



**onesteel**

# ONESTEEL WHYALLA SITE TOUR

Mark Parry – Chief Executive Whyalla

Greg Waters – Chief Executive Recycling/Iron Ore Marketing

23 November 2010





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This presentation contains certain forward-looking statements with respect to the financial condition, results of operations and business of OneSteel and certain plans and objectives of the management of OneSteel. Forward-looking statements can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. All such forward looking statements involve known and unknown risks, significant uncertainties, assumptions, contingencies and other factors, many of which are outside the control of OneSteel, which may cause the actual results or performance of OneSteel to be materially different from any future results or performance expressed or implied by such forward looking statements. Such forward-looking statements speak only as of the date of this presentation. Factors that could cause actual results or performance to differ materially include without limitation the following: risks and uncertainties associated with the Australian and global economic environment and capital market conditions, the cyclical nature of the steel industry, the level of activity in the Australian construction, manufacturing, mining, agricultural and automotive industries and, to a lesser extent, the same industries in Asia and New Zealand, commodity price fluctuations, fluctuations in foreign currency exchange and interest rates, competition, OneSteel's relationships with, and the financial condition of, its suppliers and customers, legislative changes, regulatory changes or other changes in the laws which affect OneSteel's business, including environmental laws, a carbon tax, proposed mining tax and operational risk. The foregoing list of important factors is not exhaustive. There can be no assurance that actual outcomes will not differ materially from these statements.

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Paul Leever, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Leever is a full-time employee of OneSteel Manufacturing Pty Ltd. Mr Leever has 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 of Exploration Results, Mineral Resources and Ore Reserves'. Mr Leever consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

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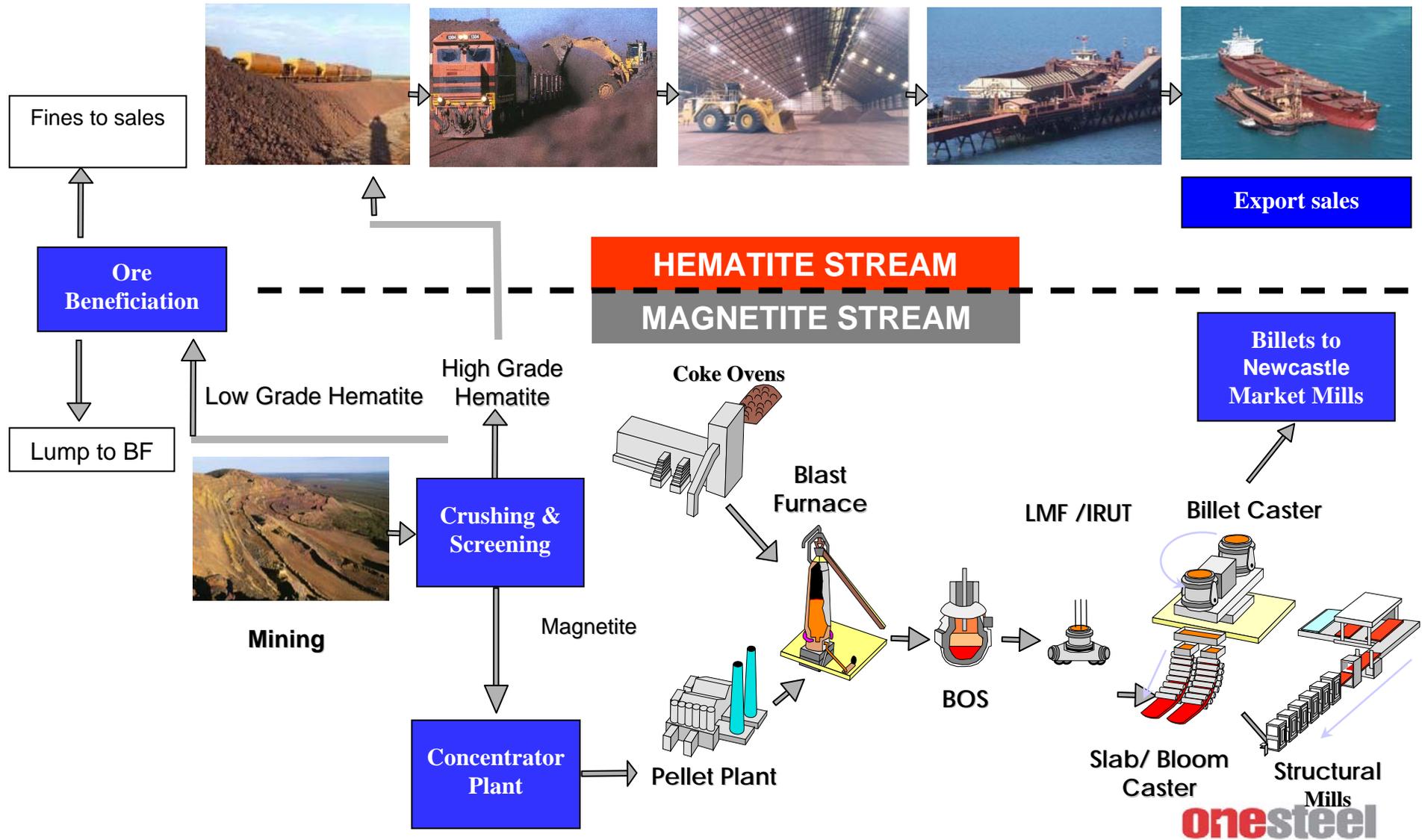
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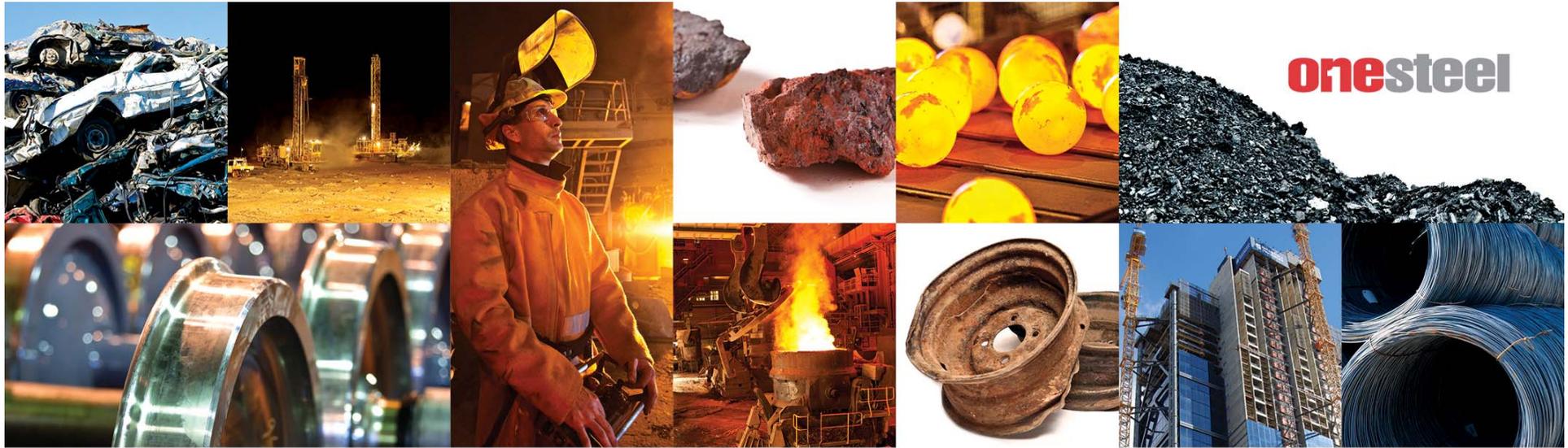


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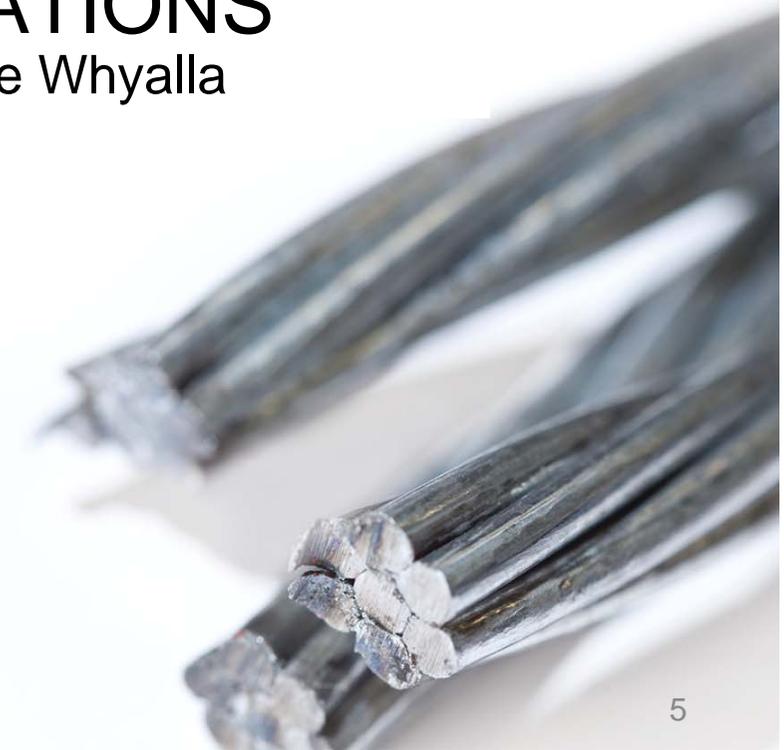
# Whyalla operations – process flow





# IRON ORE OPERATIONS

Mark Parry – Chief Executive Whyalla



# OneSteel operations



Iron Ore	Recycling	Manufacturing	Australian Distribution
<b>Iron ore mines</b> Iron ore lump Iron ore fines Lower grade ore Pellets <b>Dolomite mines</b>	<b>Australian Recycling</b> <b>International Recycling</b> (USA and Asia)	<b>Whyalla Steelworks</b> Structural Rolling Mills Rail Products Facilities Slabs & Billets Steelmaking by-products (e.g. coke) <b>Laverton Steel Mill</b> Electric Arc Furnace Laverton Rolling Mills <b>Sydney Steel Mill</b> Electric Arc Furnace Sydney Bar Mill <b>Waratah Steel Mill</b> Electric Arc Furnace Bar Mill, Rail and Forge Grinding Media (US) <b>Newcastle Rod Mill</b> <b>Wire Mills</b> Newcastle Wire Mill Geelong Wire Mill Wire Ropery <b>Australian Tube Mills</b> <b>LiteSteel™ Technologies</b>	<b>Metaland</b> <b>Piping Systems</b> <b>Sheet, Coil &amp; Aluminium</b> <b>Steel and Tube</b> <b>Australian Reinforcing Company (ARC)</b> <b>OneSteel Reinforcing</b>

