

Edgar Filing: RIO TINTO PLC - Form 425

RIO TINTO PLC
Form 425
August 06, 2008

Filed by: BHP Billiton Plc

and BHP Billiton Limited

Pursuant to Rule 425 under the Securities Act of 1933

Subject Company: Rio Tinto plc

Commission File No.: 001-10533

The following are slides comprising a presentation that was given on June 24, 2008, and was subsequently amended to edit the footnote on slide 31 to show BHP Billiton attributable Mineral Resource and Ore Reserve figures for FY2006 and FY2007. The amended version of this presentation has been posted to www.bhpbilliton.com, replacing the version that was originally posted there.

London and Sydney
24 June 2008
Steelmaking Materials Briefing

Slide 2
Disclaimer
By
reviewing/attending
this
presentation
you

agree
to
be
bound
by
the
following
conditions.
The
directors
of
BHP
Billiton
Limited
and
BHP
Billiton
Plc
(BHP
Billiton")
accept
responsibility
for
the
information
contained
in
this
presentation.
Having
taken
all
reasonable
care
to
ensure
that
such
is
the
case,
the
information
contained
in
this
presentation
is,
to
the

best
of
the
knowledge
and
belief
of
the
directors
of
BHP
Billiton,
in
accordance
with
the
facts
and
contains
no
omission
likely
to
affect
its
import.
Subject
to
the
above,
neither
BHP
Billiton
nor
any
of
its
directors,
officers,
employees
or
advisers
nor
any
other
person
makes
any
representation
or

warranty,
express
or
implied,
as
to,
and
accordingly
no
reliance
should
be
placed
on,
the
fairness,
accuracy
or
completeness
of
the
information
contained
in
the
presentation
or
of
the
views
given
or
implied.
To
the
extent
permitted
by
law,
neither
BHP
Billiton
nor
any
of
its
directors,
officers,
employees
or

advisers
nor
any
other
person
shall
have
any
liability
whatsoever
for
any
errors
or
omissions
or
any
loss
howsoever
arising,
directly
or
indirectly,
from
any
use
of
this
information
or
its
contents
or
otherwise
arising
in
connection
therewith.
Information
about
Rio
Tinto
plc
and
Rio
Tinto
Limited
("Rio
Tinto")
is

based
on
public
information
which
has
not
been
independently
verified.
This
presentation
is
for
information
purposes
only
and
does
not
constitute
or
form
part
of
any
offer
for
sale
or
issue
of
any
securities
or
an
offer
or
invitation
to
purchase
or
subscribe
for
any
such
securities,
nor
shall
it

or
any
part
of
it
be
relied
on
in
connection
with,
any
contract
or
investment
decision,
nor
does
it
constitute
a
proposal
to
make
a
takeover
bid
or
the
solicitation
of
any
vote
or
approval
in
any
jurisdiction,
nor
shall
there
be
any
sale
of
securities
in
any
jurisdiction
in

which
such
offer,
solicitation
or
sale
would
be
unlawful
prior
to
registration
or
qualification
under
the
securities
laws
of
any
such
jurisdiction
(or
under
an
exemption
from
such
requirements).

No
offering
of
securities
shall
be
made
into
the
United
States
except
pursuant
to
registration
under
the
US
Securities
Act
of

1933,
as
amended,
or
an
exemption
therefrom.
Neither
this
presentation
nor
any
copy
of
it
may
be
taken
or
transmitted
or
distributed
or
redistributed
(directly
or
indirectly)
in
Japan.
The
distribution
of
this
document
in
other
jurisdictions
may
be
restricted
by
law
and
persons
into
whose
possession
this
document
comes

should
inform
themselves
about,
and
observe,
any
such
restrictions.
This
presentation
is
directed
only
at
persons
who
(i)
are
persons
falling
within
Article
49(2)(a)
to
(d)
("high
net
worth
companies,
unincorporated
associations
etc.")
of
the
Financial
Services
and
Markets
Act
2000
(Financial
Promotion)
Order
2005
(as
amended)
(the
"Order")
or

