



Queensland Magnesia



Queensland Energy Forum
25 May 2011



Business Overview

- Production from early 90's
- Open cut mining of naturally occurring magnesite
- Resource life > 40 years
- Environmental rehab focus



- Large and high quality production of CCM, DBM and EFM
- Modern plant using latest technology
- Total employees ~400

Products and Markets

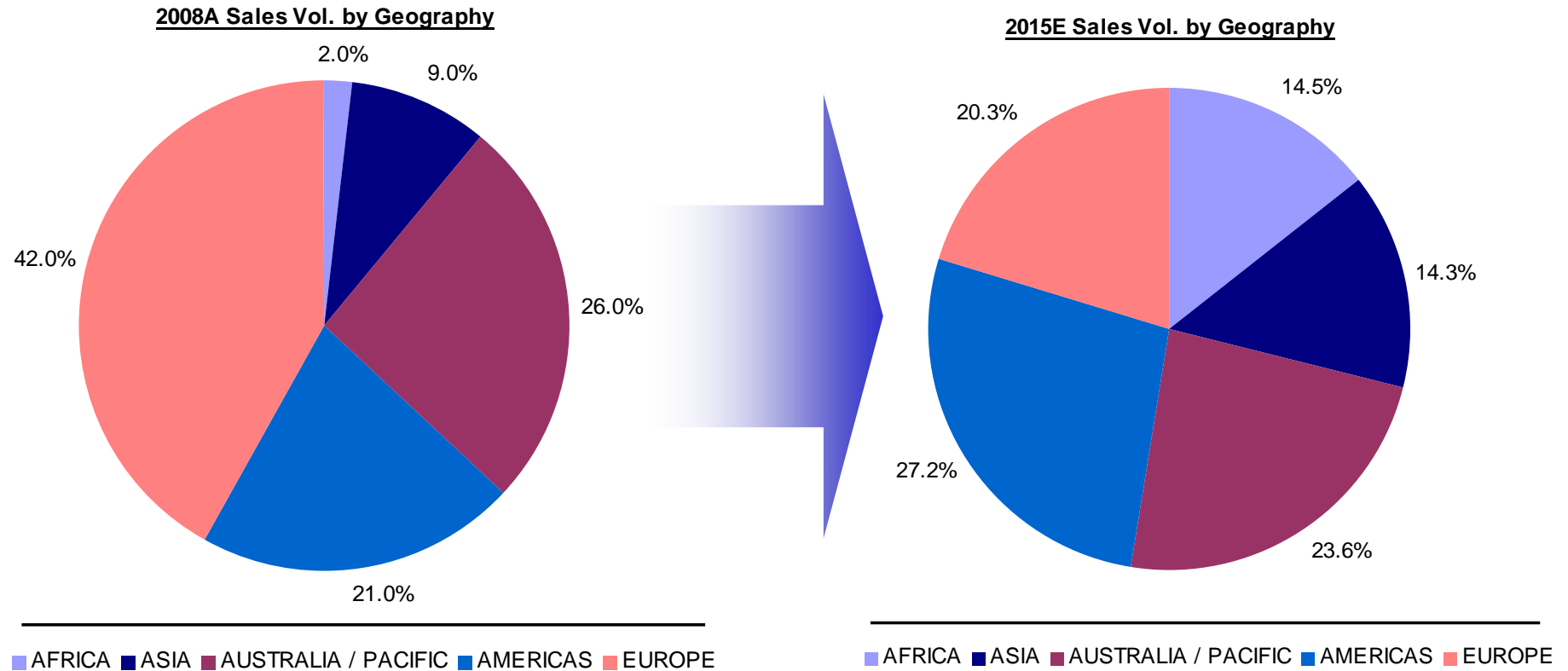
- Deadburned Magnesia (DBM)
 - Steel and cement refractory markets
 - 115,000tpa capacity

- Electrofused Magnesia (EFM)
 - Steel refractory markets
 - 35,000tpa capacity

- Caustic Calcined Magnesia (CCM)
 - Metal precipitation, Agriculture - fertiliser
 - Iron and steel fluxing
 - Pulp and paper, Waste and water treatment
 - Food, pharmaceuticals and chemicals
 - 175,000tpa capacity



Global Sales Presence & Proximity to Key Growth Markets



- Move from mature Europe/US to growing mkts in Africa and Asia
- Sales to these markets increase from 11% to 29%