New Zealand Distribution segment not included (represents OST's 50.3% shareholding in Steel & Tube Holdings Limited)

## Whyalla mines & export – output levels



Operating Unit	1H11	2H11E	FY11 Estimated Output
Mining Volume	8.2m bcm*	9.8m bcm*	18m bcm*
Concentrator	756kt	785kt	1541 kt
Pellets	793kt	814kt	1607kt

\*bcm – bank cubic metres

## Iron ore operations – 2010



- Overall objective is to deliver supply chain capability and capacity to maintain 6mt pa of external iron ore sales for at least 10 years whilst reviewing options to debottleneck supply chain constraints to increase annual volumes
- Continue exploration program to identify and prove up increases to reserves to maximise mine life and optimise life of mine
- Review opportunities to deliver higher returns through grade and volume trade offs (HGO to MGO), increased reserves and volumes (MGO initiative) and increased pellet sales
- Cost effective processing and transport of hematite ore and magnetite slurry to meet export and steelworks feed requirements within defined specifications



## Iron ore supply chain

### Current rate and constraints

- The iron ore supply chain, mining through to transshipping, is currently running at a rate that is expected to deliver iron ore at a rate at the upper end of the 6 to 6.5mt range previously indicated for sale this year. This will include a higher level of MGO (up to 2mt)
  
- Work on constraints and bottlenecks include:
  - reserves of HGO and MGO to support higher rates for 10 years
  - ramp up in mining capacity (equipment, people and infrastructure to support)
  - managing the planning and complexity of additional mines and the phasing of the development and sequencing of these (systems and people)
  - rail (wagons, passing loops and loco power)
  - export shed capacity (particularly with a combination of HGO and MGO)



## Reserves and resources

- Reserves at end June 2009 – 32.5mt @ 61.5% Fe
- Reserves at end June 2010 – 46.2mt @ 60.9% Fe
  - Highest level since commencement of Project Magnet
- In addition OST has LGO stockpiles of  $\approx 20$ mt giving  $\approx 10$ mt yielded post beneficiation. (NB: OST add at least 1 – 1.5mtpa of LGO to stockpiles each year)
- Exploration continues to indicate positive signs of success (for both HGO and MGO) with further drilling required to take to JORC compliance
- A total of approximately 0.4mtpa of lump is used to feed the blast furnace  
Whilst we continue to factor this in to our planning, in the future if necessary:
  - blast furnace lump can be replaced with pellet
  - LGO stockpiles can be allocated for beneficiation and lump feed for the blast furnace
  - there will be continued opportunities for remnant mining of HGO, MGO and LGO deposits to provide lump feed for the blast furnace



## Infrastructure and mine developments

- The Hematite Extension Project (HEP) is currently made up of 13 key projects
- The phasing, timing and on time completion of these projects is imperative to maintaining grade for contract customers and to enable the delivery of the sales target of 6mt for at least 10 years
- The project involves:
  - mine cutbacks
  - a range of infrastructure capital projects
  - regulatory approvals
  - readiness to operate (RTO) requirements
  - improved mine planning capability
  - increases in mining fleet and capacity
  - review and development of options to secure water supply for total mining operations



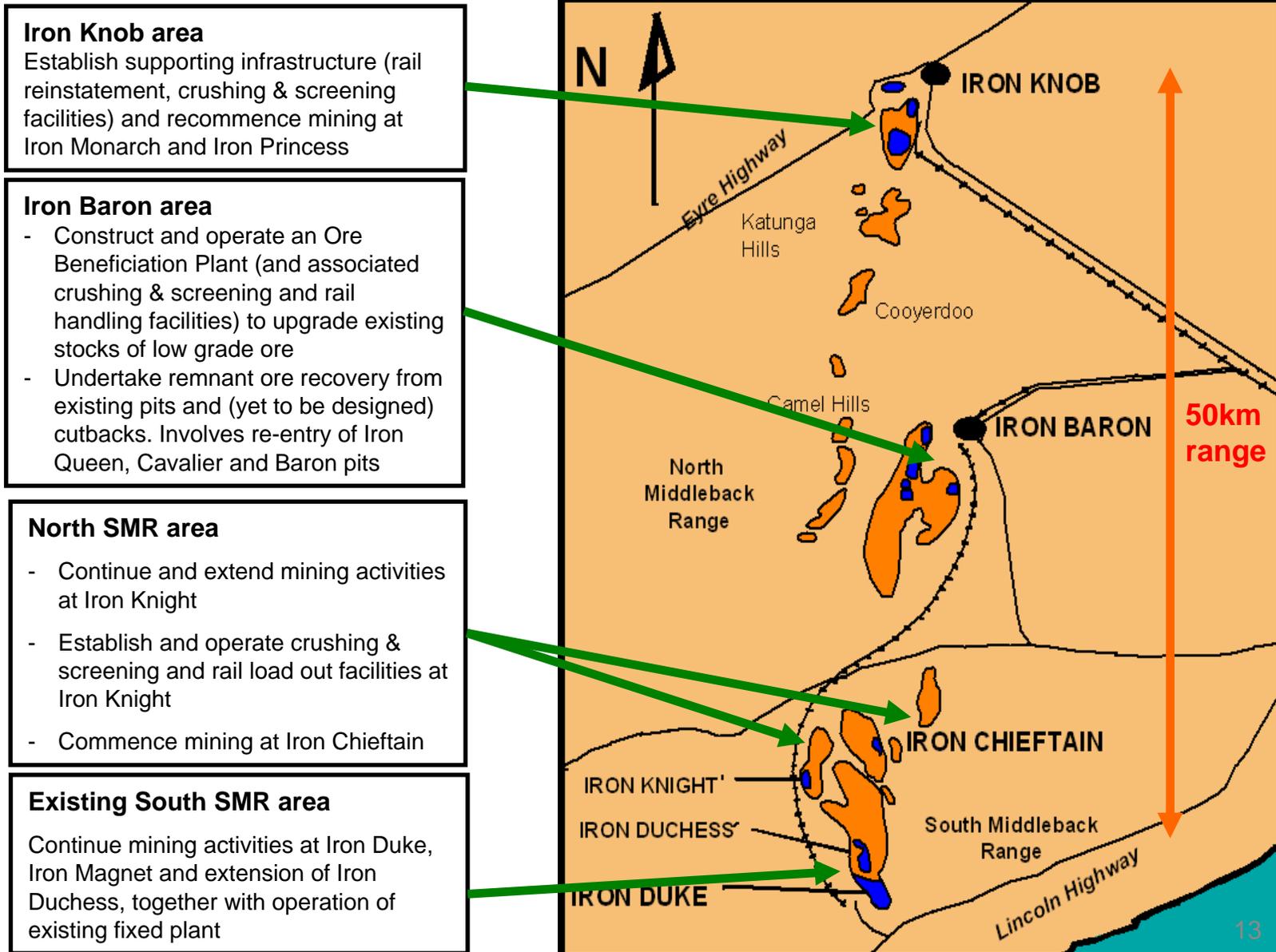
## Investment to support 6mtpa for at least 10 years

- OneSteel has previously announced that capital expenditure of approximately \$350m\* will be required over a 5 to 7 year period to support the objective of 6mt pa for at least 10 years. This includes a combination of infrastructure and cutbacks in a roughly 40:60 split
- The current phasing sees a bias towards spending on infrastructure on the current and subsequent financial year, followed by a heavy bias towards mine development
- Current capital spend in FY11 on infrastructure approximately \$74m, and \$20m on cutbacks

\*Based on estimates made in 2009 to assist with indicative cash flows



# HEP mining activity location map

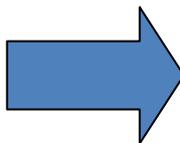




# Growth in OneSteel mining operations to 2012

## 2007

- 4 active pits (Iron Duke, Iron Magnet, Iron Duchess, Iron Knight)
- Total Mine Movement 9.0 mBCM
  - 3 x 240 t excavator
  - 13 x Dump Trucks
  - 4 x Loader
  - 2 x 10 Hour Shifts 7 Days Per Week
  - SMR Workforce ~ 400
  - 1.8 Mt LGO (OBP Feed)
- Hematite export 4.4 Mt
  - 1 x Fixed Plant Crusher
  - 2 x Auxiliary Crusher
  - 1 x Rail Siding
  - 1 x OBP Plant (1.0 Mtpa)
- Hematite strip ratio 2:1  
High Grade Simple Ore Bodies
- Magnetite – Commissioning June 2007
  - Upper Ore Benches Accessed
  - Pre Strip Phase
  - Commenced Plant Commissioning



## Expansion Project @ 2012

- 7 Active Pits (Iron Duchess, Iron Knight, Iron Duke, Iron Magnet, Iron Monarch, Iron Chieftain, Iron Princess)
- Total Mine Movement >20 mBCM (Estimate)
  - 4 x 240T Excavator
  - 2 x 190 T Excavator
  - 18 x Loader
  - 40 x Dump Trucks
  - 24/7 Operation @ 3 Locations
  - Total workforce in excess of ~ 700
- Hematite Export > 6 Mtpa
  - 1 x Fixed Plant Crusher (SMR)
  - 3 x Mobile Crushers (NSMR, IBMA, IKMA)
  - 4 x Rail Sidings
  - 2 x OBP Plants (2.2 Mtpa)
- Hematite Strip Ratio 3.56:1  
High Grade Complex Ore Bodies
- Magnetite Stripping Ratio @ 1.48:1 @ 20% SiO<sub>2</sub>,  
41.5% Mass Recovery
  - 1.6 Mtpa concentrate per annum**
  - 4.5 Mtpa feed**