(ii)
have
professional
experience
in
matters
relating
to
investments
falling
within
Article
19(5)
of
the
Order
or
(iii)
are
outside
the
United
Kingdom
(all
such
persons
being
referred
to
as
"relevant
persons").
This
presentation
must
not
be
acted
on
or
relied
on
by
persons
who
are
not
relevant
persons.
Certain

statements
in
this
presentation
are
forward-looking
statements
(including
statements
regarding
contribution
synergies,
future
cost
savings,
the
cost
and
timing
of
development
projects,
future
production
volumes,
increases
in
production
and
infrastructure
capacity,
the
identification
of
additional
mineral
Reserves
and
Resources
and
project
lives
and,
without
limitation,
other
statements
typically
containing
words

such
as
"intends,"
"expects,"
"anticipates,"
"targets,"
plans,"
"estimates"
and
words
of
similar
import.)
These
statements
are
based
on
current
expectations
and
beliefs
and
numerous
assumptions
regarding
BHP
Billiton's
present
and
future
business
strategies
and
the
environments
in
which
BHP
Billiton
and
Rio
Tinto
will
operate
in
the
future
and
such

assumptions,
expectations
and
beliefs
may
or
may
not
prove
to
be
correct
and
by
their
nature,
are
subject
to
a
number
of
known
and
unknown
risks
and
uncertainties
that
could
cause
actual
results,
performance
and
achievements
to
differ
materially.
Factors
that
could
cause
actual
results
or
performance
to
differ
materially

from
those
expressed
or
implied
in
the
forward-looking
statements
include,
but
are
not
limited
to,
BHP
Billiton's
ability
to
successfully
combine
the
businesses
of
BHP
Billiton
and
Rio
Tinto
and
to
realise
expected
synergies
from
that
combination,
the
presence
of
a
competitive
proposal
in
relation
to
Rio
Tinto,
satisfaction
of

any
conditions
to
any
proposed
transaction,
including
the
receipt
of
required
regulatory
and
anti-trust
approvals,
Rio
Tinto's
willingness
to
enter
into
any
proposed
transaction,
the
successful
completion
of
any
transaction,
and
the
risk
factors
discussed
in
BHP
Billiton's
and
Rio
Tinto's
filings
with
the
U.S.
Securities
and
Exchange
Commission
("SEC")

(including
in
Annual
Reports
on
Form
20-F)
which
are
available
at
the
SEC's
website
(<http://www.sec.gov>).
Save
as
required
by
law
or
the
rules
of
the
UK
Listing
Authority
and
the
London
Stock
Exchange,
the
UK
Takeover
Panel,
or
the
listing
rules
of
ASX
Limited,
BHP
Billiton
undertakes
no
duty
to

update
any
forward-looking
statements
in
this
presentation.
No
statement
concerning
expected
cost
savings,
revenue
benefits
(and
resulting
incremental
EBITDA)
and
EPS
accretion
in
this
presentation
should
be
interpreted
to
mean
that
the
future
earnings
per
share
of
the
enlarged
BHP
Billiton
group
for
current
and
future
financial
years
will
necessarily

match
or
exceed
the
historical
or
published
earnings
per
share
of
BHP
Billiton,
and
the
actual
estimated
cost
savings
and
revenue
benefits
(and
resulting
EBITDA
enhancement)
may
be
materially
greater
or
less
than
estimated.
References
in
this
presentation
to
\$
are
to
United
States
dollars
unless
otherwise
specified.

