



Astron Limited

ACN 000 285 272

Annual General Meeting 2006

Agenda



- Introduction
- Highlights
- Operating Review
- Strategic Update
- 2007 Outlook
- Project Development
- Q and A

Gerry King

Alex Brown

Alan Guy

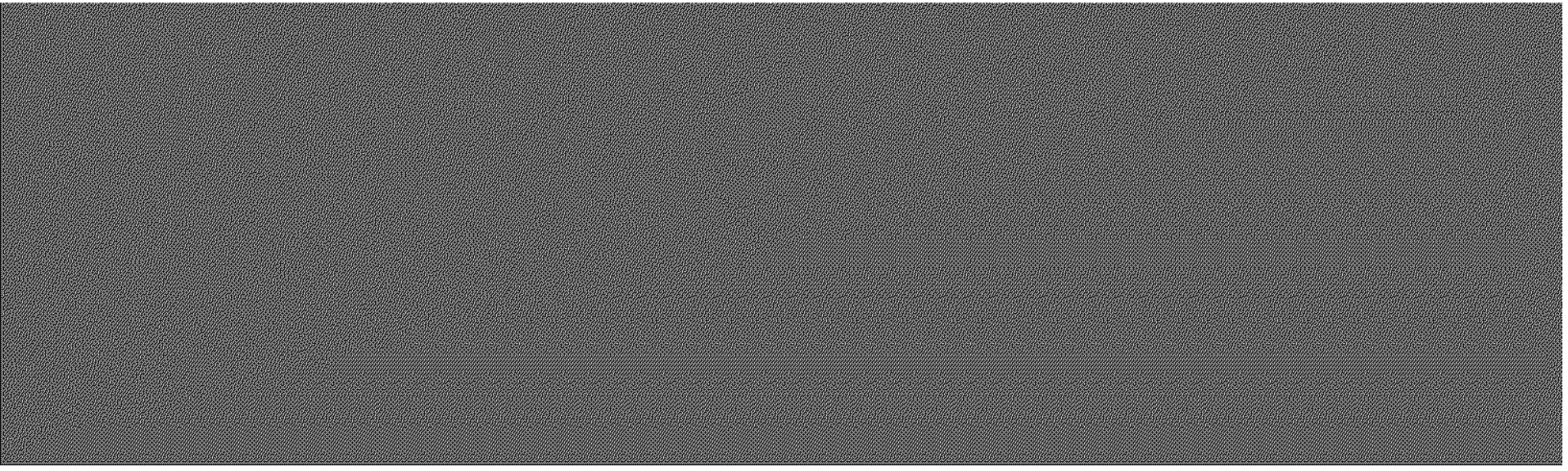
Alan Guy/Arno Kruger

Introduction



- **A year of achievement, change and challenge**
- **Record sales revenue of \$151M**
- **After tax profit of \$20.6M**
- **\$29M available for business expansion**
- **Greater emphasis on organizational improvement**
- **Exciting new projects**
- **Future growth prospects are very good**

Highlights



2006 Summary



Total revenue

A\$ 151.2 million

Net Profit

A\$ 20.6 million

Employees

580

Earning/share

A\$ 0.35

Price/share

A\$ 3.1

Capitalization

A\$ 181 million

ASX Code

ATR

Website

www.astronchem.com

Business Highlights



- **Sales growth in fused and chemical products**
- **30% price increase in zircon supplies**
- **Zircon availability at 2005 levels**
- **11% increase in export sales**
- **Increased customers worldwide**
- **Margins down on zircon materials**
- **New waste treatment plant**

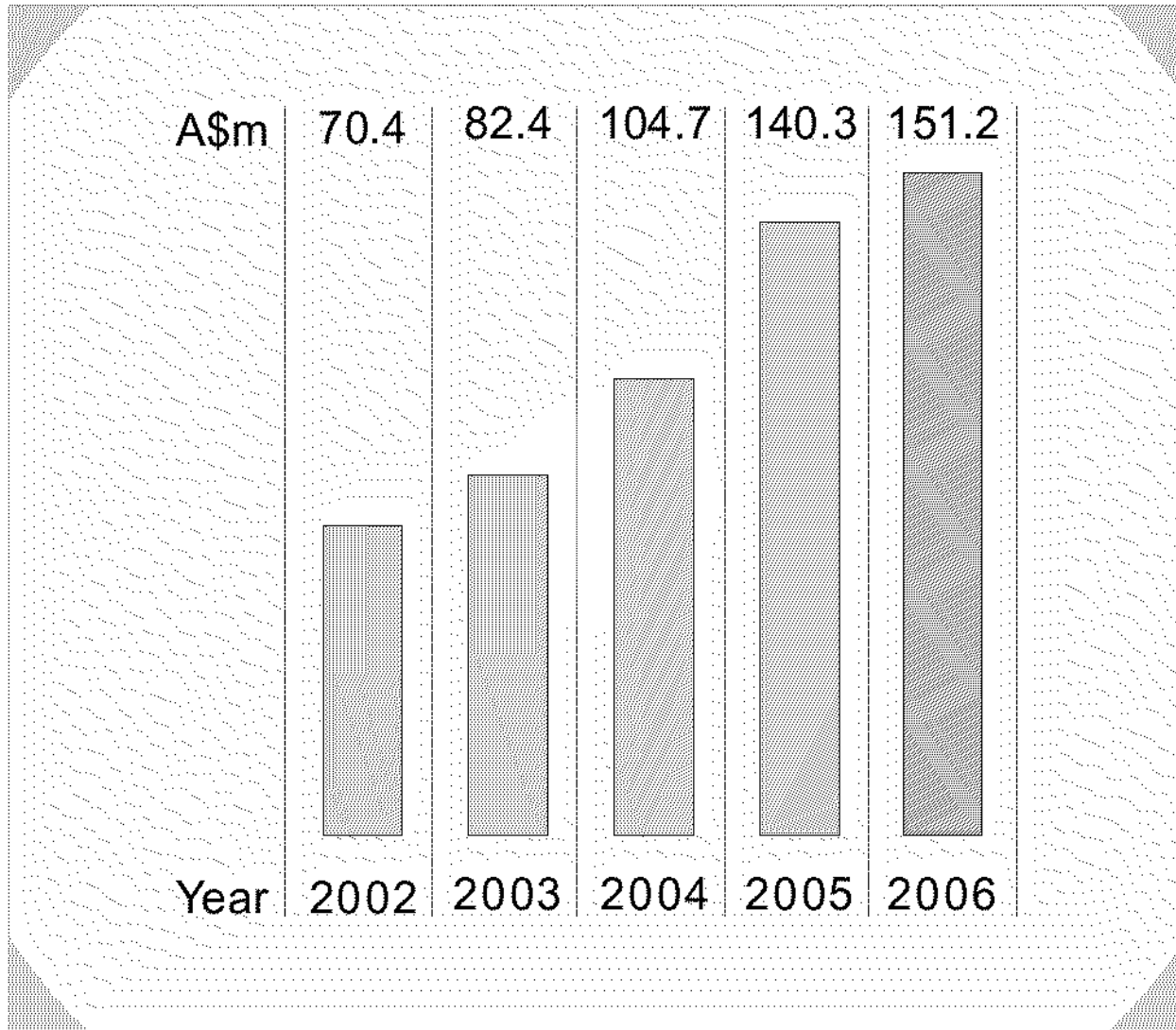
Financial Highlights



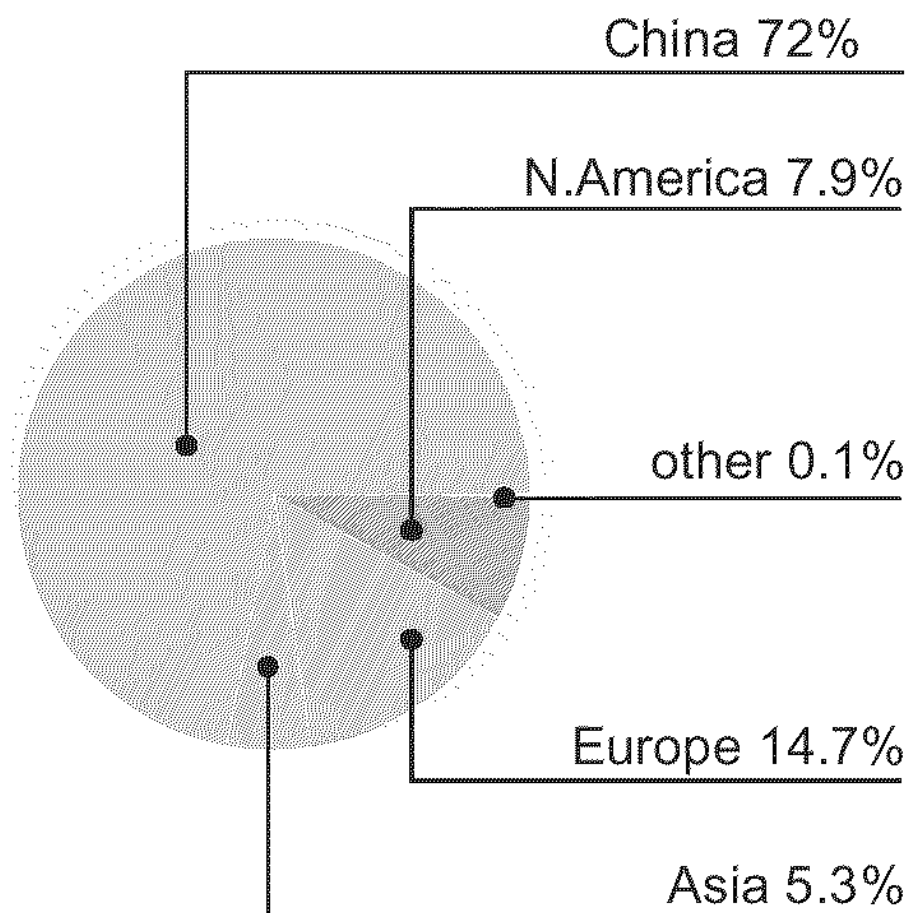
- Revenue growth of \$10.7M
- Net profit after tax \$20.6M
- R.O.N.A. of 19.3%
- Net Assets increased by \$23M
- Cash and marketable securities of \$29M
- Debt : Equity = 4%
- Current ratio =3.2