## Medium grade ore (MGO) – taking the opportunity

- OneSteel has been undertaking detailed planning to determine the sequencing and scheduling of reserves added through the exploration program. This work has indicated that there is an opportunity to selectively mine areas of these deposits to generate MGO that can be made available for immediate sale (vs stockpiled for beneficiation at a later date)
- This material is about 58% Fe (approx 50:50 split lump and fines) and has to be mined to access HGO deposits
- Given current market conditions, OneSteel has taken the opportunity to selectively mine and sell this material to supplement our volumes
- Although not factored into our reserve we believe there is at least 10mt in our resource that could be accessed
- We will continue to mine and ship MGO whilst the market is attractive and it makes sense in terms of returns



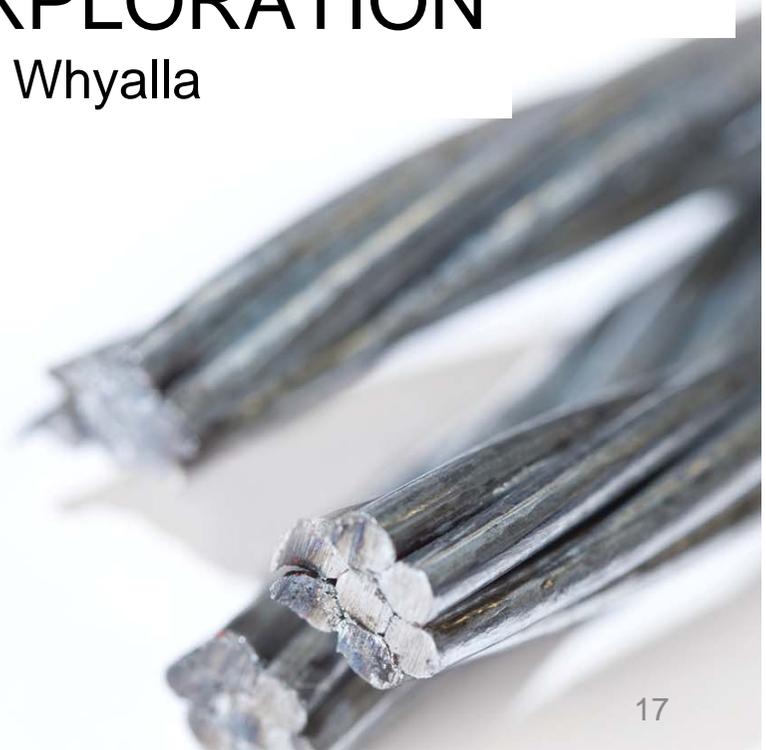
## Opportunity for increased pellet sales

- Project Magnet was based around a concentrator/pellet plant design capability of 1.8mt pa
- Work undertaken to resolve the silica issue has been successful. However, this has capped the annual production rate of pellets to approximately 1.6mt
- In the main, the 'below design' output is due to constraints and bottlenecks in the grinding circuit which is overloaded (further exacerbated by the silica screen solution and high silica in 'as mined' feed)
- Whilst projects to deliver continuous incremental improvements are progressed, work has commenced to understand the options and investment opportunities to increase pellet production:
  - assess the small, quick and low cost options to deconstrain the grinding circuit
  - assess the more significant and costly options to increase overall capacity
- Work to determine the optimum solution and choice is well progressed



# NON FERROUS EXPLORATION

Mark Parry – Chief Executive Whyalla





## Non ferrous exploration

### Why explore for non ferrous?

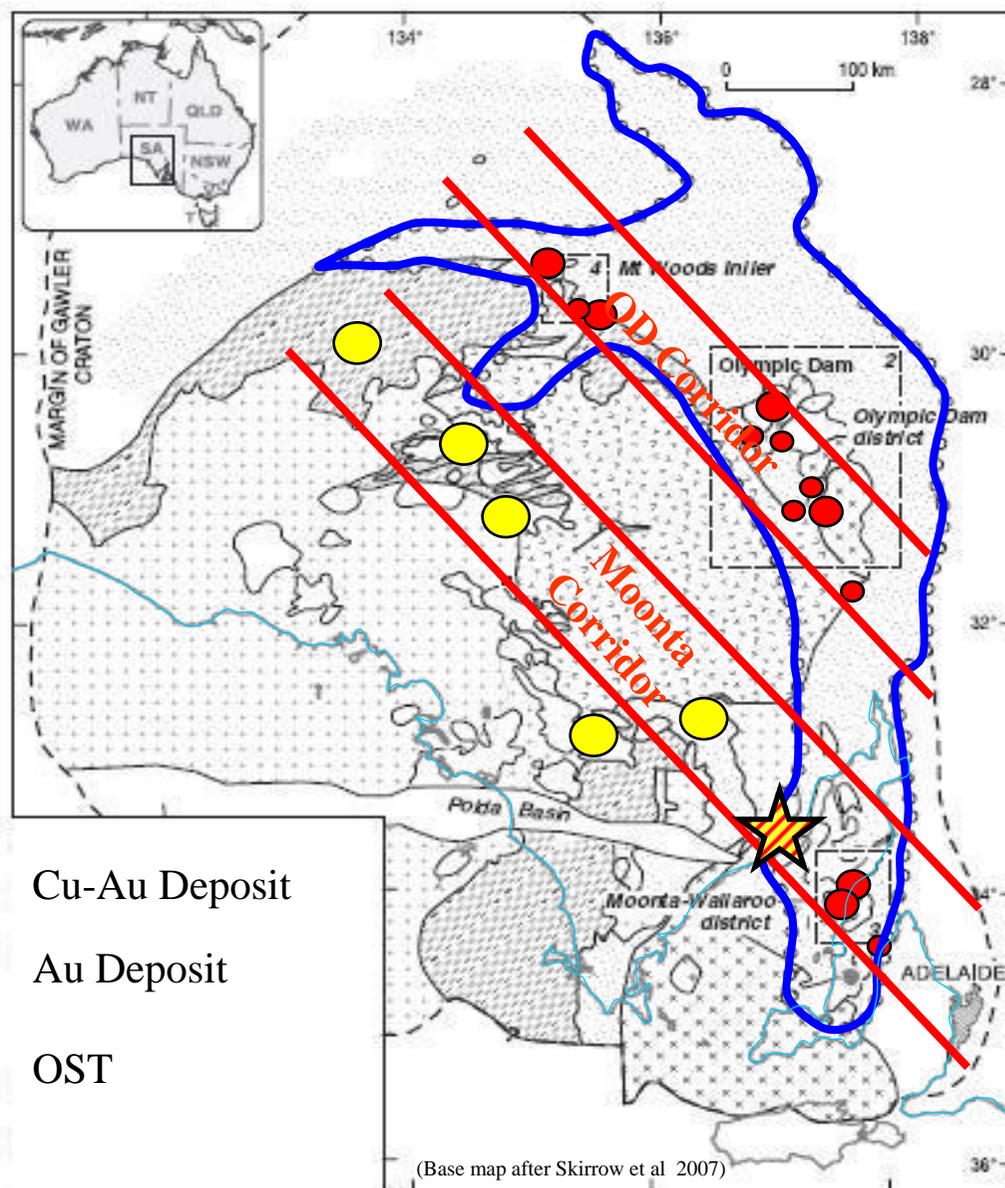
- Reasonable prospects for copper-gold
- Eastern Gawler Craton world-class Iron Oxide Copper Gold (IOCG) terrain (Olympic Dam, Prominent Hill, Carrapateena, Moonta, Hillside)
- OneSteel tenements highly prospective for copper and gold
- Grossly under-explored for non ferrous minerals
- Geologically favourable – lack of deep cover
- Excellent infrastructure



# Olympic Cu-Au Province – the right address

- The right rock types
- Plumbing system
- Granite as heat engine and source of metals
- Geochemical anomalies
- Copper in drillholes
- Shallow cover only

- ● Cu-Au Deposit
- Au Deposit
- ★ OST



## Progress to date



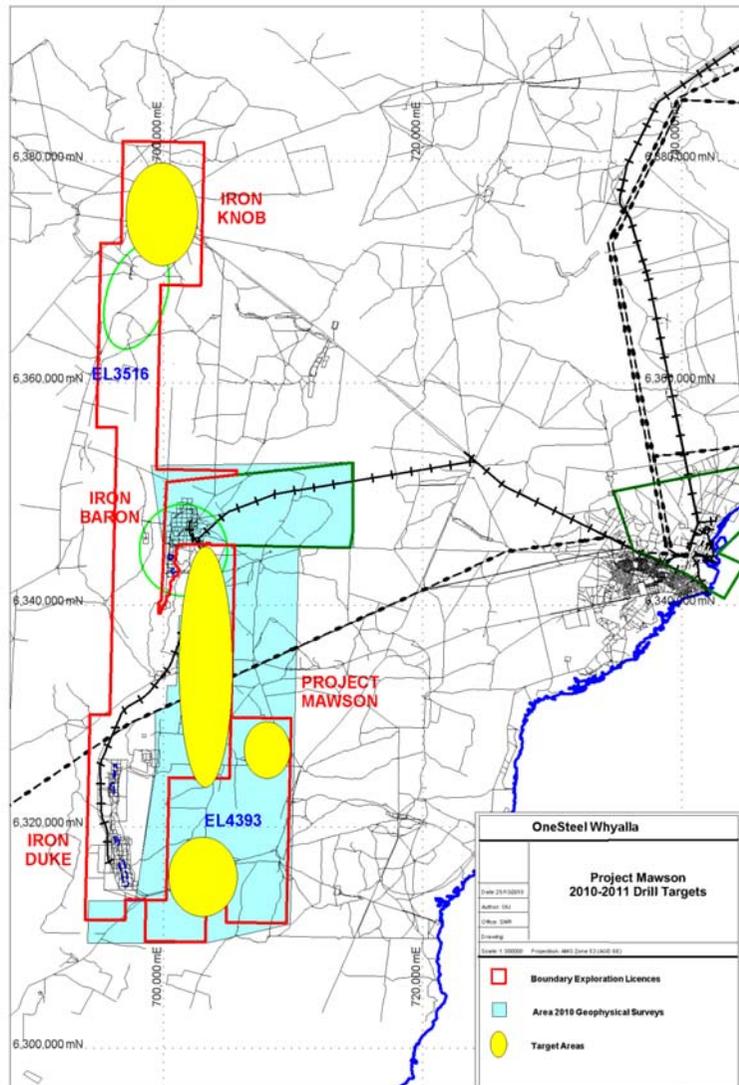
### STAGE 1 - completed

- Drilling confirmed geological model - chalcopyrite & native copper Nov 2009
- Commenced R&D projects with University of Adelaide Feb 2010
- Completed high resolution regional aeromagnetic and gravity surveys Mar - July 2010
- Defined drill targets Sept - Oct 2010