Slide 3
Disclaimer (continued)
Cautionary
Note
to
US
Investors

The
SEC
generally
permits
mining
companies
in
their
filings
with
the
SEC
to
disclose
only
those
mineral
deposits
that
the
company
can
economically
and
legally
extract.
Certain
terms
in
this
presentation,
including
resource ,
mineralisation
and
potential
mineralisation ,
would
not
generally
be
permitted
in
an
SEC
filing.
The
material
denoted

by
such
terms
is
not
proven
or
probable
Reserves
as
such
terms
are
used
in
the
SEC's
Industry
Guide
7,
and
there
can
be
no
assurance
that
BHP
Billiton
will
be
able
to
convert
such
material
to
proven
or
probable
Reserves
or
extract
such
material
economically.
BHP
Billiton
urges
investors

to
refer
to
its
Annual
Report
on
Form
20-F
for
the
fiscal
year
ended
30
June,
2007
(and,
with
respect
to
iron
ore
Reserves,
the
BHP
Billiton
Reserves
News
Release,
dated
24
June
2008
and
available
at
www.bhpbilliton.com
and
www.sec.gov)
for
its
most
recent
statements
of
mineral
Reserves
calculated
in

accordance
with
Industry
Guide
7.
Information
Relating
to
the
US
Offer
for
Rio
Tinto
plc
BHP
Billiton
plans
to
register
the
offer
and
sale
of
securities
it
would
issue
to
Rio
Tinto
plc
US
shareholders
and
Rio
Tinto
plc
ADS
holders
by
filing
with
the
SEC
a
Registration
Statement
(the

Registration
Statement),
which
will
contain
a
prospectus
(the
Prospectus),
as
well
as
other
relevant
materials.
No
such
materials
have
yet
been
filed.
This
communication
is
not
a
substitute
for
any
Registration
Statement
or
Prospectus
that
BHP
Billiton
may
file
with
the
SEC.
U.S.
INVESTORS
AND
U.S.
HOLDERS
OF
RIO
TINTO

PLC
SECURITIES
AND
ALL
HOLDERS
OF
RIO
TINTO
PLC
ADSs
ARE
URGED
TO
READ
ANY
REGISTRATION
STATEMENT,
PROSPECTUS
AND
ANY
OTHER
DOCUMENTS
MADE
AVAILABLE
TO
THEM
AND/OR
FILED
WITH
THE
SEC
REGARDING
THE
POTENTIAL
TRANSACTION,
AS
WELL
AS
ANY
AMENDMENTS
AND
SUPPLEMENTS
TO
THOSE
DOCUMENTS,
WHEN
THEY
BECOME
AVAILABLE
BECAUSE

THEY
WILL
CONTAIN
IMPORTANT INFORMATION.

Investors
and
security
holders
will
be
able
to
obtain
a
free
copy
of
the
Registration
Statement
and
the
Prospectus
as
well
as
other
relevant
documents
filed
with
the
SEC
at
the
SEC's
website
(<http://www.sec.gov>),
once
such
documents
are
filed
with
the
SEC.
Copies
of
such
documents

may
also
be
obtained
from
BHP
Billiton
without
charge,
once
they
are
filed
with
the
SEC.
Information
for
US
Holders
of
Rio
Tinto
Limited
Shares
BHP
Billiton
Limited
is
not
required
to,
and
does
not
plan
to,
prepare
and
file
with
the
SEC
a
registration
statement
in
respect
of
the

Rio
Tinto
Limited
Offer.
Accordingly,
Rio
Tinto
Limited
shareholders
should
carefully
consider
the
following:
The
Rio
Tinto
Limited
Offer
will
be
an
exchange
offer
made
for
the
securities
of
a
foreign
company.
Such
offer
is
subject
to
disclosure
requirements
of
a
foreign
country
that
are
different
from
those
of
the

