not to be considered without that explanation. It is not intended to guide any investment decisions in Terramin Australia Ltd.

The information is intended as a guide to the potential of Terramin's zinc projects but is not predictive. Consideration of the technical and financial factors requires skilled analysis and understanding of the context.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr. Robert Singer. The information that relates to Angas Ore Reserves is based on information compiled by Mr Andrew Robertson. The information that relates to Tala Hamza Ore Reserves is based on information compiled by Dr Yi Huang. All are Members of The Australasian Institute of Mining and Metallurgy. Mr Singer is Chief Geologist and Mr Andrew Robertson is General Manager Operations of Terramin Australia Limited and both are full time employees. Dr Huang is a full time employee of Golder Associates Pty Ltd. All have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources or Ore Reserves'. Mr. Singer, Mr Robertson and Dr Huang consent to the inclusion in the report of the matters based on his information in the form and context in which it appears

### **Terramin strategy**



### Finding and developing base metal mines

- in close proximity to infrastructure and
- with low capital and operating costs

### To grow the company by

- building on existing portfolio through focused exploration
- aggressively seeking to acquire base metal projects that meet location and cost criteria
- Focus on zinc- but open to other opportunities

### Leveraged to zinc – asset positioning



# The Company is a low cost producer and has and a world class project in final feasibility;

- Angas Zinc Mine South Australia (100%)
  - In production C1 cash cost US34 cents
  - expansion to accelerate cash flow
- Oued Amizour Project Algeria (65% interest)
  - In final feasibility, deposit remains open to south
  - block cave option: lower operating cost; higher throughput

#### Attributable metal - 2.8 Mt lead and zinc

USD5.3 billion in ground value (Barclay's long term prices)

### Why zinc?



### Mine closures and production cuts

1.1 Mt zinc metal reduction in 2009 (10% of world supply)
 [ILZSG]

### Many proposed projects unlikely to proceed

high capital and operating cost, difficult locations

### Lack of investment in exploration and development

delays any future recovery in supply by 10+ years

### Zinc price responding to recovery in world economies

production can only resume from high cost producers

### Why zinc?

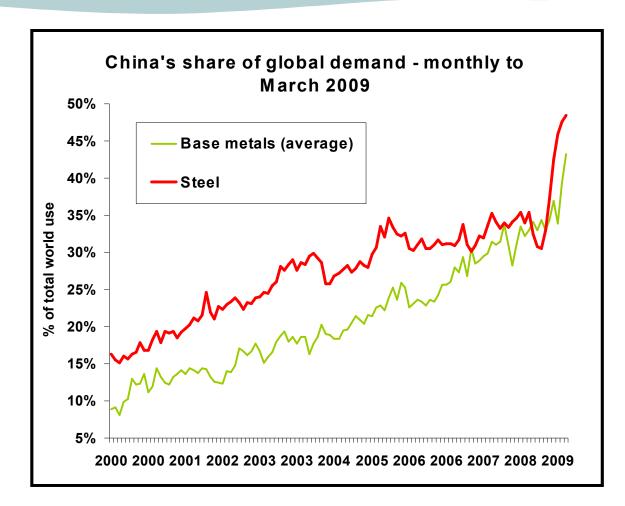


### China

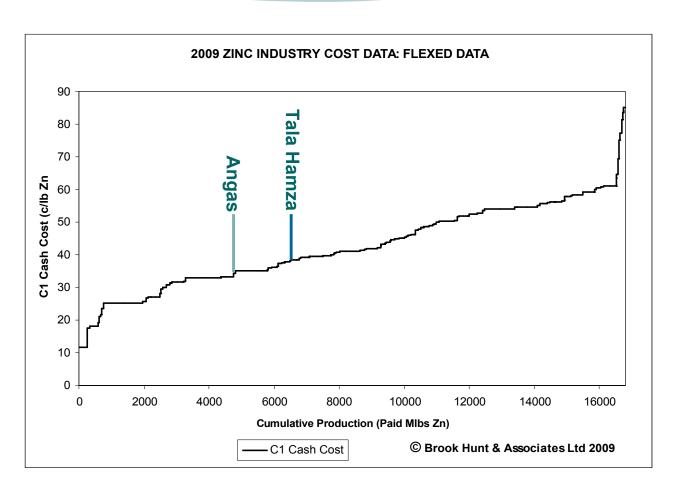
-galvanising demand is growing by 15–20%