### STAGE 2 - underway

- RC and diamond drilling: to Oct 2011
- Define areas for more focussed resource drilling and resource estimation 2011- 2012 and beyond

## Stage 2 – proposed work



### 1Q 2011

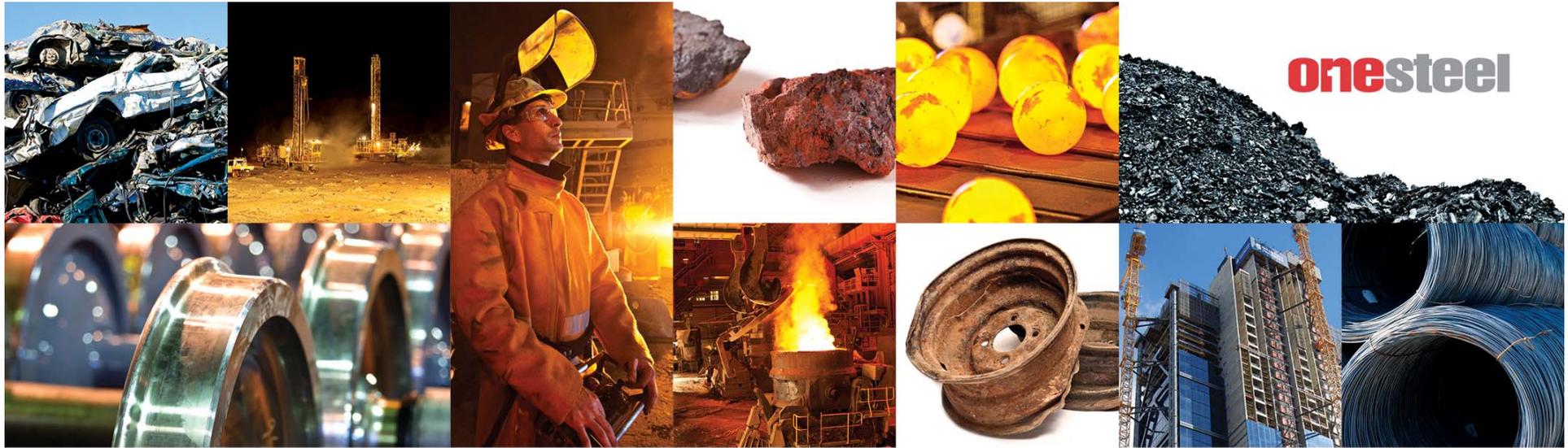
- First pass RC drilling of SE target areas, 800m x 200m spaced holes

### 2Q 2011 to 3Q 2011

- Follow up RC drilling of SE target areas, 400 x 100m spaced holes
- Diamond drilling of Iron Knob target area
- Diamond drilling of SE target areas as justified

### AIMS

- Complete approx 15,000m RC and diamond drilling (note: will not deliver JORC standard resource)
- Define mineralised areas for follow up drilling 2011-2012



# IRON ORE MARKETING

Greg Waters – Chief Executive Recycling/Iron Ore Marketing





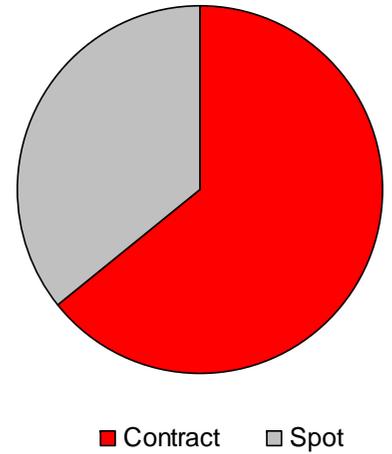
## Iron ore marketing

- End of benchmark pricing system in FY10
- New pricing arrangements now much closer to spot prices
  - from pricing perspective, no significant difference between contract and spot customers
- OneSteel's contract pricing arrangements now complete
  - each customer wanted own pricing mechanism (options provided)
  - all but one customers' annual pricing expires 31 March
  - contracts adjusted to provide more flexibility (volumes, product type, scheduling, pricing)

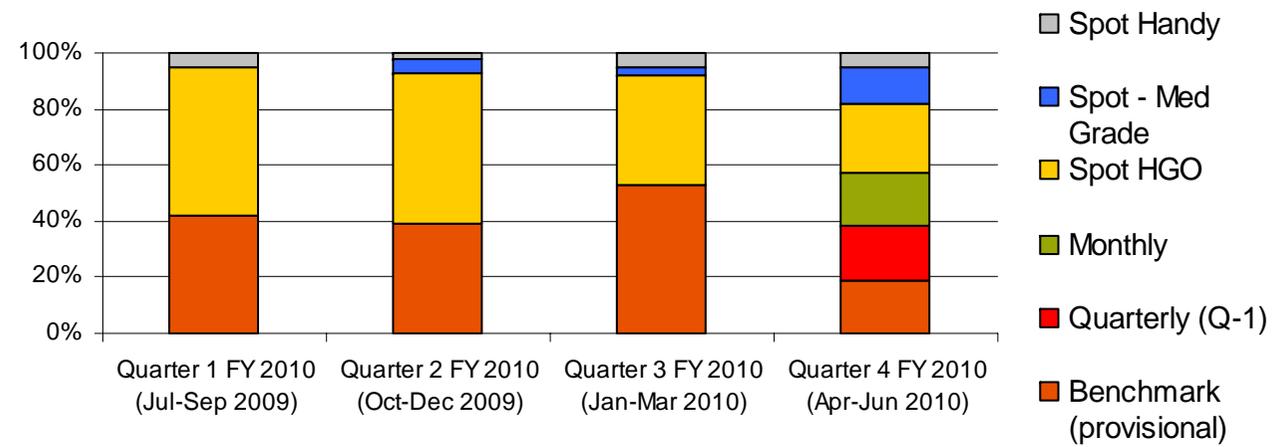


# Iron ore – FY10 shipments/contracts

Contract/Spot (planned)\*



Shipment types by pricing method



\*3 contract shipments in 2<sup>nd</sup> half were converted to spot



## Marketing strategy – strong relationships

- OneSteel believes holding to a strong set of marketing principles will provide longer-term value through
  - better understanding of each others' operating styles and needs
  - flexibility for both parties in times of change (i.e. energy cuts or weather issues)
  - stronger longer term dynamic to product development and raw material needs
  - potential linkage to other OneSteel sales/purchases, including ferrous and non-ferrous scrap
  - medium grade shipments to some long-term customers
- During uncertainty of 2009, OneSteel supported a core group of contract customers through adjusted schedules, pricing and higher volumes in demand peaks
  - generated a range of mutually beneficial outcomes for core customers
  - enabled our marketing plan to better suit the mining operation while recognising the critical needs of core customers
- In 1Q FY11 strong customer relationships helped achieve the Q-1 pricing for customers in that category - a good outcome given downward market pressures



## Marketing strategy – going forward

- “Our promise” for contracted customers is to strive to meet their key needs (consistent supply, grades and schedule flexibility during times of difficult market conditions)
- In return, customers have and will also consider schedule flexibility to enable maximum output from OneSteel mines
- OneSteel added Tangshan Ruifeng as a core customer commencing this year
  - Ruifeng has a very strong management and highly principled to longer term relationships
  - Ruifeng were listed as the 4<sup>th</sup> most profitable per tonne last year (CISA)
- Present level of contracted customers is appropriate for our High Grade ores.
- We anticipate around 60-70% of our export material will be contracted (vs spot sales) in FY11
- Potential to add some additional longer-term customers utilising MGO
  - OST is a reliable supplier
  - focusing on mills with or close to own coal supplies

## Marketing strategy – pricing closer to market

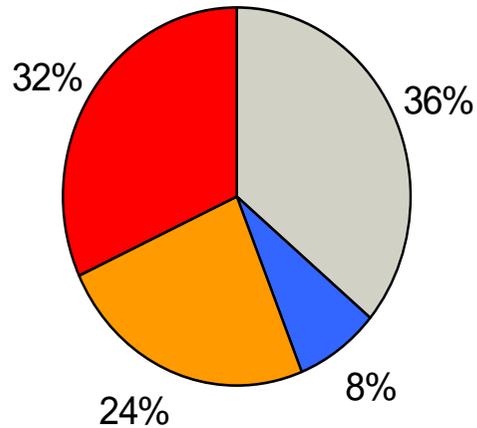


- OneSteel has a range of pricing methods predominantly split into 4 categories
  - Q-1, M-1, M and spot
- These arrangements provide a more “balanced” revenue book
- Most mills are seeking closer to market based pricing and we will likely move this way with one or more customers (from new contract year)
  - likely to include some MGO material for one or more long-term customers
    - favourable outcomes for OneSteel

# Iron ore – FY11 contract pricing (likely)

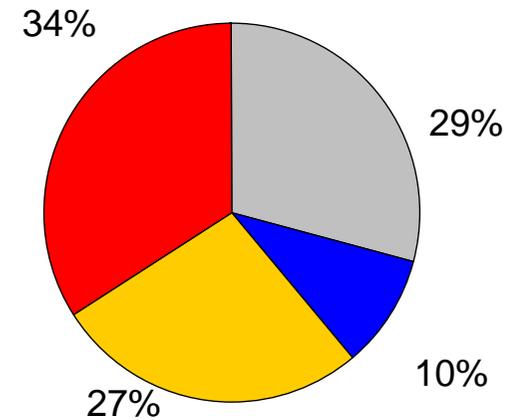


## As advised at FY10 results



## Current expectation

(includes Q4 FY10 which first quarter of new contract year for most customers)



□ Previous Quarter    ■ Previous Month    ■ Month of Shipment    ■ Spot

Pricing:  
Previous Quarter = average (spot price) over previous quarter  
M = pricing based on average of monthly spot price  
M-1 = pricing based on average of spot in previous month to shipment