United
States.
Financial
statements
included
in
the
document
will
be
prepared
in
accordance
with
foreign
accounting
standards
that
may
not
be
comparable
to
the
financial
statements
of
United
States
companies.
Information
Relating
to
the
US
Offer
for
Rio
Tinto
plc
and
the
Rio
Tinto
Limited
Offer
for
Rio
Tinto
shareholders

located
in
the
US
It
may
be
difficult
for
you
to
enforce
your
rights
and
any
claim
you
may
have
arising
under
the
U.S.
federal
securities
laws,
since
the
issuers
are
located
in
a
foreign
country,
and
some
or
all
of
their
officers
and
directors
may
be
residents
of
foreign

countries.
You
may
not
be
able
to
sue
a
foreign
company
or
its
officers
or
directors
in
a
foreign
court
for
violations
of
the
U.S.
securities
laws.
It
may
be
difficult
to
compel
a
foreign
company
and
its
affiliates
to
subject
themselves
to
a
U.S.
court's
judgment.
You
should
be

aware
that
BHP
Billiton
may
purchase
securities
of
either
Rio
Tinto
plc
or
Rio
Tinto
Limited
otherwise
than
under
the
exchange
offer,
such
as
in
open
market
or
privately
negotiated
purchases.

Slide 4
Disclaimer (continued)
Competent
Persons
for
Mineral
Resources

and
Ore
Reserves
are
named
in
the
BHP
Billiton
Limited
Group
Combined
Financial
Statements
2007
and
BHP
Billiton
press
release
of
24
June
2008,
which
can
be
viewed
at
www.bhpbilliton.com.
The
statement
of
Mineral
Resources
and
Ore
Reserves
being
presented
has
been
produced
in
accordance
with
the
Australasian
Code
for

Reporting
of
Mineral
Resources
and
Ore
Reserves,
December
2004
(the
JORC
Code).

This
information
is
based
on
information
prepared
by
the
relevant
Competent
Persons
and
relates
to
Mineral
Resources
and
Ore
Reserves
forecast
as
at
30
June
2008.

Competent
Persons
for
Iron
Ore
are
Heath
Arvidson
(Resources
and
Potential
Mineralisation)

and
Reza
Pasyar
(Reserves).
Competent
Persons
for
Manganese
are
E
P
W
Swindell
(SACNASP),
E
P
Ferreira
(SACNASP)
and
O
van
Antwerpen
(SACNASP).
Metallurgical
Coal
Competent
Persons
for
Mineral
Resources
and
Ore
Reserves
are
named
in
the
BHP
Billiton
Limited
Group
Combined
Financial
Statements
2007,
which
can
be
viewed
at:

<http://bhpbilliton.com>.

Doug

Dunn

verifies

that

this

report

is

based

on

and

fairly

reflects

the

information

from

the

BHP

Billiton

FY07

Annual

Report.

All

Competent

Persons

are

full

time

employees

of

BHP

Billiton

(unless

otherwise

specified)

and

have

sufficient

experience

relevant

to

the

style

of

mineralisation

and

type

of

deposit

under

consideration
and
to
the
activity
they
are
undertaking
to
qualify
as
a
Competent
Person
as
defined
in
the
JORC
Code.
All
Competent
Persons
are
members
of
either
the
Australian
Institute
of
Mining
&
Metallurgy
(AusIMM)
or
the
Australian
Institute
of
Geoscientists
(AIG)
or
a
Recognised
Overseas
Professional
Organisation
(ROPO).
The

Competent
Persons
consent
to
the
inclusion
in
this
report
of
the
matters
based
on
their
information
in
the
form
and
context
in
which
it
appears.
Doug
Dunn,
who
is
a
member
of
the
AusIMM,
is
a
full
time
employee
of
BMA.