Operating Overview

Revenue

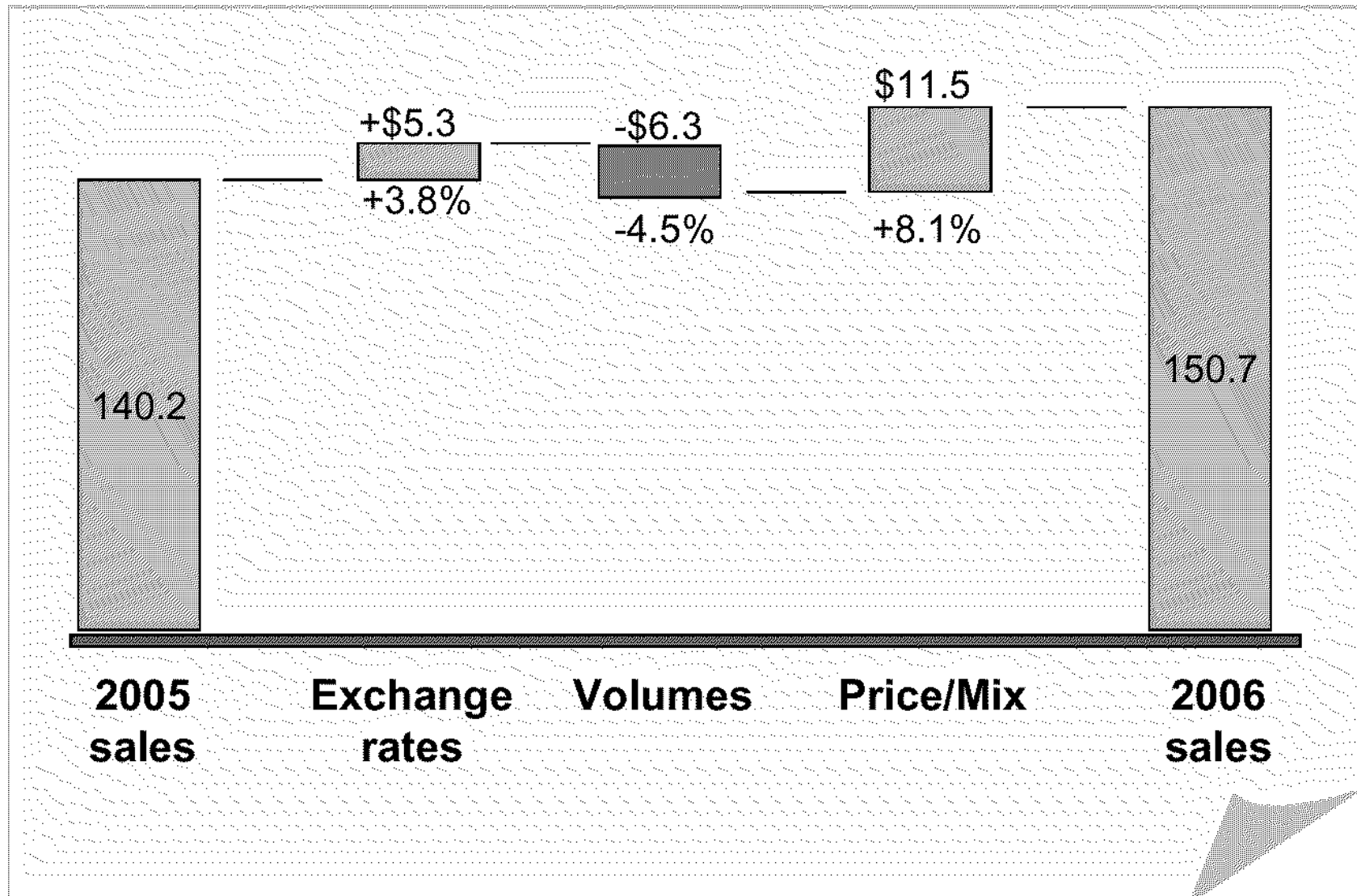


Sales Geographies

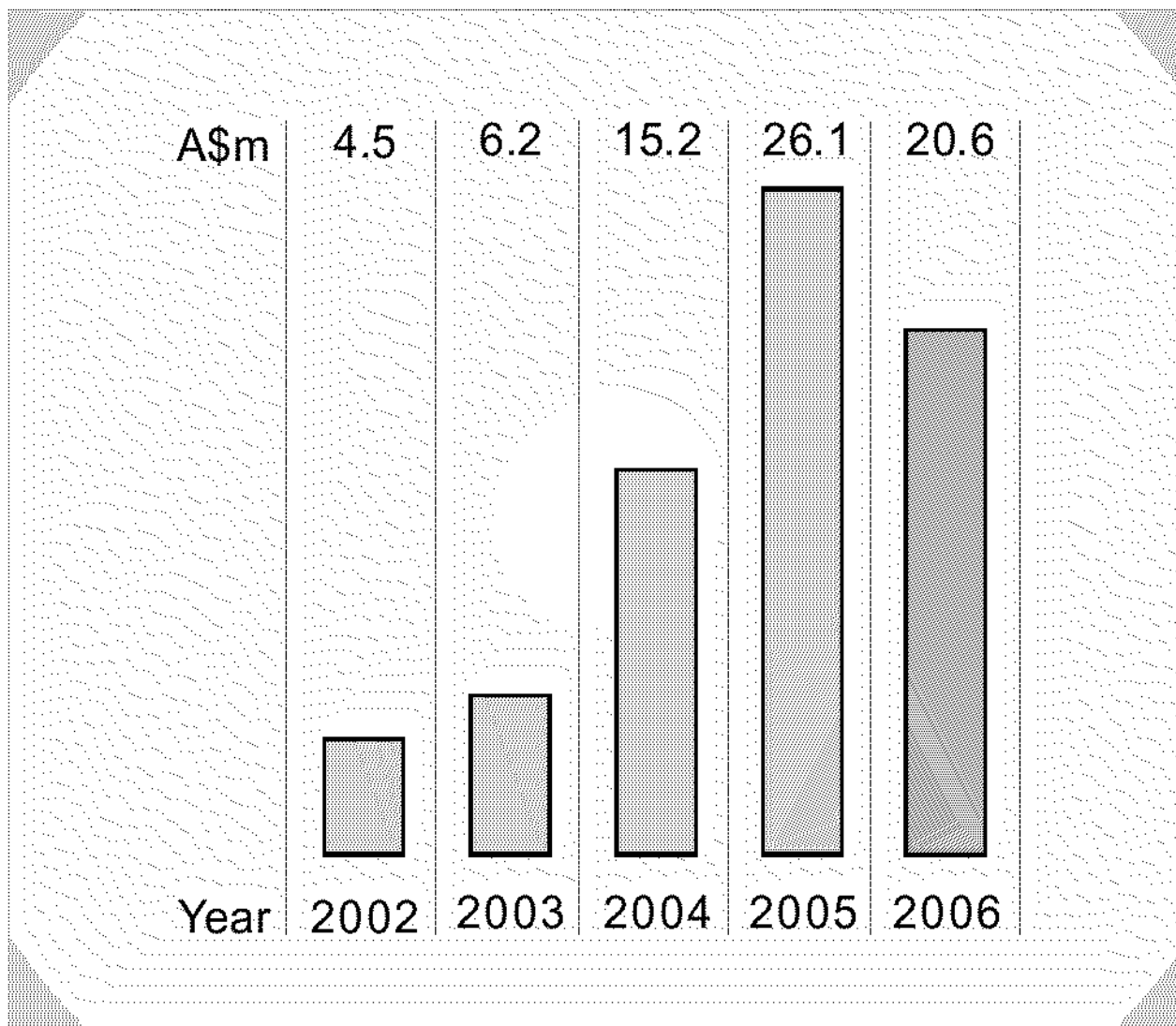


Sales revenue contributors

A\$M



Net Profit



Operating Cash Flow



Balance Sheet summary



	June 2006	June 2005	% Change
Cash/marketable securities (A\$M)	29.1	18.4	58
Receivables (A\$M)	21.5	16.7	28.7
Inventories (A\$M)	28.6	25.9	10.4
Plant property & equipment (A\$M)	21.1	14.9	41.6
Other (A\$M)	19.7	17.6	11.2
Total assets (A\$M)	120.0	93.5	28
Payables (A\$M)	20.6	20.3	0.02
Interest Bearing Liabilities (A\$M)	3.5	0	—
Tax liabilities (A\$M)	1.2	1.4	-21
Total liabilities (A\$M)	25.3	21.7	16
Net assets (A\$M)	94.7	71.8	32
Net asset/share (A\$)	1.62	1.25	—