## Iron ore – MGO opportunity

- MGO stockpiled historically
- Market demand and mine sequence provided an opportunity to sell stockpiles in Q3 and Q4 FY10
  - This process was successful with strong interest from a few players for repeat sales
- Decision to export up to ~2m mt of MGO in FY11
  - intent to have both spot and contract
  - will involve present contracted customers
  - ongoing positive discussions with other potential longer-term customers



## Iron ore – FY11 estimates

- On track for sales at upper end of 6.0mt – 6.5mt for year
  - Fines/lump mix (55% / 45%)
  - Likely to include up to 2.0mt of MGO
  - HGO FE 61% - 62.5%
  - MGO 56% - 60%



## Market view

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- We have long association with China and market dynamics
- China mills more independent and seek positions for their commercial benefit
- World is depleting high grade ores (until new supply comes on stream)
- China has also utilised much of its lower cost ores
- India expected to continue exporting ores for some time but increasing domestic pressure to retain for local consumption
- New mines expected to be harder to commercialise and meet time commitments than market expects
  - Australia/Africa = resources, skills, distance, infrastructure, location & government(s)
- Europe and other economies expected to recover (although not around corner), this likely to pull more material to Atlantic, particularly from Vale
- China expected to continue to grow steel capacity, albeit by replacement and efficiencies
- China market easily consumes ~70/80mt inventory stockpiles
- But partially offset by:
  - western capacity expected to reduce (real terms)
  - environmental restrictions in China – initially sporadic leading to more consistent standards
  - potential new ore bodies that can be commercialised within 5 years



# WHYALLA MANUFACTURING

Mark Parry – Chief Executive Whyalla



# OneSteel operations



Iron Ore	Recycling	Manufacturing	Australian Distribution
<b>Iron ore mines</b> Iron ore lump Iron ore fines Lower grade ore Pellets <b>Dolomite mines</b>	<b>Australian Recycling</b> <b>International Recycling</b> (USA and Asia)	<b>Whyalla Steelworks</b> Structural Rolling Mills Rail Products Facilities Slabs & Billets Steelmaking by-products (e.g. coke) <b>Laverton Steel Mill</b> Electric Arc Furnace Laverton Rolling Mills <b>Sydney Steel Mill</b> Electric Arc Furnace Sydney Bar Mill <b>Waratah Steel Mill</b> Electric Arc Furnace Bar Mill, Rail and Forge Grinding Media (US) <b>Newcastle Rod Mill</b> <b>Wire Mills</b> Newcastle Wire Mill Geelong Wire Mill Wire Ropery <b>Australian Tube Mills</b> <b>LiteSteel™ Technologies</b>	<b>Metaland</b> <b>Piping Systems</b> <b>Sheet, Coil &amp; Aluminium</b> <b>Steel and Tube</b> <b>Australian Reinforcing Company (ARC)</b> <b>OneSteel Reinforcing</b>

New Zealand Distribution segment not included (represents OST's 50.3% shareholding in Steel & Tube Holdings Limited)



## Whyalla manufacturing overview

- OneSteel's manufacturing segment comprises:
  - Whyalla Manufacturing
  - Market Mills
  
- Whyalla Manufacturing includes the following operations:
  - Ironmaking (including coke ovens, blast furnace and power & services)
  - Steelmaking (including BOS, ladle treatment, billet caster and combi caster)
  - Steel products (including Rolling Mills and Trak-lok)

# Whyalla manufacturing overview

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- Products produced:
  - Coke and coke by-products
  - Flat iron
  - Slabs
  - Billet (feed for Market Mills)
  - Hot Rolled Structurals
  - Rail
  - Sleepers and sleeper systems

## Whyalla manufacturing – market conditions



- We are seeing a small but steady improvement in domestic demand for hot rolled structurals (but off a low base) as distributors demand increases and inventory levels bottom
- The high exchange rate has improved the competitiveness of imported product prices, resulting in continued price pressure across the product range
- Demand for rail products is good given the ARTC order and demand from our normal customer base

# ARTC Rail supply contract



- An order of approx 120kt for mainly 60kg plain carbon rail to be delivered over the next 20 months

## **ARTC SIGNS HISTORIC DEAL WITH ONESTEEL** (ARTC Press Release 14th August 2010)

*Australian Rail Track Corporation today signed one of the largest rail infrastructure supply deals in a decade with OneSteel to produce steel rail for projects announced as part of the equity investment by the Australian Government in the May Budget..*

*Specifically, OneSteel has been commissioned to supply 2,200kms of steel rail to be used as part of the \$110 million Albury – Melbourne – Geelong re-railing project; and the \$312 million Whyalla – Broken Hill and Parkes – Cootamundra re-railing project.*





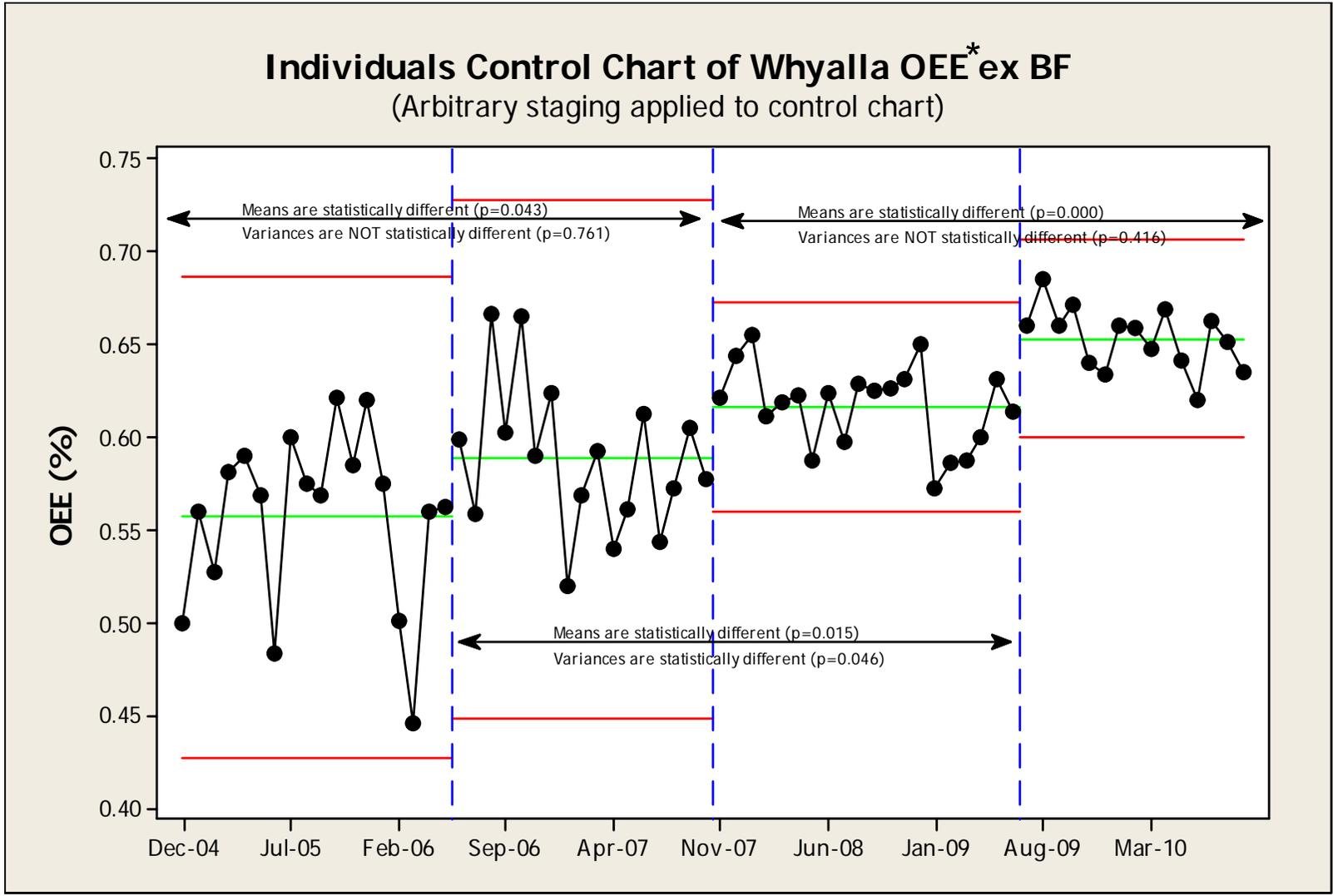
## Whyalla manufacturing

### Main areas of focus

- Continue to drive core values of safety and customer
- Drive **step change sustainable cost improvement and on time delivery of promise to customers**, through:
  - **reliable and predictable assets and equipment**
  - building competence and capability of workforce (process, leadership and social skills) through the implementation of the OneSteel Operating System
- Optimising and maximising returns in alignment with Market Mills, Recycling and Distribution via the steelmaking sales and ops planning processes (**right products, made at right time, on right asset**)
- **Relentless drive on reducing loss, waste and variation**
- Attraction, retention and development of a skilled and capable workforce through succession planning, employee development and performance management
- Successful on time and on budget completion of the blast furnace repair/re-design work, including commissioning and ramp up to enable full extraction of improved blast furnace productivity