Slide 5

Today s agenda

Introduction & Markets

Marcus Randolph, Chief Executive Ferrous and Coal

Iron Ore

Ian Ashby, President Iron Ore

Metallurgical Coal

Dave Murray, President Coal

Manganese

Peter Beaven, President Manganese

Concluding Remarks

Marius Kloppers, Chief Executive Officer

Marcus Randolph
Chief Executive Ferrous and Coal
Introduction and Markets
24 June 2008

Slide 7
Introduction
Steelmaking materials demand
Market pricing
Introduction & Markets

Slide 8

Iron ore, metallurgical coal and manganese are integral components in blast furnace production

Notes:

a)

Iron
ore

2008
forecast
price
calculated
based
on
65-71%
increase
above
Newman
IO
fines
price
in
2007

per
Vale
settlement
for
Itabira
fines.
Assuming
63.5%
iron
content
and 5%
moisture.

b)
Metallurgical
coal
2008
forecast
price
calculated
based
on
206-240%
increase
above
Peak
Downs
Hay
Point
price
in
2007

per
BHP

Billiton
announcement 9-Apr-2008.

c)
Manganese
2008
forecast
price
assumes
100%
FeMn
use
and 76%
Mn
content
in
HC
FeMn.
Based on
actual
USA
spot
HC
FeMn
prices
for
Jan

May
2008 and
BHP Billiton forecasts.
Basic Oxygen Furnace
COKE OVEN
COKE OVEN
CONVERTER (BOF)
CONVERTER (BOF)
REFINING STAND
REFINING STAND
CONTINUOUS CASTING
CONTINUOUS CASTING
REHEAT FURNACE
REHEAT FURNACE
SINTERING
SINTERING
Iron ore
Coal
Coke
Slag
Molten pig iron
Sintered ore
Graded

Liquid Steel
Slab
Hot
Rolled
Coils
ROLLING MILL
ROLLING MILL
Electrical Arc Furnace
Graded
Liquid
Steel
Scrap
Raw liquid
steel
Hot Rolled
Coils
ROLLING MILL
ROLLING MILL
TUNNEL FURNACE
TUNNEL FURNACE
THIN SLAB CASTING
THIN SLAB CASTING
REFINING STAND
REFINING STAND
BLAST FURNACE
BLAST FURNACE
ELECTRIC ARC FURNACE
ELECTRIC ARC FURNACE
Input per tonne
of
steel (kg)
Cost per tonne
HRC
(US\$ 2008)
Iron
Ore
(a)
1,600
133
Metallurgical
Coal
(b)
600
180
Manganese
(c)
7
25
Blast Furnace Production Inputs

Slide 9

Blast furnace steel production is continuing to increase

66% of global crude steel is currently
generated via blast furnaces

Blast furnace production and

share is
continuing to rise

Trend is to larger, higher productivity
furnaces

China's steel policy is supportive of this
move and the shift towards blast furnace

Shift in size and efficiency demands will
require high-quality raw materials

Global
blast
furnace/BOF
steel
production

(a)
50%
55%
60%
65%
70%

0
500
1,000
1,500

World BF/BOF production (RHS)
BOF share of crude steel production (LHS)

Market share
(%)

Steel production
(mt)

Notes:
(a)

Source: IISI, CRU (pre-1990).

CAGR: 1.0%

CAGR:

8.4%

Slide 10

BHP Billiton's businesses are leaders in their own right

BHP Billiton is the only mining company with a top three marketing position in all three steel raw material groups

Australian based operations have a significant location advantage with close proximity to Asian growth market

Expected mineralisation base will support metallurgical coal and iron ore production lives of >50 years

We are aggressively expanding production capacity

296

103

145

21

111

24

25

14

25

17

5

33

0

50

100

150

200

250

300

350

Vale

BHP Billiton

Rio Tinto

Anglo

American

Xstrata

Manganese

Met Coal

Iron Ore

Source:

Annual reports,

BHP

Billiton

analysis.

a)

Calculation

based

on
CY2007
equity
production
and
JFY2008
prices.
Iron
ore
JFY2008
price
based
on
a
71%
increase
above
JFY2007
benchmark

per
Vale
settlement
for
Ilabira
fines.
Metallurgical
coal JFY2008
price
based
on
a
206-240%
increase
above
JFY2007
benchmark

per
BHP
Billiton
announcement
9-Apr-2008.
Manganese
JFY2008
price
based
on
recent
manganese

spot
price
settlement
reported
in the
Tex
Report
on
12-Feb-2008.