-galvanised steel is 50% of new zinc consumption in China

-steel nearly 50% of world demand



# 2009 Zn Cost Curve, C1



# **Company fast facts**



Public company - ASX listed

No of Shareholders

4,200 139 million

**Shares on issue** 

USD30.5 M and AUD5.0 M

Convertible/redeemable Notes

[ USD notes 5 year term convertible at market ]

**Market Capitalisation (at share price of \$0.71)** 

~AUD100M

Turnover (daily average)

~275,000 shares

**Shareholders** 

Management, Board & associates

23.4%

Institutions (Australian & international)

33.7%

NFC

11.2%

**Transamine** 

8.3%

**Debt facility** (Investec Bank) – fully drawn

**AUD30** million

Cash at Bank

**AUD23** million

No metal or currency hedge positions but natural hedge

# **Building on a year of progress**



### Angas mine completes first year of production

- production on forecast
- debt restructured
- optimisation initiatives implemented
- EBITDA forecast \$54m over next two years

the next step? - production expansion to accelerate cash flow

### Tala Hamza project advancing

- expanded mineral resource 59Mt, but resource still open
- initial 24Mt ore reserve declared
- prefeasibility completed
- finance in place for feasibility and initial mine development

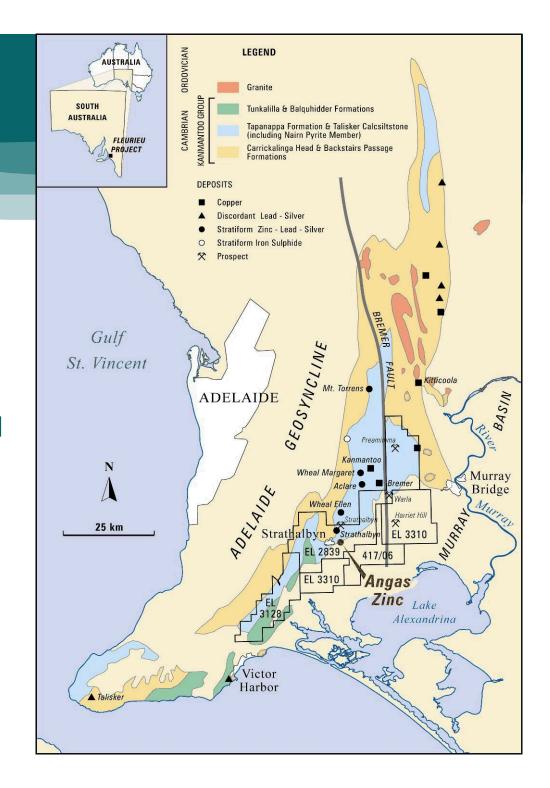
the next step? – upscale design to double production

TERRAMIN AUSTRALIA LIMITED

# **Angas Mine**

- 60 km from Adelaide
- Australia's first mining belt (c1845)
- □ Company tenements total 1,160km²
- Angas: new discovery 1991
  - Mining Lease grant August 2006
  - MARP approved March 2007
  - construction from June 2007
  - Production from August 2008
- □ Fast effective path to production