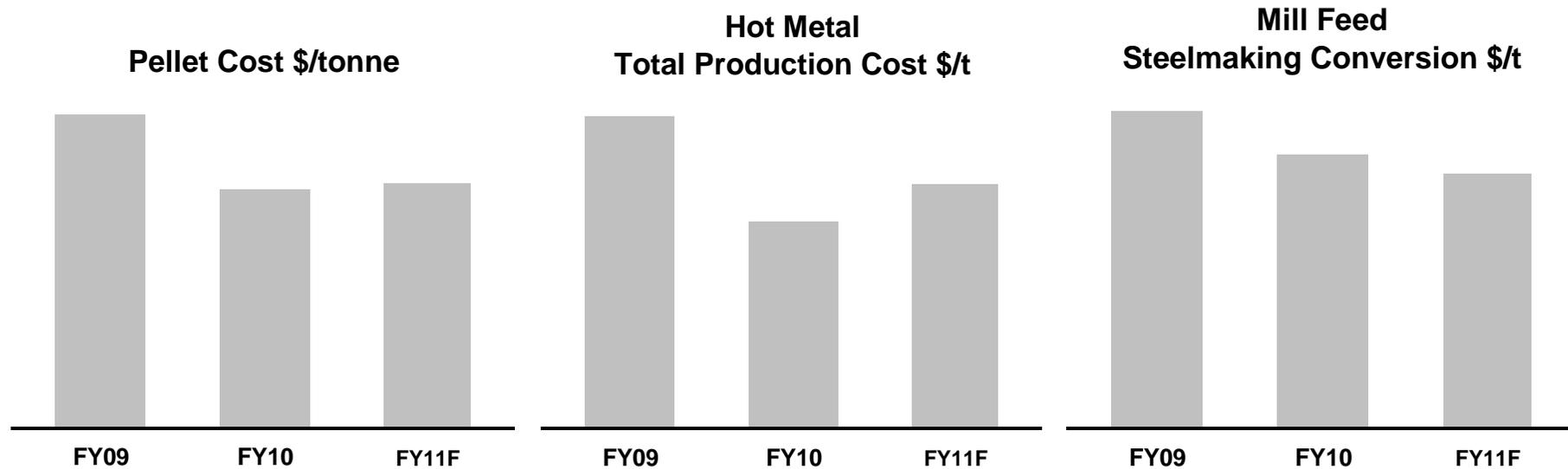


# Some signs of improvement

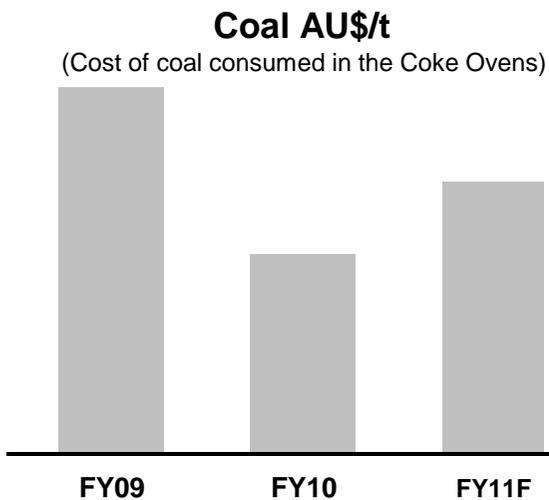


\*OEE – overall equipment efficiency

# Whyalla manufacturing - costs



Note hot metal production costs exclude blast furnace impacts



- Performance relative to FY10
  - Improved pellet cost in FY10 has been sustained in FY11.
  - Increased Hot Metal costs reflect higher coal prices
  - Mill feed conversion is favourably impacted by the increased ARTC volumes



## Blast furnace repair/re-design work

- The work will replace the lining components that have been exhibiting accelerated wear following the 2004 reline
  - existing copper staves in rows 1 to 5
  - refractory materials in the lower bosh and tuyere band
  - replacement of buckled and cracked sections of the bosh shell plate
  
- Currently scheduled to commence in May 2011 and expected to take approximately 49 days followed by a 34 day commissioning and ramp up period
  
- Expected to extend life of blast furnace beyond 2020





## Blast furnace repair/re-design work

### Ensuring success

- The root causes, design solution and implementation methodologies have all been validated and verified by internal reviews, third party reviews and visits to overseas reference sites
- The solution is proven technology
- A lump sum contract for design and procurement of long lead time items has been signed with Danieli-Corus for the supply of the replacement section of lining and key methods associated with furnace run-down, hot hearth capping and blow in
- We are in the final stages of negotiating a construction contract with clearly defined and documented scope and with allocation
- Scope is being tightly controlled with any variation requiring approval
- A project team, steering team and resources are in place
- Cost control and tracking processes are in place (leveraging from Project Magnet learnings)
- The remaining risk to scope is the emergence of any unexpected work that will not be known until the furnace is opened up (mitigated to some degree through the overseas reference site visits which have undertaken similar work)



## Blast furnace repair/re-design work

### Significantly different to April 2010 interruption

- In Q4 FY10 Whyalla experienced a chilled hearth in the blast furnace. This incident followed an unplanned stoppage in early April when the bosh expansion joint ruptured following the reintroduction of pressure (wind) to the furnace. The furnace had been brought off line briefly due to a disruption in steam supply.
- On inspection, degradation of the bosh refractory was observed, extending the repair time.
- As this shutdown was unplanned, the blast furnace was not burdened and prepared for an extended shutdown. As a result, the extended repair resulted in chilling of the hearth and stack burden.
- The restart was further delayed when delivery of specialist equipment was delayed in Europe by approximately 8 days (Iceland volcano)
- This specialist equipment, a high pressure gas-oxy lance inserted into the normal taphole, failed to work given the unique state of the blast furnace at the time (inadequate porosity of the hearth coke bed).
- A restart was eventually successful following the use of the more conventional method, the manual lancing between tuyere and emergency taphole
- Conventional method successful and 'wind-on' achieved early May
- Resumed steelmaking late May after reheat, ramp up and reestablishment of normal tapholes
- Returned to normal operations early June



## Blast furnace repair/re-design work

### Nature of planned Q4 FY11 work

- Totally different from the events that lead to the chilled hearth in Q4 FY10
- Blast furnace will be progressively emptied of liquid material and burden using a defined and proven method
- The work is a planned event that has been rigorously assessed by OneSteel, been subjected to independent third party review and incorporates learning's and experience gained from reference plants that have recently undertaken similar processes
- The restart will involve tried and proven methods that have been used for many decades by a large number of steelmakers, including OneSteel
- The restart and commissioning process will include on site attendance by skilled and experience international experts who have completed similar events



## Blast furnace – repair/re-design work

### Implications

- The work is being carried out with the aim of no disruption of supply to meet customer demand. This will be achieved through a stock build of billet and slab/bloom feed and an increase in EAF billet make
- Peak incremental stocks occur at the end of April 2011 and are mostly consumed by the end of June 2011
- Surplus lump, pellets and coke will be sold externally to mitigate cost impacts
  - Lump ≈ 50kt (approx 30kt in FY12)
  - Pellets ≈ 200kt (approx 100kt in FY12)\*
  - Coke ≈ 80kt
- Planning is underway to minimise the number of non-operational people on site during the repair (employees and contractors). Mine operations, including mining, concentrator, pellet plant and iron ore export stream will continue as normal. As will the coke ovens and rolling mill
- Based on current prices, the EBIT impact is estimated to be between \$0m and \$10m<sup>^</sup>
- Capital cost is expected to be \$60m to \$65m. Based on this capital cost, the inventory build and subsequent run down, and current market price assumptions, an adverse cash impact is expected in FY11 (approx. \$50m)

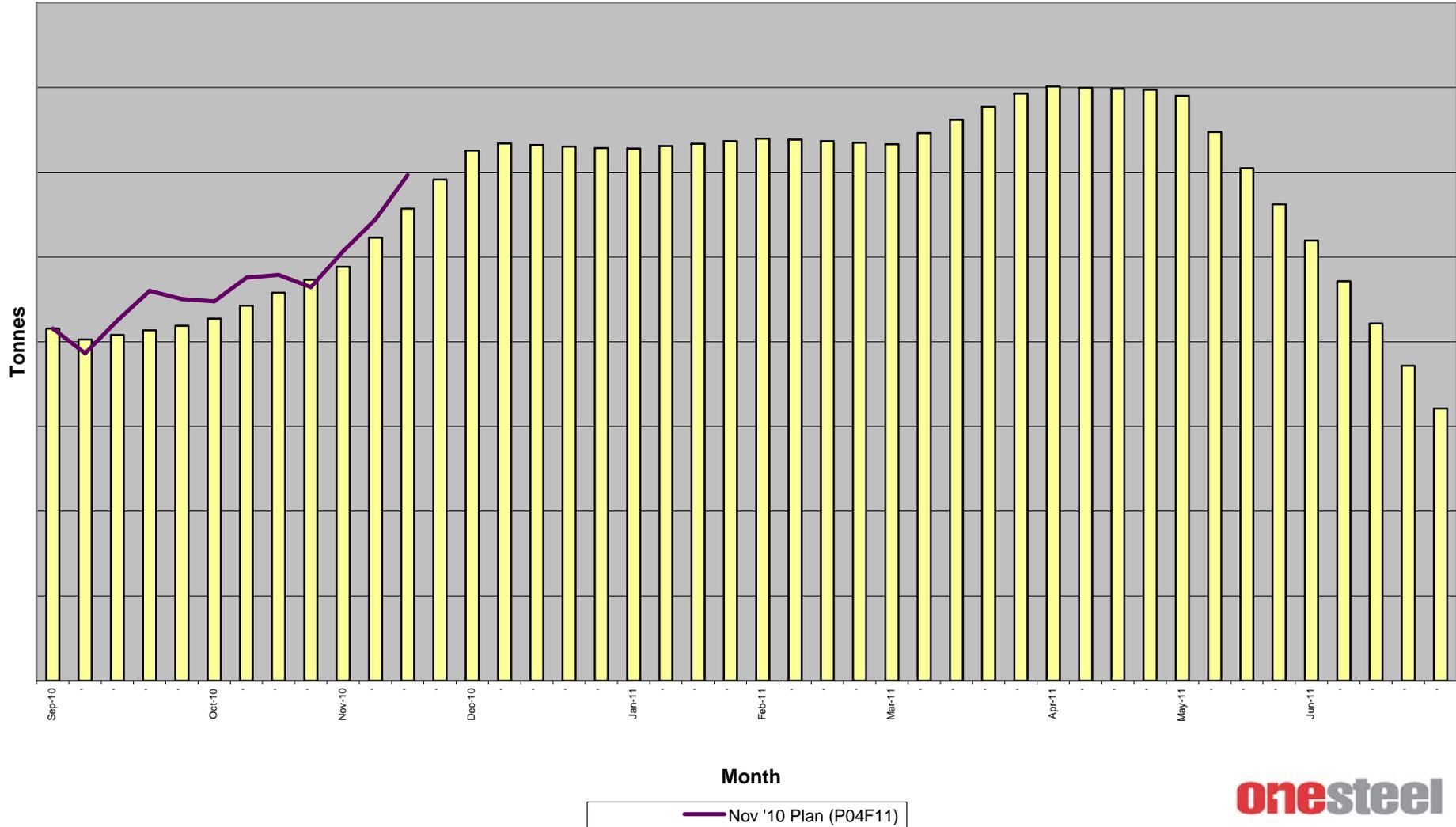
\*Note total pellet sales in FY11 will be approx 300kt (including approx 200kt of pellets being sold to mitigate BF work impact)