Iron
ore
equivalent
production

(a)
(mt, CY2007 based on JFY2008 prices)

Slide 11

Three large, low cost, high quality and expandable businesses

Production is expected to triple between 2007 and 2015

benefits of
operational scale and simplicity

High quality resources, and low costs of production

Large resource base in close proximity to key growth markets

Iron Ore

Metallurgical

Coal

Manganese

Bowen Basin produces ~64% of the global seaborne metallurgical coal

Large, low cost operations, supplying extremely high quality products to customers

Resource base and infrastructure provides growth optionality

Unique high grade ore position

High value in use is being reflected in price

Slide 12

One co-ordinated business unit

Marcus Randolph

Chief Executive Ferrous and Coal

31 years resources experience

9 years at BHP Billiton

Previously held roles:

Chief Organisation
Development Officer

President Diamonds & Specialty Products

Chief Development Officer Minerals
Iron Ore
Metallurgical Coal
Manganese
Marketing

Previously held roles:

President and Chief Operating
Officer, WA Iron Ore

Chief Operating Officer Base
Metals
Ian Ashby
President, Iron Ore

28 years resources
experience

21 years at BHP Billiton
Dave Murray
President, Coal

29 years resources
experience

29 years at BHP Billiton
Peter Beaven
President, Manganese

8 years resources
experience

8 years at BHP Billiton
Nelson Silva
Marketing Director Carbon
Steel Materials

Previously held roles:

President, Metallurgical Coal

Chief Executive Officer, BMA

Chief Executive Billiton Coal

Previously held roles:

Chief Development Officer,
Carbon Steel Materials

Practice Leader, Corporate
Finance

Executive Director, UBS Warburg

Previously held roles:

President, Aluminium

Marketing and Sales Director,
CVRD Iron Ore Division

Commercial Director, Embraer

Chief Executive Officer, ALL
Logistica

19 years resources
experience

1 year at BHP Billiton

Slide 13

Marketing reflects customer requirements

Purpose is to delight our customers and to receive market prices

Superior product offerings with full range of steel

making materials

Security of long term contract volumes, capturing floating prices

Freight optimisation
prefer CIF to FOB

Measure and reward performances against market prices for product and freight and customer satisfaction

Slide 14
Safety performance demonstrates operational control
0
5
10
15
20

25

30

35

Jul-04

Dec-04

May-05

Oct-05

Mar-06

Aug-06

Jan-07

Jun-07

Nov-07

Apr-08

Iron ore

Metallurgical coal

Manganese

Total recordable incident frequency rate (TRIFR)

(Per million hours, 12 month rolling average)

Slide 15
Introduction
Steelmaking materials demand
Market pricing
Introduction & Markets

Slide 16

Steel is an essential input as nations industrialise
and urbanise

Finished steel consumption
(kg/capita)

Source: World Bank; Government Statistics for Taiwan; IISI

0

250

500

750

1,000

1,250

0

5,000

10,000

15,000

20,000

25,000

30,000

GDP/Capita (Jan-2008 Constant US Dollars)

China

India

Japan

Korea, Rep.

Taiwan

Germany

United States

Slide 17

China's urban population is on track to reach one billion

China population by city size

(Millions of people)

143

157

149

232
160
315
86
102
34
120
572
926
2005
2025

Big town
(<0.5m)
Small
(0.5m - 1.5m)
Midsized
(1.5m - 5m)
Big (5m - 10m)
Mega (10m+)

Source: McKinsey Global Institute, March 2008, *Preparing for China's Urban Billion* .

the number of times which GDP will have
multiplied by 2025
5
of these buildings could be skyscrapers
the
equivalent to constructing up to ten New York
cities
50,000
square metres
of floor space will be built
in
five million buildings
40
billion
mass-transit systems could be built
170
square metres
of road will be paved
5
billion
Chinese cities will have over one million people
living in them
Europe has 35 today
221
China's expected urbanisation in 2025

Slide 18

China is the world's largest steel producer

Source: IISI and BHP Billiton estimates.