**TERRAMIN** AUSTRALIA LIMITED



# Angas – low operating cost attributes

- shallow virgin ore body
- grid power- low fixed price

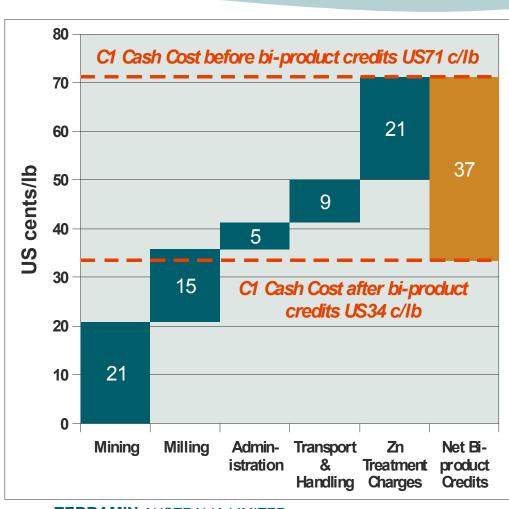
coarse grind

- no fly-in fly-out
- precious metals credit
- local equipment support services



### **Angas C1 cash cost**





#### June 2009 quarter

□ Basis

zinc treatment charge US 50 cents/lb and lead credit at US83 cents/lb

**□** Current prices

zinc US 84 cents/lb lead US 95 cents/lb

□ Sensitivity

increase of US5 cents/lb lead price decreases the zinc C1 by US1.3 cents/lb

### Throughput expansion option

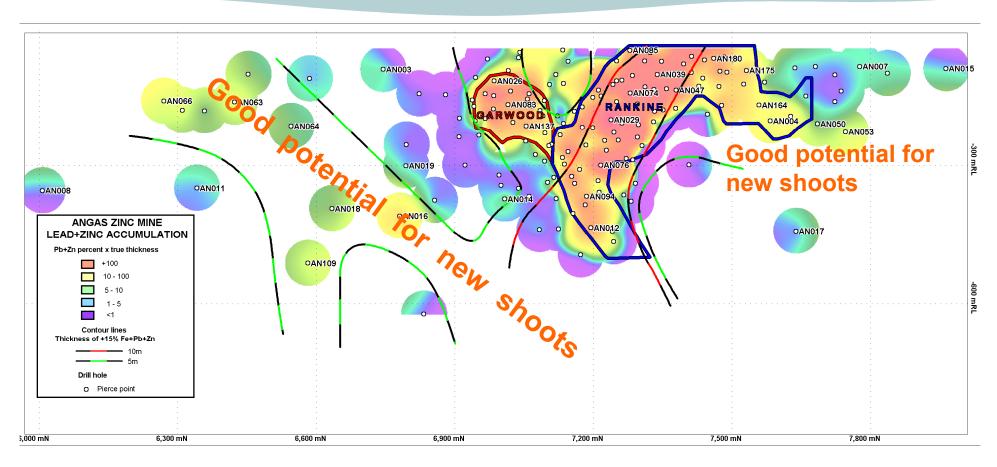


- Expand process plant to 500,000 tonnes pa -\$3.6M
  - SAG mill VS drive, additional cyclones, upgrade pumps, flotation capacity, two extra lead filter leafs crushing/conveying/thickening/tailings storage/concentrate out loading no expenditure
- ☐ Underground <\$2M
  - production drill rig and minor reticulation only
- Site infrastructure Nil
- Accelerate exploration ~ \$2M

..... looking to capture economies of scale

# Resource upside





# **Angas regional potential**



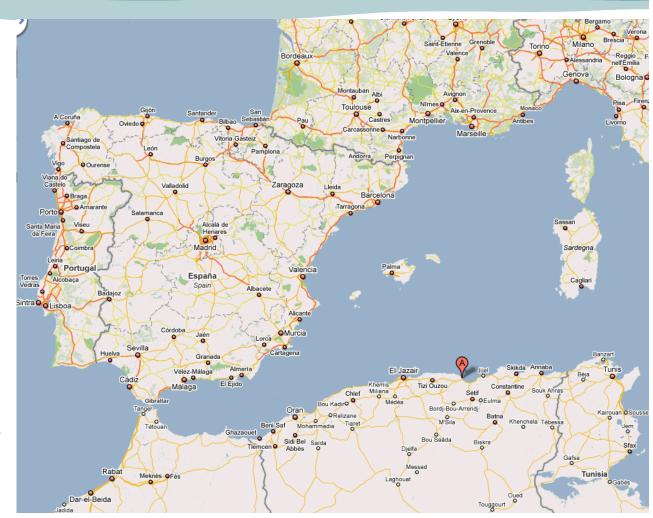
- Focus currently around Angas
- 20 identified regional targets
- Process plant design not capacity constrained
- Targeting incremental feed
- Gold potential being reviewed



# **Oued Amizour Project**



- □ Located nearBejaia in northernAlgeria 250 kmeast of Algiers
- Positioned at the doorstep of Europe's smelters
- Perfect location and infrastructure
- Algeria is major energy supplier to Europe



# **Oued Amizour Project**

- Ownership



- Exploration Permit 5225PE
- 100% owned by Western Mediterranean Zinc (WMZ)
  - incorporated private Algerian company

### **WMZ Ownership:**

65.0% Terramin Australia Limited (TZN) 32.5% ENOF (Algerian Govt. company) 2.5% ORGM (Algerian Govt. company)