<sup>^</sup>Actual impact will depend on prevailing prices at the time the work is undertaken

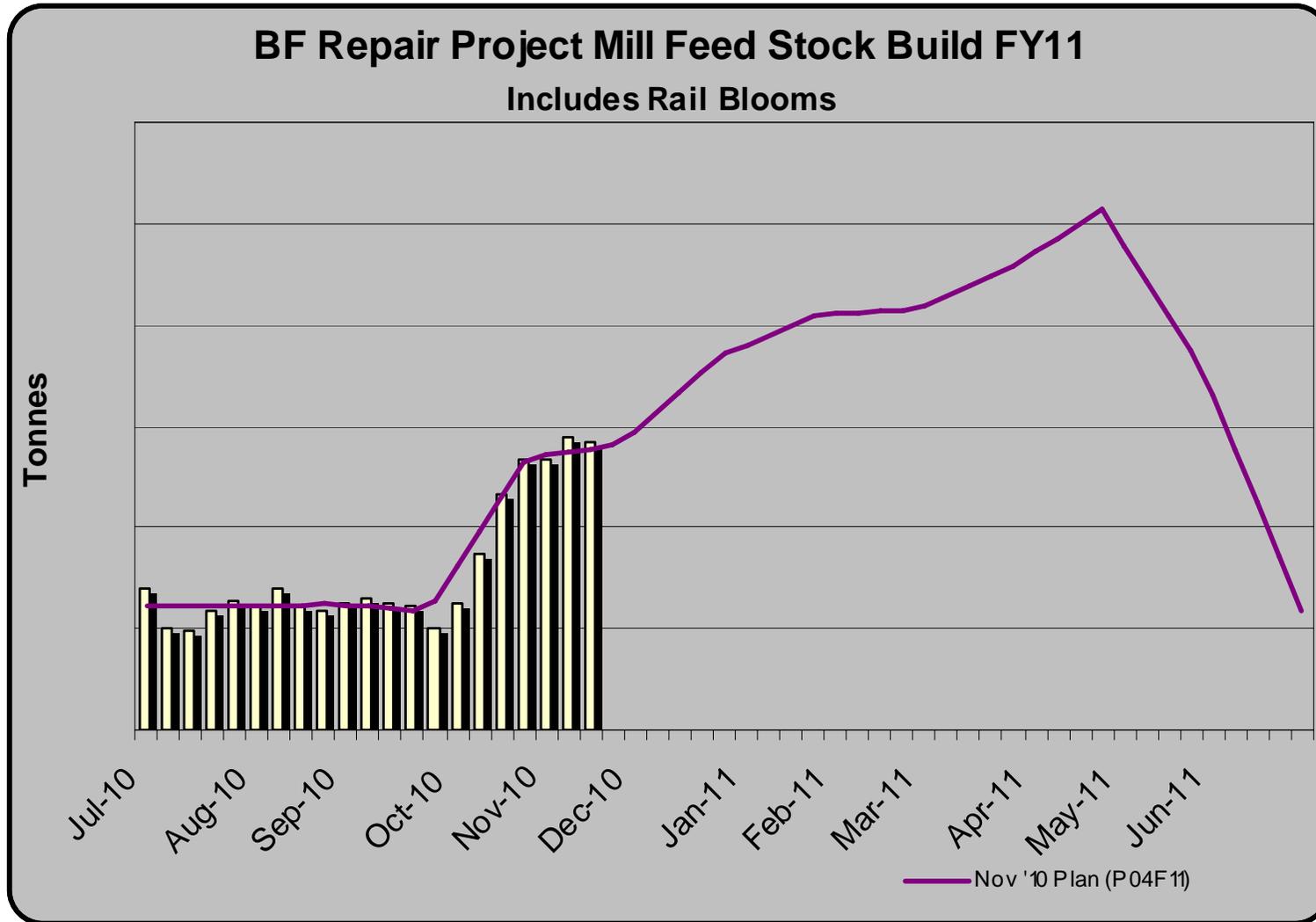
# Blast furnace repair/re-design work

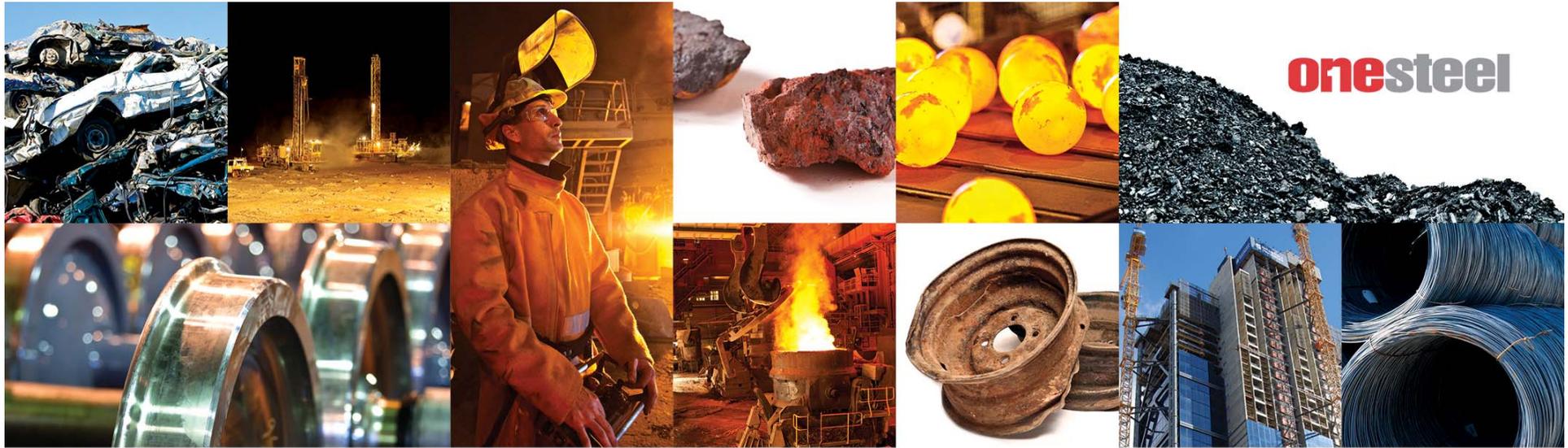


Total Billet Stock Build



# Blast furnace repair/re-design work



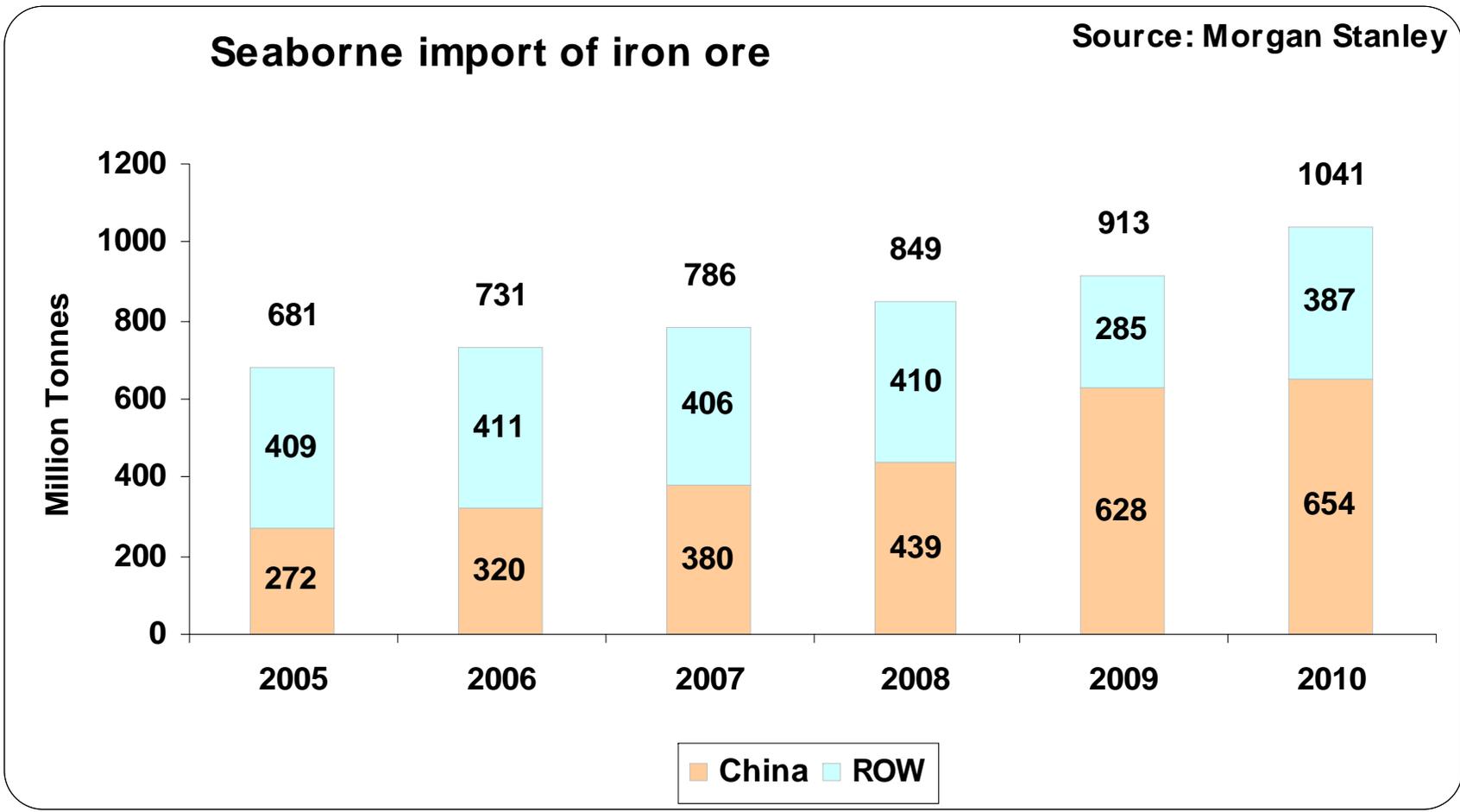


# APPENDIX





# Appendix - China's seaborne imports of iron ore





## Historical data – 12 months ended 30 June

### Iron Ore – Historical Information

	FY10 \$m	FY09 <sup>1</sup> \$m	FY08 \$m
Revenue/Income	782.3	598.5	561.2
EBITDA	361.2	138.0	220.9
EBIT	333.4	113.0	212.9
Sales Margin %	42.6%	18.9%	37.9%
Assets	816.7	769.2	542.0
Funds Employed	717.4	688.9	461.8
ROFE %	47.4%	19.6%	46.1%
Employees (number)	339	357	152
Total lump & fines (mt)	6.03	5.07	4.46
Pellet & Ore by products (mt)	0.81	0.69	0.88

<sup>1</sup> The FY09 results have been restated to reflect changes in organisation structure announced in February 2010 effective from 1 July 2009. The pellet plant operations previously reported as part of the Manufacturing segment are now reported as part of the Iron Ore segment.