Note crude steel production growth calculated based on the change in annual production between years ended 1996 and 2007.

0

250

500

750
1,000
1,250
1,500
1996
2007

Crude steel production

(mt)

China

USA

Japan

Europe

Other

India

66%

20%

5%

4%

5%

0%

Crude steel production growth (1996-2007)

(mt)

China

USA

Japan

Europe

Other

100% = 590

India

Slide 19
India metallurgical coal demand
the next wave
9.7
9.3
11.2
9.7

8.8

7.2

6.6

Indian domestic metallurgical coal consumption

(mt)

Data source: CRU The Annual Outlook for Coking Coal 2007 , BHP Billiton.

10.7

12.9

14.9

15.9

19.6

20.2

22.9

Indian seaborne metallurgical coal consumption

(mt)

Slide 20

Source: GTIS and CRU

Note: Trade flow figures are in million tonnes per year and domestic supply and demand figures are in million tonnes. All data

South America

Domestic supply / demand

0%

426%
Iron Ore
Met Coal
India
Domestic supply / demand
17%
226%
Iron Ore
Met Coal
China
Domestic supply / demand
47%
99%
Iron Ore
Met Coal
CIS / Other Europe
101%
97%
Iron Ore
Met Coal
Domestic supply / demand
Australia is the natural supplier to Asia
75
21
137
62
14
238
84
18
26

Slide 21
Introduction
Steelmaking materials demand
Market pricing
Introduction & Markets

Slide 22

The price received by Australian producers does not reflect its superior value

0
20
40
60

80
100
120
140
160
180
200
220
Jun-03
Nov-03
May-04
Nov-04
May-05
Oct-05
Apr-06
Oct-06
Apr-07
Sep-07
Mar-08
China Market Price (66% Fe Equiv)
Newman Fines
Carajas Fines
Source:
Press
releases,
TEX
report,
Baltic
Exchange
and
BHP
Billiton
estimates.
Newman
fines
and
Carajas
fines
price
are
based
on
the
benchmark
price
multiple
by
its
natural
grade

from
TEX
report.
The
freight
rates
are
based
on
spot
rate
for
Western
Australia
to
China
and
Brazil
to
China. JFY2008
Newman
fines
price
based
on
a
71%
increase
above
JFY2007
benchmark

per
Vale
settlement
for
Ilabira
fines.
a)
Source:
China
market
price
(66%
Fe
Equiv)
is
the
average
price

of
13
China
regions
in
11
provinces
including
Anhui
Anqing,
Fujian
Longyan,
Guangdong
Huaiji,
Guangxi
Liuzhou,
Hebei
Tangshan,
Hebei
Hanxing, Hubei,
Inner
Mongolia
Wuhai,
Liaoning
Benxi,
Liaoning
Chaoyang,
Shandong
Zibo,
Shanxi
Daixian
and
Sichuan
Liangshan.
(a)
Iron ore landed prices
(US\$/dmt)

Slide 23

Transparent pricing for bulk commodities will maximise
supply from the most efficient producers

Financial swaps

enable price risk

to

be managed

separately from
supply risk
Counter-parties
trade directly with
each other
Prices set by
negotiation
Time
Source: FSA
OTC Forward
Delivery
Benchmark
pricing
OTC Financial
Swap

Slide 24
382%
599%
486%
Iron ore
Metallurgical
coal

Manganese

ore

Raw material prices have risen, but still low as a % of steel price

Commodity price movement

(% change 2001-2008)

Note:

Historical

nominal

prices

based

on

Japanese

financial

year

benchmarks

beginning

April

of

relevant

year.

a)

Iron

ore

based

on

benchmark

FOB

prices.