On-going projects



- **Gambia Mine Development**
- **Fused Zirconia plant expansions**
- **Donald project**
- **HMC processing plant in China**
- **ZOC plant**
- **Titanium pigment plant**



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Strategic Update and Outlook

ALAN GUY

Vice President-Business Development

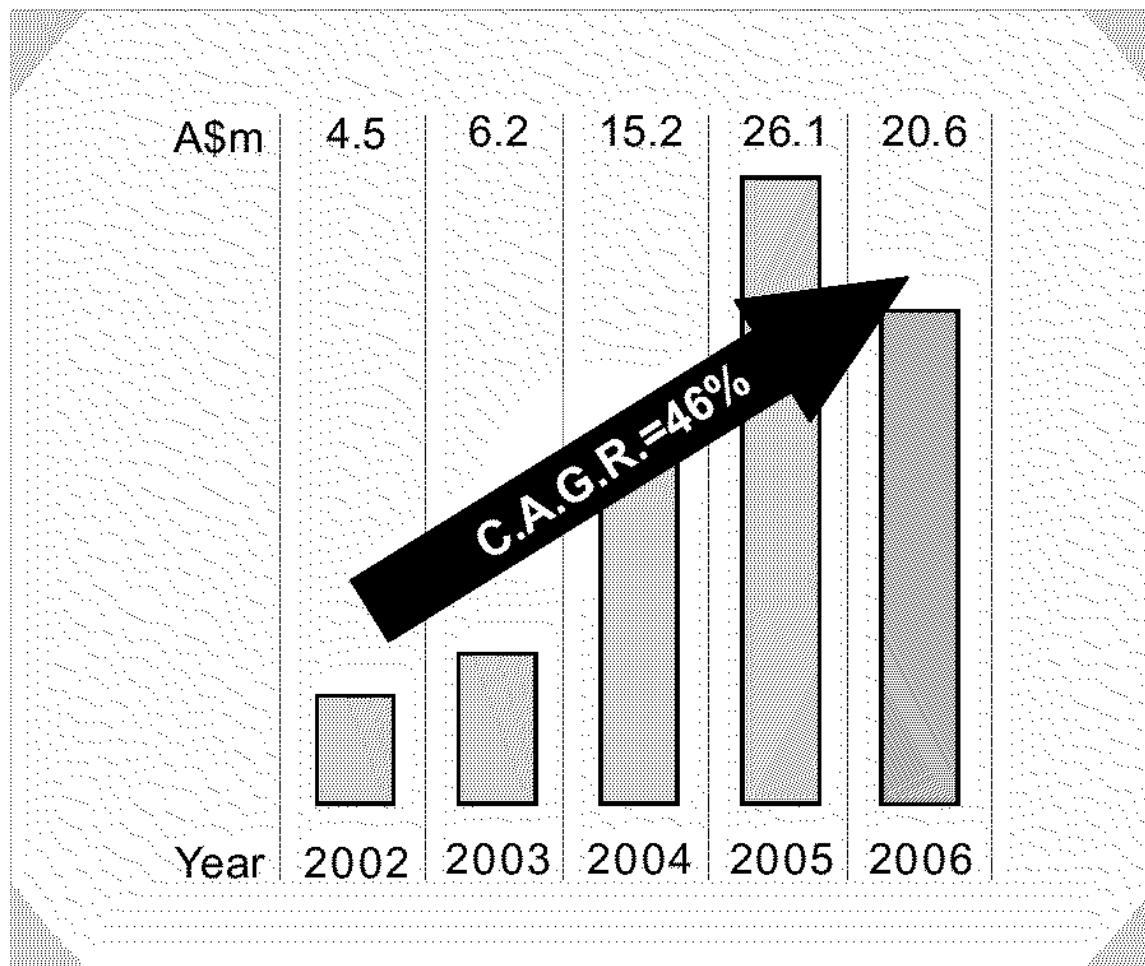
Strategic Intent



Grow earnings by concentrating on:

- **Increased volumes of added value Zr products**
- **Focussed diversification (business areas closely related to our core competencies)**