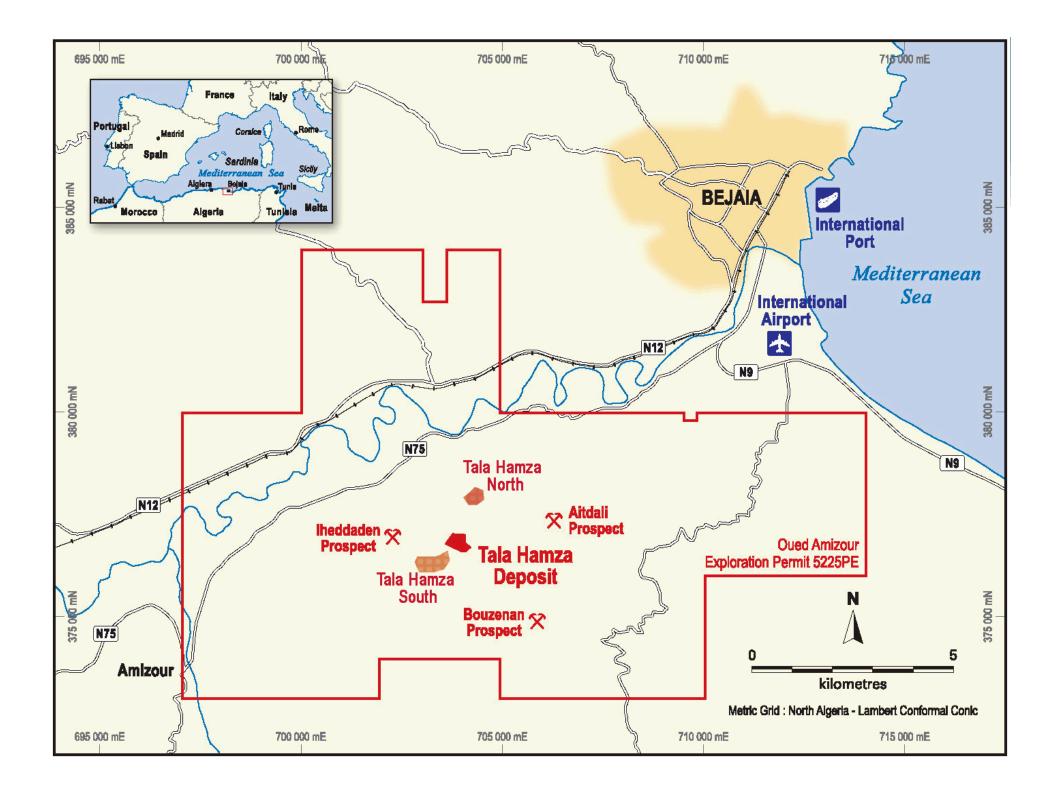


Algerian partners free carried to "decision to mine"

### **Project summary so far**



- Terramin interest acquired in 2006
- ORGM non-JORC "reserve" 30Mt @ 6.9% Pb+Zn
- WMZ major infill and feasibility drilling programme through 2007 to December 2008
  - additional 58 diamond drill holes (up to four rigs)
- Scoping study completed in February 2008
- Upgraded JORC compliant Resource estimate including first Indicated Resource in October 2008
- Prefeasibility study results released in April 2009
- Spend to date US\$ 26M



### **Oued Amizour**

- mérites de projet ? "Pas de problème!"



- wide mineralised intersections with large high grade intervals
- process power
  - reliable low cost 3-4c/kWhr

- □ diesel 18c / litre
- water mine lease bores
- major port and international airport (10kms)



# **Pre-feasibility study**



- Bateman Engineers/Golder Associates/Terramin
- Most elements at feasibility standard (±15%)
- Study assumes
  - conventional crush-SAG mill-flotation
  - bulk mining using low cost SLC or Block caving
  - access via twin declines for production and ventilation
  - concentrate shipment through Bejaia port (10km)
  - conservative long term metal price forecasts

# **Pre-feasibility outcomes**



- Capital cost USD 266 million: 2 Mtpa throughput
- Production per annum average
  - 210kt zinc concentrate (54% Zn grade at 90% recovery)
  - 40kt lead in concentrate (60% Pb grade at 72% recovery)
- Highly marketable product (low Fe and Si)
- □ Life of Mine C1 cash cost US 42 c/lb payable zinc
  - assumes lead price USD 0.60/lb, Zn TC USD 229

### **Going forward**



### Proceeding to Feasibility

- further geotechnical and hydrogeological drilling
- finalisation of portal and decline design
- optimisation of mine plan and 4-5 Mtpa production options
- continuing assessment of block cave option
- finalisation of EIS
- application for Mining License