## Integrated steelworks facilities

### Casters

- Whyalla's casting facilities include a combi caster (combination slab/bloom/billet caster) installed in 1992 and a five strand billet caster installed in 1999. The billet caster was further upgraded in 2008 to be capable of casting billets up to 160mm
- Billets are supplied to OneSteel's east coast rolling facilities (Market Mills)
- Bloom and slabs are used to feed rolling mill at Whyalla. Some slabs are sold directly to re-rollers to produce various flat products



Billet

~ 12m x 127mm<sup>2</sup>

~ 12m x 160mm<sup>2</sup>



Slab

~ 12m x 600 to 1850 x 250mm

Bloom

~ 8m x 300 to 450mm x 250mm

**onesteel**



## Integrated steelworks facilities

### Rolling Mill

- Whyalla's rolling mill commenced rolling ingots in 1964. Rail finishing was added in 1982. New rolling stand and mill upgrades were undertaken in 1992 (revamp for slabs/blooms). A further upgrade was undertaken in 1996 (cooling beds and capacity upgrade)
- The rolling mill produces structural products (columns, beams, channels and angles), rail and feed for steel sleepers
- Structural products are distributed to domestic steel distribution companies, including OneSteel Distribution. They are used in structural frames for buildings, factories, bridges and other infrastructure (see example right).
- Rail and sleepers are sold direct to end users



# Integrated steelworks facilities



Rolling mill – finished products



Columns (100mm to 310mm)



Beams (150mm to 610mm)



Channels (150mm to 380mm)

Angles (125mm to 200mm) & (150 x 90 and 150 x 100)

# Integrated steelworks facilities



## Rolling mill – finished products

- Columns (100mm to 310mm) and



- Beams (150mm to 610mm)



- Channels (150mm to 380mm)  
&  
Angles (125mm to 200mm)  
and (150 x 90 and 150 x 100)

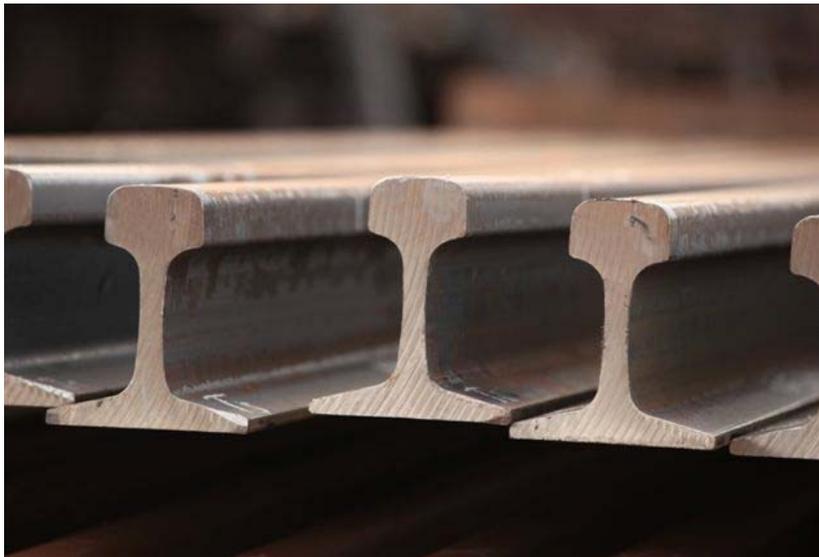


# Integrated steelworks facilities



## Rolling mill – finished products

- Rail (41kg/m to 68kg/m Plain Carbon and Head Hardened)
- Sleeper Section (6.5mm to 10mm)





# Labour

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- Whyalla OneSteel employees
  - 1,698 (as at end Oct 10), inclusive of additional labour associated with the ARTC order and resources allocated to the BF repair project and Mines and Export expansion projects
- Significant contractor base ~ 40% of hours
  - Mining - HWE
  - Railways – Genesee Wyoming
  - Materials Handling - Brambles / Metserv
  - Oxygen - BOC
  - IT Support - CSC
  - Laboratories - Amdel
  - Engineering – Worley Parsons
  - Sea Transport - CSL/ISM
- Focus on reducing number of contractors and service delivery cost (greater proportion of variable vs fixed costs)

# OneSteel Whyalla – facility upgrades



Event	Year
<b>Ore Products</b>	
Pellet Plant	
PP starts as export facility	1968
Flux pellets for Whyalla	1981
Waste Gas Cleaning Plant	1998
Kiln and cooler upgrade	2002-2005
Roller Feeder replacement	2002
Grate Upgrade	2006
Filter Flux commissioned	2007
Rail	
Major track upgrade, (inc 40 to 60km/h)	Comp (2006)
New fleet (56) higher capacity wagons	Comp (2006)
Upgrade 75 RSK wagons	Comp (2006)
Ore Beneficiation Plant commissioned	2005
Crushing and Screening commissioned	2007
Concentrator commissioned	2007
Export Ore Facility Commissioned	2007
<b>Coke Ovens</b>	
Battery 1 (72 ovens)	1968
Battery 2 (36 ovens)	1980
Reed Beds	1996
Refractory Asset Life extension	Ongoing
Through wall repairs (12 ovens complete)	2006-2010
Weak Ammonia Liquor Still	2008

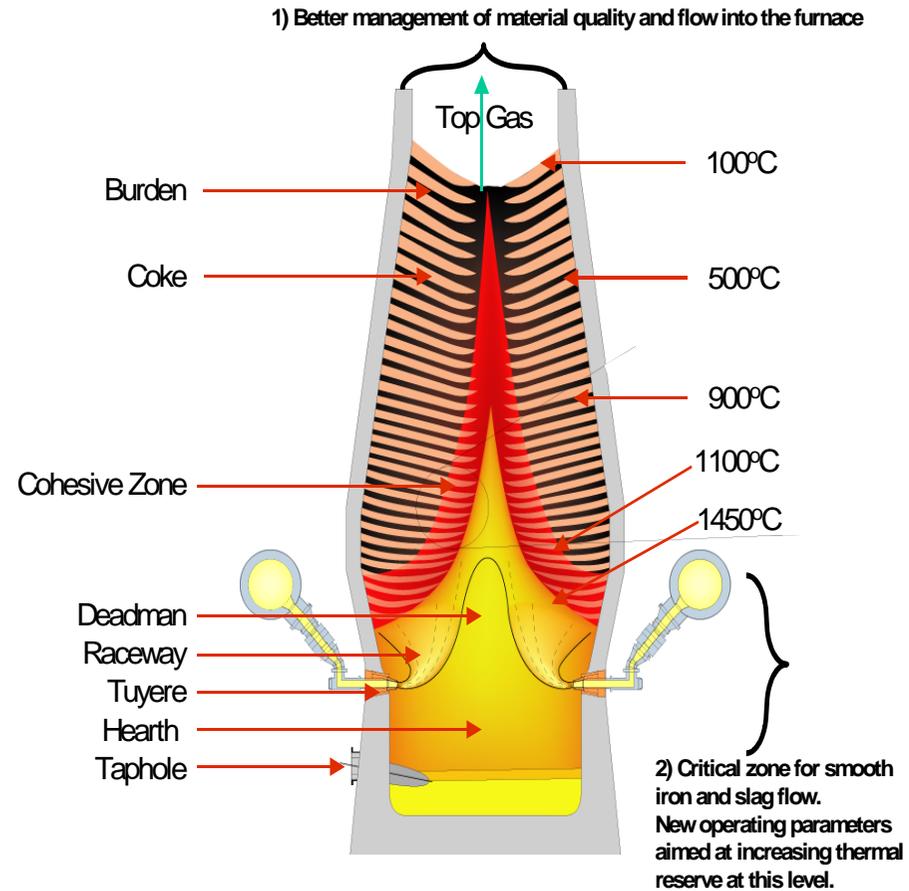
Continuous maintenance and capital investment

# OneSteel Whyalla – facility upgrades



## Blast furnace history and operations

No. 2 Furnace Blown in	1965
Reline 1	1972
Reline 2	1981
Casthouse Floor Revamp	1993
Record Production	1999
Dust Catcher	2001
Water Treatment Plant	2002
Near Record Campaign Life of 23 years	2004
Reline	2004



# OneSteel Whyalla – facility upgrades



## Basic Oxygen Steelmaking

Event	Year
2 vessels @ 130t	1965
Hot Metal Desulphuriser	1991
IRUT/Sublance/Electric/Controls	1992
Ladle Met Furnace/Alloy System	1999
New Vessel Shells	1999/2000
BOC Oxygen Plant Commissioned	2001
Desulphurisation Plant Commissioned	2007

Continuous maintenance and capital investment



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## Safety is a Core Value

### *Your Safety is Important to us!*

- 1 Your safety whilst you are our guests is our highest priority.
- 2 Wearing Personal Protective Equipment (PPE) - including safety helmets, safety glasses, reflective safety vests, dust coats and adequate footwear is MANDATORY.
- 3 Sign-in procedures apply at OneSteel Whyalla to ensure that visitors to Plant Departments can be accounted for at all times. You will be asked to sign Location Tags for the Plant areas you will be visiting.
- 4 When visiting Plant Departments, always stay within the designated walkways.
- 5 To ensure your visit remains on schedule and is conducted safely, please always remain with the group, your guide and our departmental hosts.
- 6 OneSteel Whyalla has a drug and alcohol policy which could require you to undertake a test based on a random selection process and/or testing for cause.

OneSteel Whyalla welcomes you and hopes that your visit is informative and enjoyable