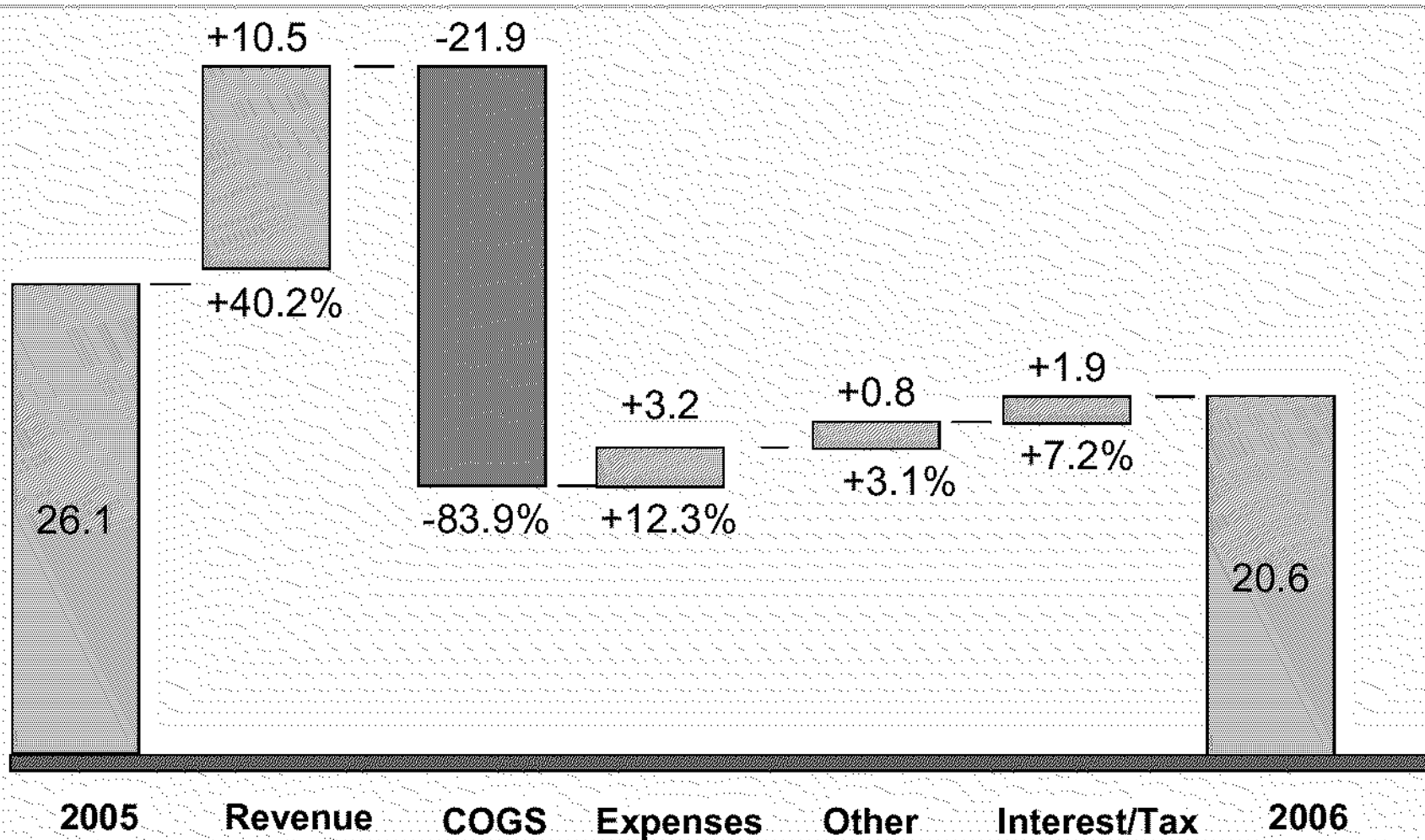
Earnings performance



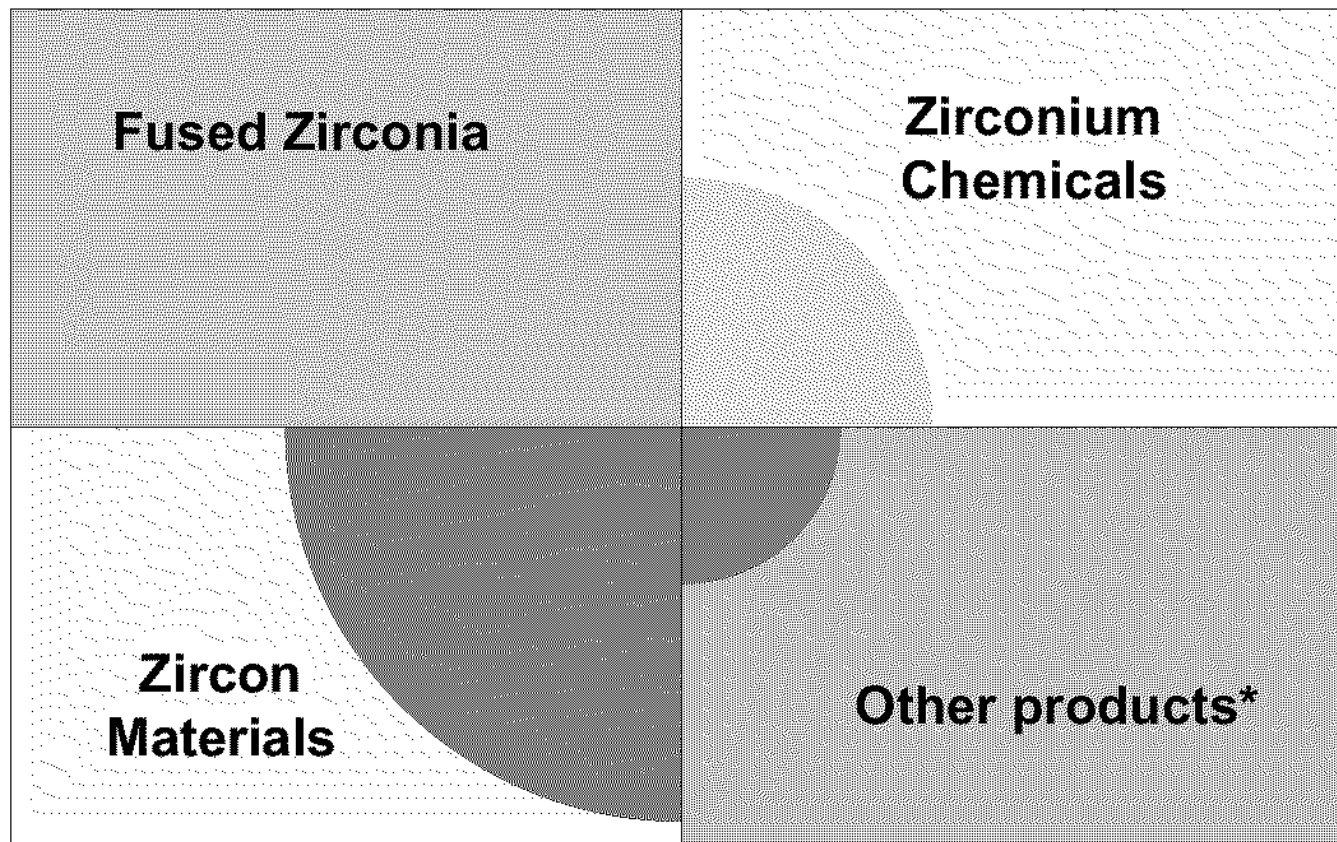
Forward-looking Statements

This part of the presentation contains forward looking statements and information. Its basis is our current expectations along with certain assumptions and therefore such statements carry certain risks and uncertainties.

Net profit comparison (A\$M)

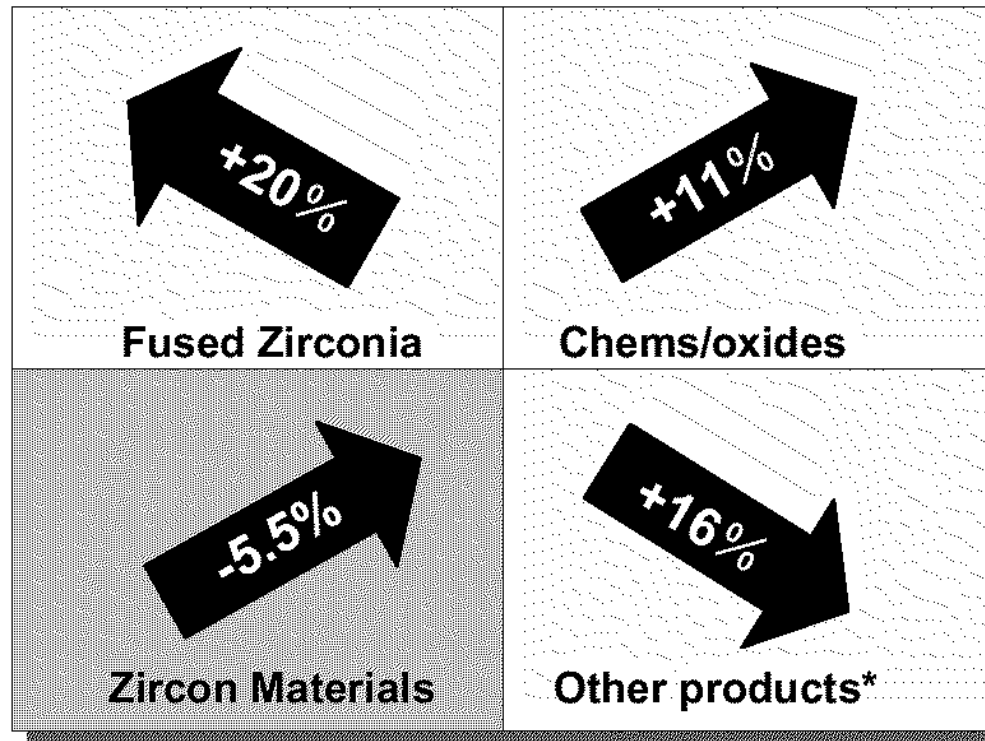


Products Groups



***Shaded Area proportional to 2006 sales value**

Segment Growth



* Includes Ti products and silicas

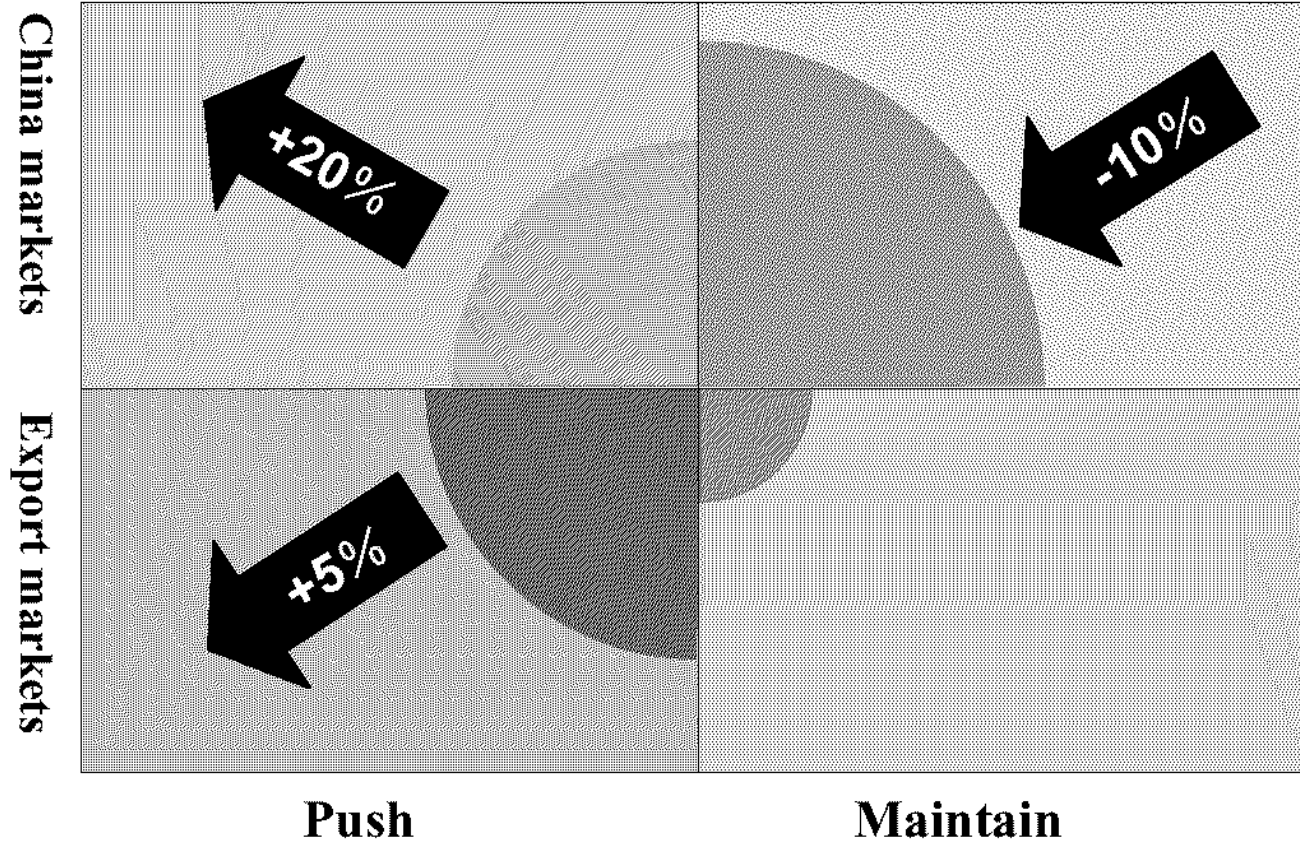
- Prices increases all segments
- Volumes up except zircon materials

Strategy implementation



- **Push higher value products**
- **Be selective on markets**
- **Maintain other product categories**
- **Innovation to give new products**