# Value add propositions



- Block cave
  - opportunity for higher tonnage/lower unit cost
  - look at increasing production to 3-4Mtpa
- Underground crushing and conveying
  - increased production
  - reduced ventilation requirements
- Early start to declines
  - bring forward mine commencement
- Bulk shipment of lead concentrate
  - lower costs
- Increase Proved Reserve with additional drilling

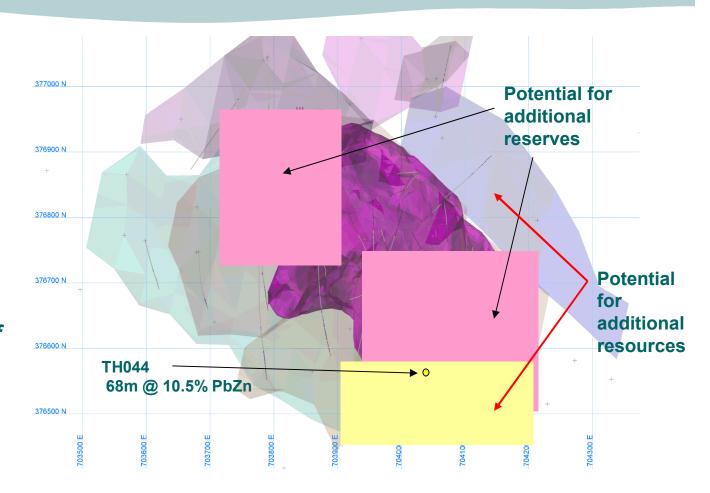
### **Additional Reserves?**



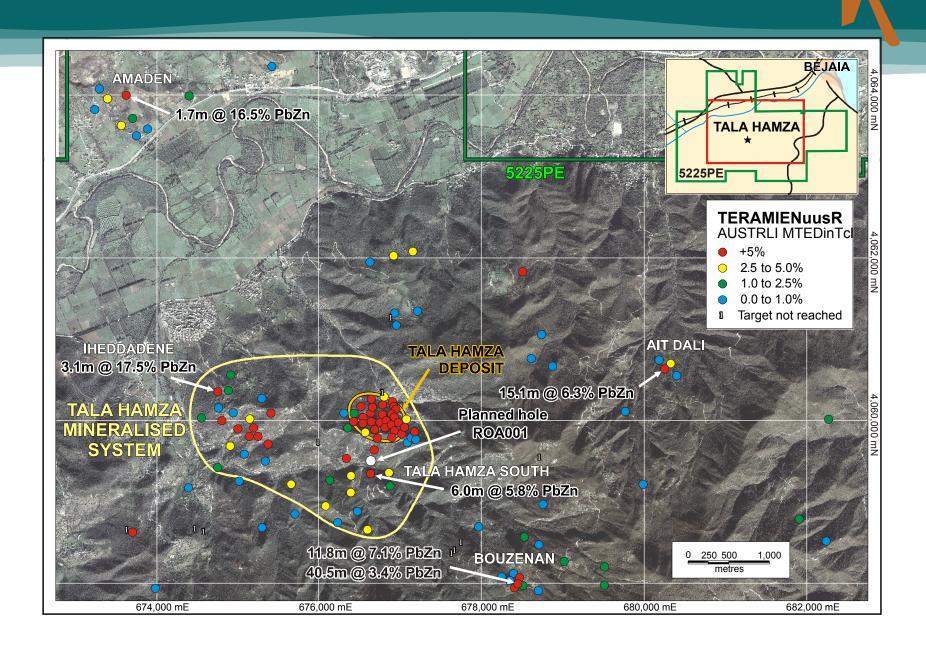
Resources
Indicated
24.8Mt at 1.8% Pb
and 6.5% Zn

Inferred 33.8Mt at 0.9% Pb and 4.3% Zn

at 2.5% ZnEq cut-off



# And the bigger picture



# **Summary and in perspective**



- Low cost mine at Angas for expanding near term cash flow
- Develop Tala Hamza as a major low-cost Pb-Zn producer
- Management team with proven capability
- Board with major project oversight and delivery experience

### Growing a large global producer with quality assets

Angas	31,000t zinc metal
Tala Hamza (4.0 Mtpa ore)	200,000t
cf Red Dog (No. 1 ranked)	574,000t
cf Antamina (No. 4 ranked)	164,000t

### **Company contacts**



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