Energy Use



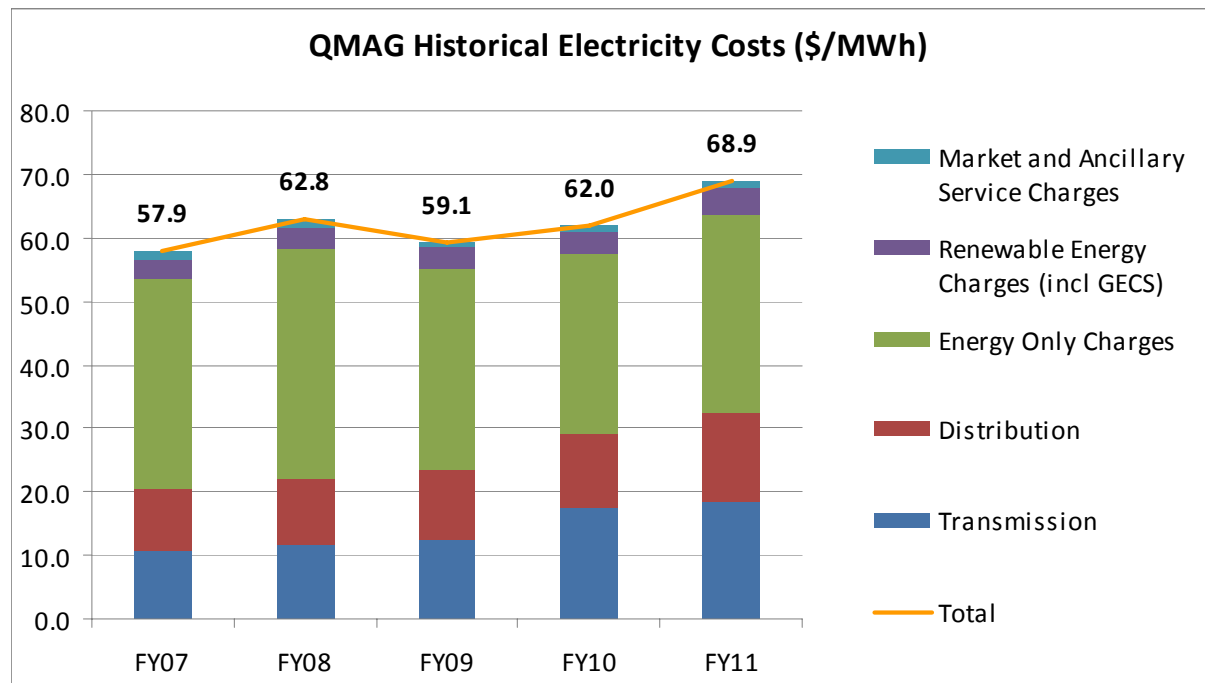
Activity	Elec	Gas	Diesel
Mining	✓	-	✓✓
Transport	-	-	✓✓
CCM	✓	✓✓	✓
DBM	✓	✓	✓
EFM	✓✓	✓	✓

Energy	Annual Usage (FY12)
Electricity	~ 137,000 MWh
Natural Gas	~ 2.450 PJ
Diesel	~ 7.8M litres



Energy Costs

Energy	Annual Cost (FY12)	Share of Total Budget
Electricity	\$7.9M	5.3%
Natural Gas	\$10.3M	6.9%
Diesel	\$7.7M	5.2%



➤ Annual Compound Growth of 3.5%

➤ Key Actions:

- EFM Demand Management
- Direct pool purchases >50%
- Hedging

Energy Costs – Renewable Energy and Other

- Exposed to contractual pass through of costs relating to:
 - LRET ⇒ LGC
 - SRES ⇒ STC
 - QGS ⇒ GEC
- Some relief as EITE via PEC



Energy Product	Gross	PEC	Net Annual Cost (FY12)
LGCs	\$0.4M	(\$0.2M)	\$0.2M
STCs	\$0.9M	(\$0.4M)	\$0.5M
GECs	\$0.1M	---	\$0.1M

Energy Costs – Carbon Tax

Impact on Electricity Prices

- @ \$5-8/MWh
- \$0.7M to \$1.0M
- ~ 13% increase

Direct Impact on QMAG

- 20 to 40 \$/t = \$8M to \$16M
- Loss of competitiveness / jobs
- Carbon leakage to China, Brazil, Russia & N Korea where there is no carbon tax
- Threatens business viability

QMAG



CHINA



Energy Cost Management Strategies

- Hedging of electricity load with retailer (55% cover in FY12)
- Electricity demand management during peak periods
 - Switching of Electrofusion load (up to 12 MW)
- Weekly market monitoring for renewable and other energy products
- Use of energy advisors (Creative Energy Solutions) for energy procurement strategies
- Qualified as Emissions-intensive Trade-exposed (EITE) organisation for renewable energy cost relief
- Fixed price contracting for Gas
- Government lobbying on changed and new legislation