Strategic split

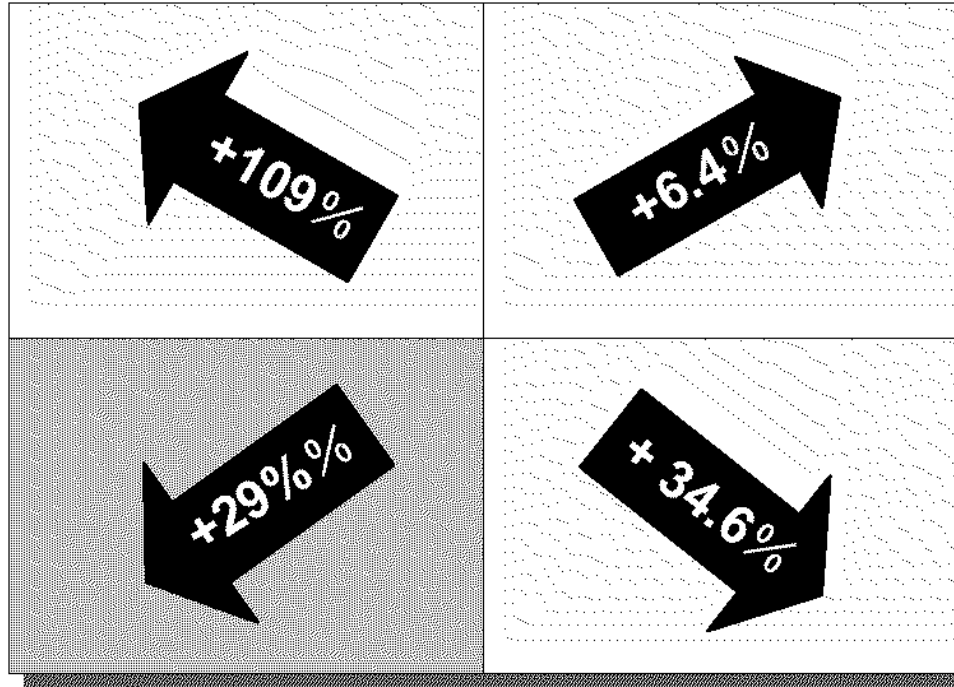


***Shaded Area proportional to 2006 sales value**

New Product performance



Existing customers New customers



China markets

Export markets

- GW, ZRO products
- ZPP
- ZCOH

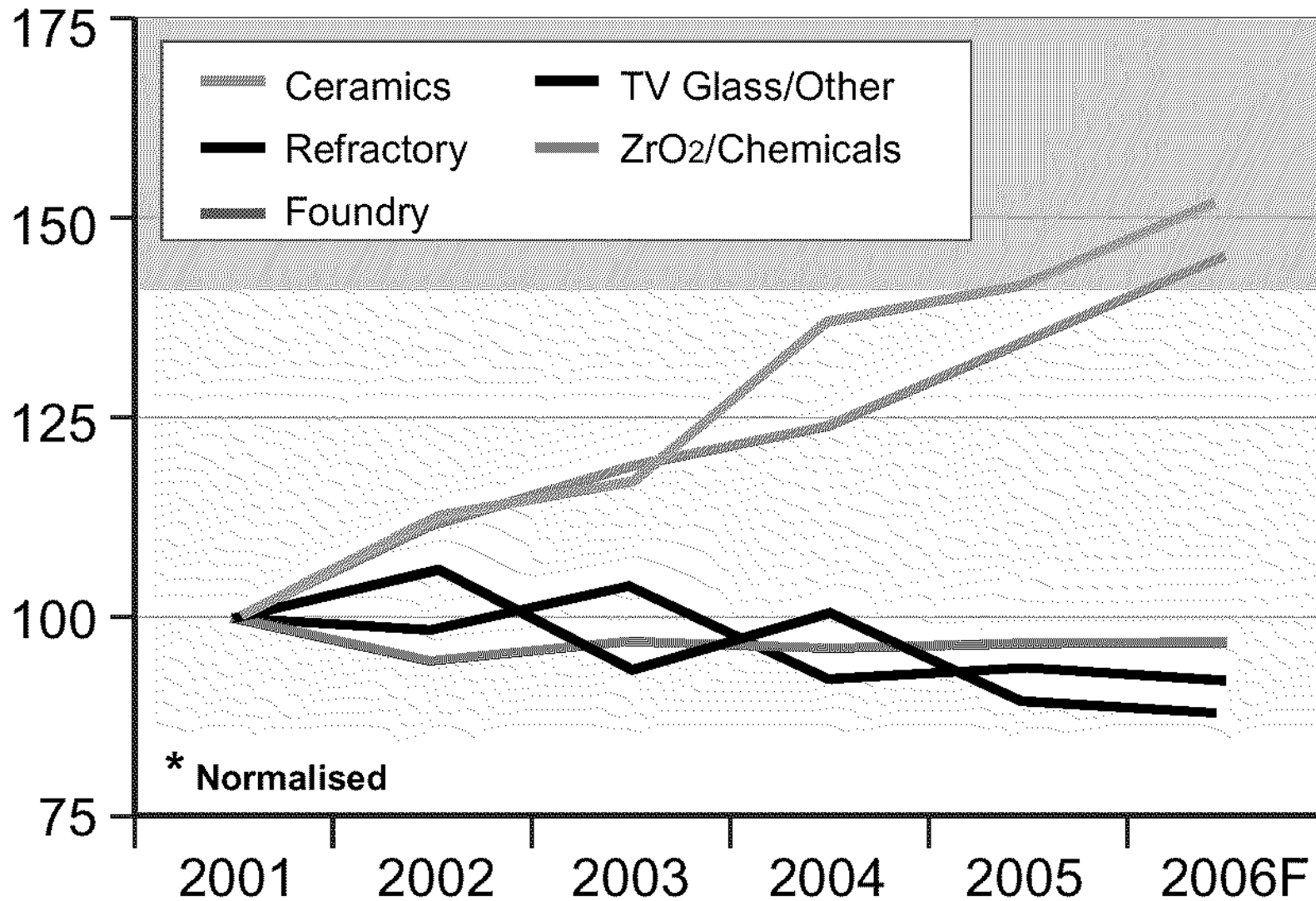
Summary



- **Growth in products of increased value**
- **Innovation continues to yield new products**
- **Targeted segment growth up 25%**
- **Constrained by zircon supply level & price**

2007 Outlook

Market Segment Growth*



AAGR Global vs. China

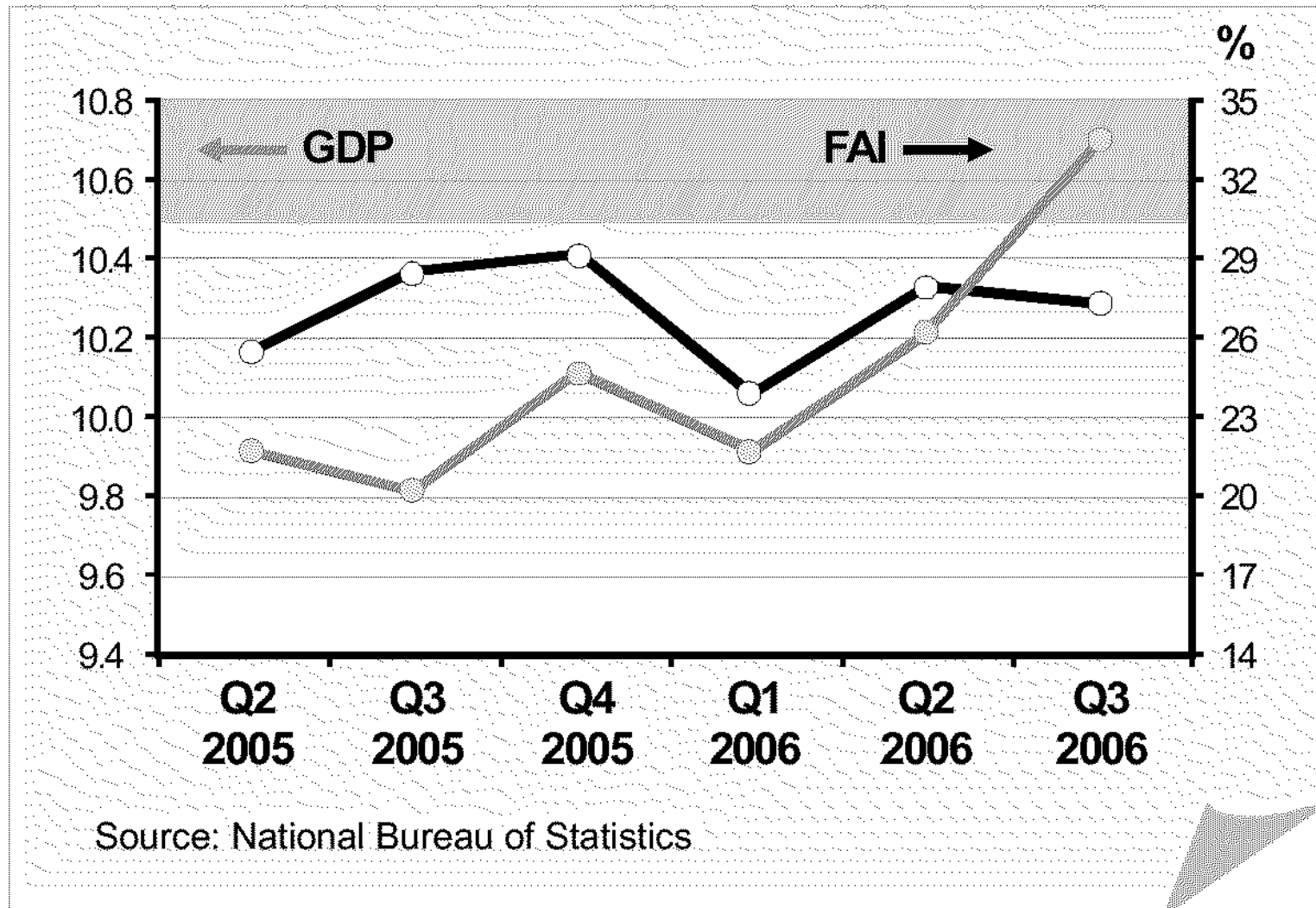


	Global AAGR %	China AAGR %
• ZrO ₂ /Chemicals	12.5	17.5
• Ceramics	7.9	42.1
• Refractories	0.2	12.9
• Foundry	-0.3	11.7
• CRT glass	-5.6	15.4

The China factor



-continuing fixed asset led GDP growth



Continuing growth for 2007



- **Growth in manufactured products**
- **Additional revenues from new products**
- **Access to additional raw material supplies**

Performance drivers for 2007



- **Continuing economic growth**
- **New product introduction timing**
- **Target segment penetration rate**
- **Margins**

Project Development

Titanium pigments - 90k plant



- **Feasibility study completed**
- **Detailed design complete by Jan 07**
- **Site selected and services under negotiation**
- **Capex requirement of A\$180M**
- **Implementation options under review:**
 - **JV with China partner**
 - **JV with International partner**

Zirconium Oxychloride- 15k pilot



- **Design on-going**
- **Feasibility study complete**
- **Site selection being finalized**
- **Decision to proceed by mid 2007**

Donald project



- **Integrates with Zirconium business**
- **Creates revenue from Ti minerals**
- **Fit with TiO_2 entry plan**
- **Business expansion opportunity**

Donald Mineral Sands Project Overview and Progress

DMS – Project Location



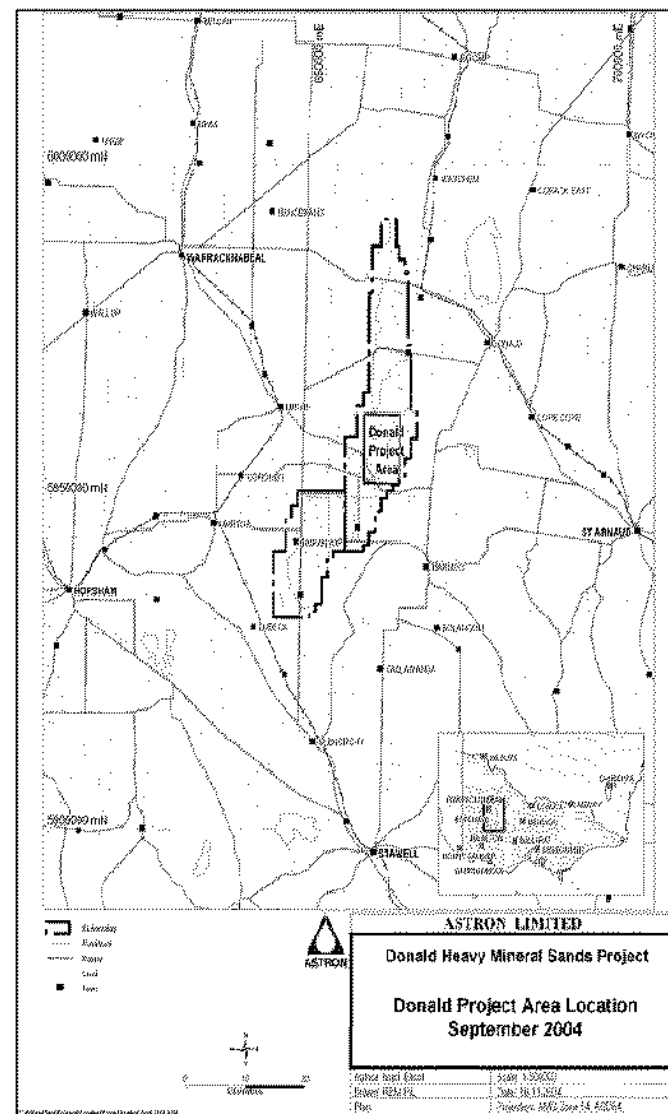
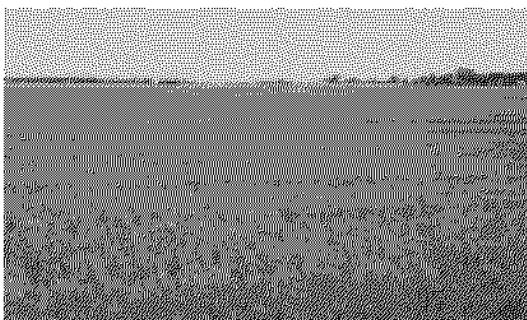
Part of deposits discovered during early 1980's by CRA
Previously known as WIM 200 and WIM 250

240km Northwest of Melbourne - Victoria

66km Northeast of Horsham

Deposit located within freehold agricultural land

Limited remnant native vegetation



DMS – Geology

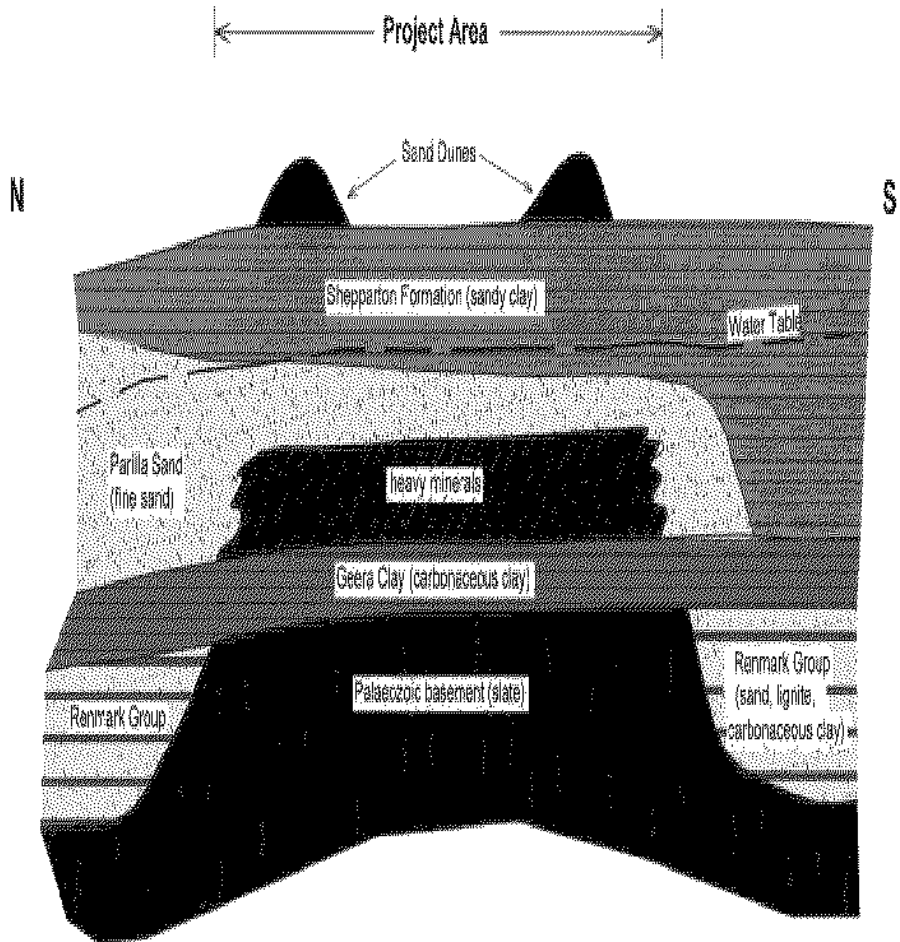


Regional Geology (Donald and Jackson)

- Deposits part of the Murray Basin which is a low-lying, ancient sea bed.
- The Loxton-Parilla Sand the Heavy Mineral
- Deposits are of two principal types; the coarser grained “strand-style” occurrences and the finer grained “WIM-style” accumulations
- Donald and Jackson are WIM-style deposits and formed offshore, developing as planar, well sorted deposits.

Local Geology (Donald Project Area)

- Donald Project Area is part of the large Donald deposit
- Area was selected based on its favourable heavy mineral grade, zircon content and ore thickness
- Heavy Mineral contained within Parilla Sand
- Parilla sands overlain by Shepperton formation and underlain by Geera clay



SCHEMATIC CROSS SECTION (not to scale)

DMS – Mineral Resource



Donald Project Area Mineral Resource

Classification	Tonnes (M)	HM (%)	Slimes (%)	Oversize (%)	Tonnes HM (M)	Tonnes Slimes (M)	Tonnes Oversize (M)
Indicated	531	5.0	14.8	7.4	27	78	40
Inferred	162	5.4	16.8	6.7	8	27	11
Total	693	5.1	15.3	7.3	35	106	50

Classification	Tonnes (M)	Zircon (%)	Ilmenite (%)	Rutile (%)	Leucoxene (%)
Indicated	368	1.1	1.8	0.3	1.2
Inferred	109	1.0	1.7	0.2	0.9
Total	477	1.1	1.8	0.3	1.1

- 1) All resources have been classified as Indicated under the 2004 JORC code.
- 2) All resources have been rounded to the nearest 10 million tonnes and one decimal place in grade.
- 3) Donald resources are reported using a 1% lower cut-off grade

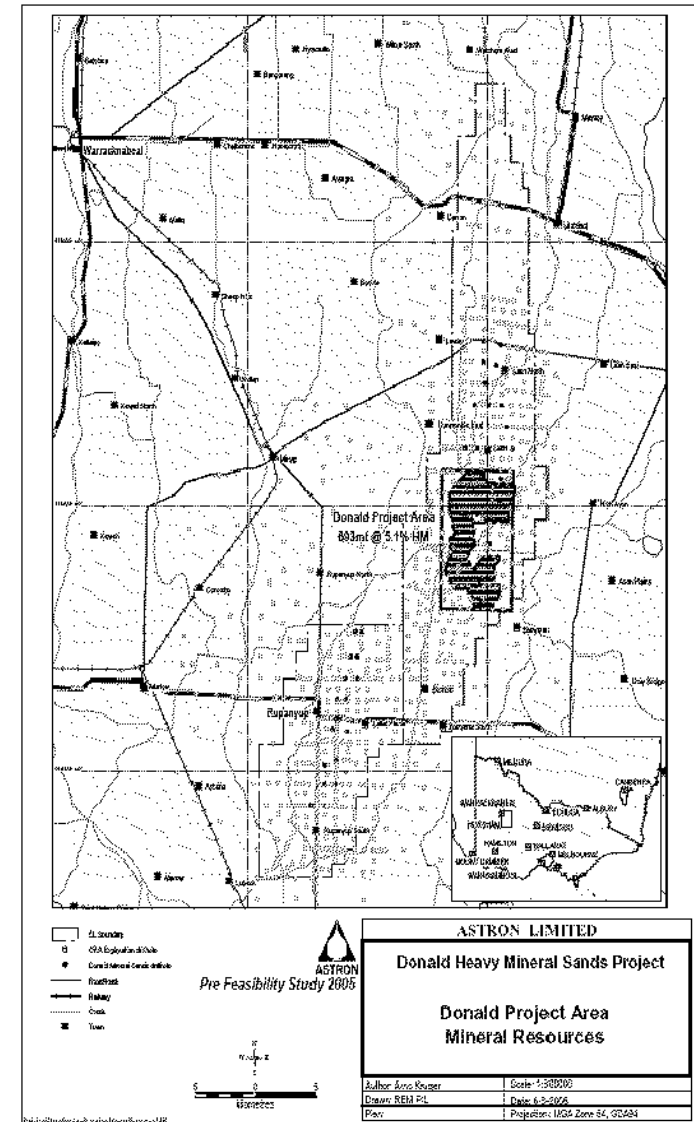
- Donald Project Area contains sufficient resource to sustain a 7.5mtpa operations for 50 years or 2 x 7.5mtpa operations for 25 years

- Represents approximately 25% of the exploration area, and is estimated to contain 1,700million* tonne of ore

- Current study focusing on delineating an area capable of sustaining a single 7.5mtpa operation for 25 years

- DMS will apply for Mining License based on single 7.5mtpa operation

*Estimated by CRA



DMS – Mining Method



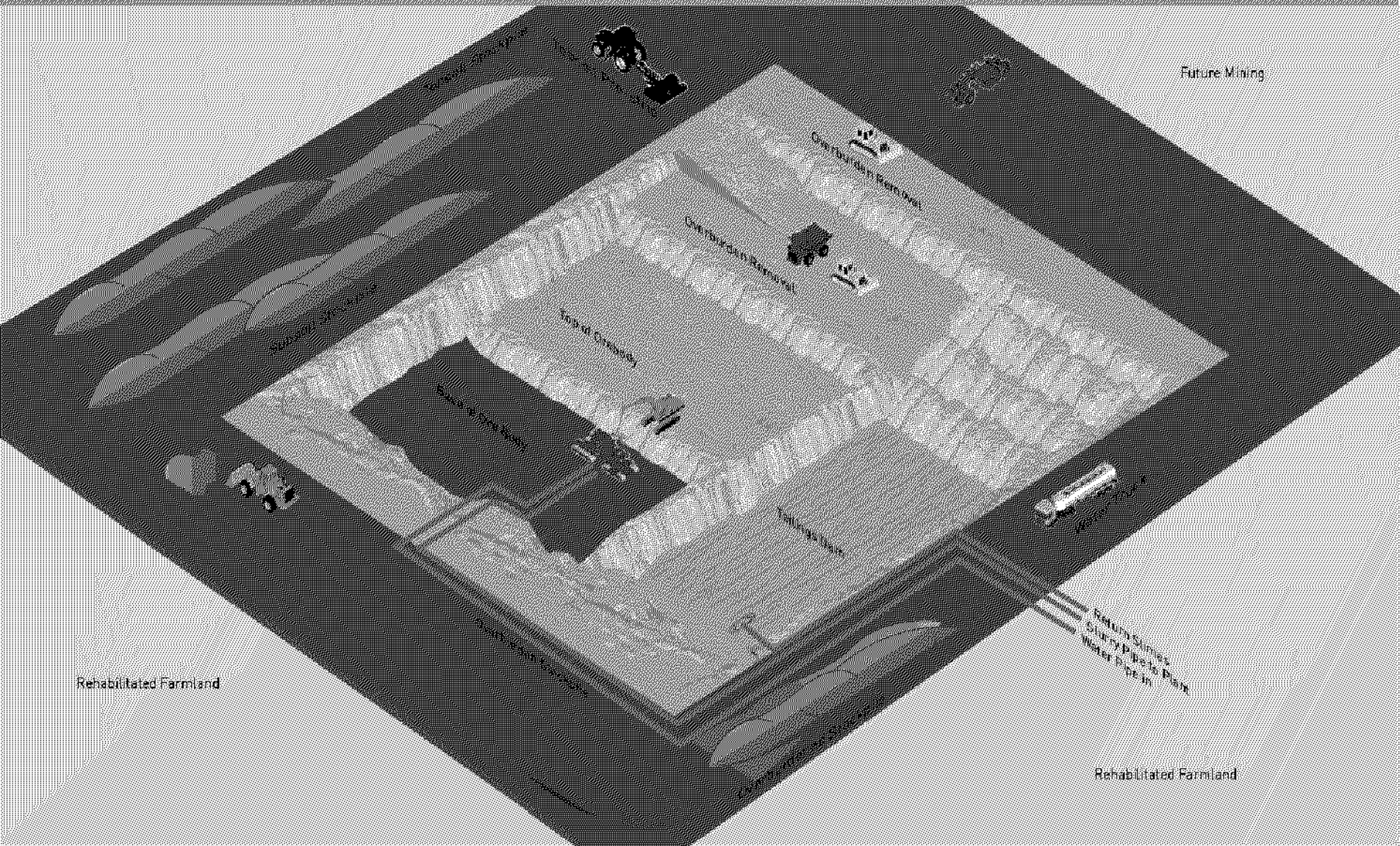
Mining Method Evaluation

Detailed mining method evaluation complete, indicating a conventional mining method consisting of a mixed fleet including:

- Tractor and Bowl Scrapers
- Dozers/Scrapers
- Shovels/Moveable Mining Unit



Mining and Rehabilitation Operations Schematic Presentation

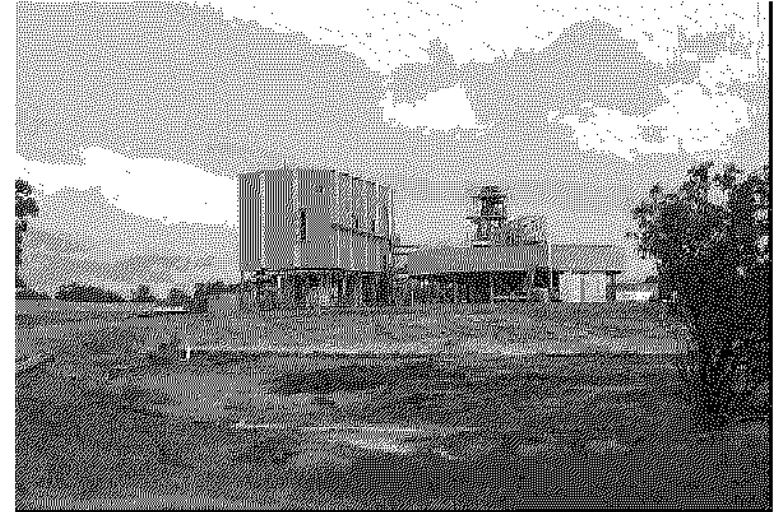


DMS – Mineral Processing



Australian Operation – Wet Concentration

- Feed preparation (Screening, De-sliming)
- Clay handling (Thickening, Disposal)
- Wet concentration to 90% HMC
- Separation into a Magnetic and Non-magnetic Concentrate
- Product preparation and handling



Typical Wet Concentration Plant – Western Australia

Chinese Operation – Mineral Separation Product Manufacture

- Separate HMC into intermediate mineral sands products (Zircon, HiTi and Ilmenite)
- Production of advanced materials from Zircon, Titanium Dioxide from Ilmenite and HiTi



Typical Mineral Separation Plant – South Africa

DMS – Mineral Processing



Technical Challenges

- High Clay Levels - Ore contains 15% clay ($-38\mu\text{m}$)

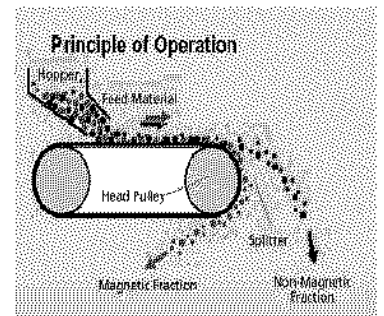
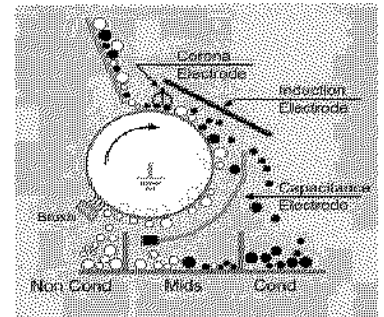
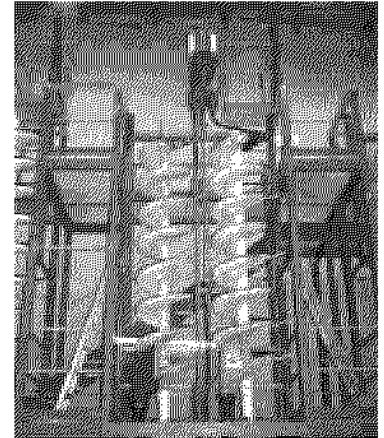
DMS has developed an efficient clay removal and water recovery circuit by:
Performing extensive laboratory and pilot scale tests
Utilizing new cyclone and thickening technologies

- Fine nature of heavy minerals (Mineral $d_{50} < 65\mu\text{m}$)

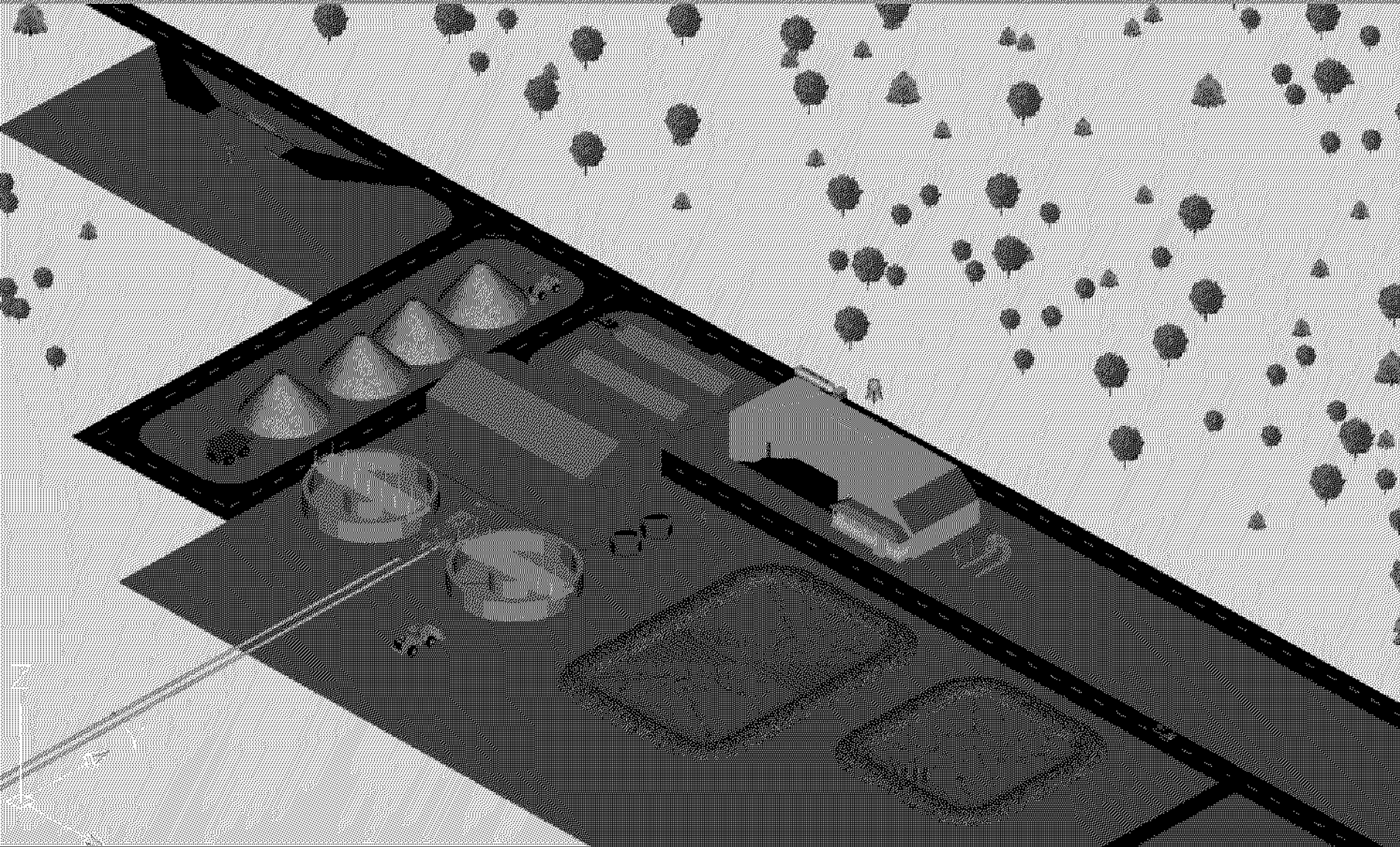
DMS has developed a conventional mineral processing route by:
Collaborating with equipment manufactures on improving equipment efficiencies
Utilizing new improved spiral, electrostatic and magnetic separators developed
Performing extensive laboratory and pilot scale test work

- Product Quality (Zircon and Ilmenite Products)

DMS has successfully removed contaminants from its products by:
Collaborating with mineralogical testing and development laboratories
Tapping into and utilizing Astron's chemical expertise
Performing extensive laboratory test work



Mineral Processing Plant



DMS – Production Data



Australian Operation

Mining (Ore) 7 500 000 tpa

Magnetic Concentrate 110 000 tpa

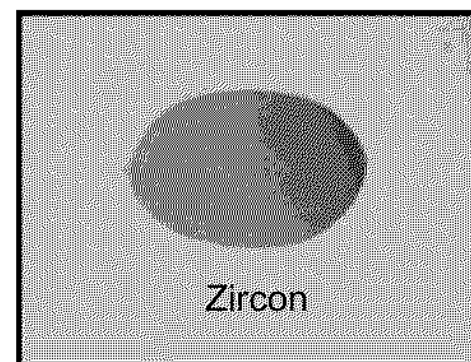
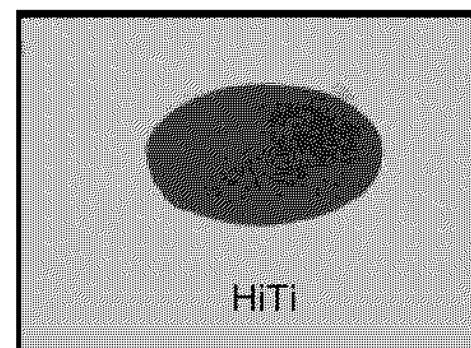
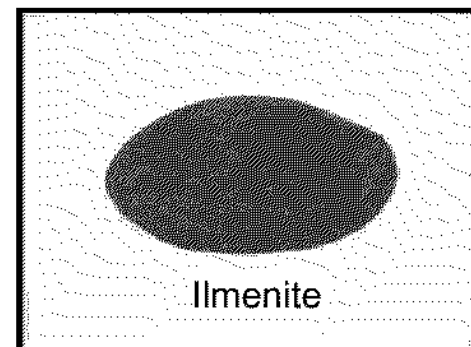
Non-Magnetic Concentrate 286 000 tpa

Chinese Operation

Zircon Production 86 000 tpa

HiTi – Production 73 000 tpa

Ilmenite Production 106 000 tpa



DMS – Infrastructure



Water

- Saline groundwater to be used for processing – focusing on Avon Deep Lead
- Fresh Water for Amenities

Power

- 55km, 66kV Power line
- Gas Fired Power Station

Transport - Mine Site to Existing Rail Siding

- Road

Transport – Rail Siding to Port

- Road – Viable for HMC <170 000tpa
- Rail – Viable for HMC >170 000tpa



Avon Deep Lead Drilling - June 2006



Local Rail Siding

DMS – Environment



Astron Limited is aware of its obligations towards the environment, safety of its workers and nearby communities.

Donald Mineral Sands project will be developed by completing an Environmental Effects Statement

EES Studies

- Technical Review Group Appointed
- Assessment Guidelines Finalized
- Specialist Consultants Selected
- Studies Initiated
- Native Title extinguished
- Community Consultation Initiated



Winter Crop - Wheat



Modified Wooded Areas



Information Evening – April 2006

DMS - Conclusion



Donald Project Area contain sufficient mineral resource to sustain a large, low cost, long life mining operation, which can be processed into marketable mineral sands products using conventional mineral processing techniques.

Pending regulatory approval and the successful completion of a detailed feasibility study, DMS is poised to become a major contributor to the success and profitability of Astron Limited.

Welcome to the Zirconium Age!!!



Astron Limited

ACN 000 285 272

Thank You!