JFY2008

forecast

prices

calculated

based

on

65-71%

increase

above

JFY2007

benchmark

per

Vale

settlement

for

Itabira

fines.

b)

Metallurgical

coal

based

on
Peak
Downs
Hay
Point
FOB.
JFY2008
forecast
prices
calculated
based
on
206-240%
increase
above
JFY2007
benchmark

per
BHP
Billiton
announcement
9-Apr-2008.

c)
Manganese
based
on
GEMCO
lump
ore
contract
FOB.
JFY2008
prices
based
on
recent
manganese
spot
price
settlement
reported
in
the
Tex
Report
on
12-Feb-2008.

d)
Based

on
benchmark
contract
prices.
Iron
ore,
metallurgical
coal
and
manganese
announced
2008
settlements
(71%
for
iron
ore
and
206%
for
coking
coal)
are
reflected
in
Q2
CY2008
costs
for
2008
YTD
estimate.

e)
For
US
delivery.

Source:
CRU.

Hot rolled coil price and raw material costs

(US market transactions (US\$/mt) and share of raw materials costs (%))

0
100
200
300
400
500
600
700
800
900

1,000
2001
2002
2003
2004
2005
2006
2007
2008
YTD
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Raw materials cost as % of HRC price, % (RHS)

HRC price (LHS) US\$/mt

- (d)
- (e)
- (a)
- (b)
- (c)

Ian Ashby, President
24 June 2008
Iron Ore

Slide 26
Iron Ore
A world class iron ore business
2008
A record year
Continued rapid growth
Key messages

BHP Billiton Iron Ore
A premier iron ore business
WAIO (85-100%)
Samarco
Operations
Selected Customer Technical
Collaborations
Exploration & Development
CSM Technology Centre
Quadrilatero
Ferrifero
Nimba / W Africa
CW Africa
Bluescope
NSC
JFE Steel
Baosteel
CSC
WISCO
Masteel
India
Iron Ore Marketing
Nelson Point
Yandi
Newman JV
Mining Area C
BHP Billiton's Tenements
Jimblebar
Jinayri
Nimingarra
Yarrie
Finucane Island

Slide 28

Central Pilbara

12bt of high quality Resource and 21 to 35bt of mineralisation concentrated in two production regions

Source: Resource base: BHP Billiton News Release, 24-Jun-2008;

Equity basis: The Mineral Resource of 11.7bt in 100% terms translates to an attributable Mineral Resource of 10.3bt. The Potentially attributable Potential Mineralisation Range of 19 to 32bt.

The
Potential
Mineralisation
(Exploration
Target)
is
based
on
probabilistic
assessment
of
are
as
across
the
Pilbara
using
surface
mapping,
geophysics,
known
regional
geology
and
some
limited
drill
results
acquired
over
the
last
40
years
of
exploration.
The
target
range
is
conceptual
in
nature,
there
has
not
been
sufficient
exploration
to

define
a
Mineral
Resource
and
it
is
uncertain
if
further
exploration
will
result
in
the
determination
of
a
Mineral
Resource
This
BHP
Billiton
Mineral
Resource
information
should
be
read
together
with
and
subject
to
the
notes
set
out
in
the
BHP
Billiton
Resource
and
Reserve
News
Release,
dated
24
June

2008.

This document can be viewed at: <http://bhpbilliton.com>.

12bt of high quality Mineral Resource
(100% basis)

Potential Mineralisation range has
increased by 17% (21
35bt, 100%
basis)

Large tonnages of Marra
Mamba and
Brockman ores, available for blending, at
both Central and East Pilbara hubs

Benefits of concentrated resources

-

Infrastructure scale efficiencies

-

More resource unlocked by local
blending

-

Smaller environmental footprint

East Pilbara

<0.5bt

Nelson Point

Finucane

Island

BHP Billiton

Tenements

BHP Billiton Mines

Ore Reserve

Mineral Resource

Potential

Mineralisation

>2bt

1

2bt

0.5

1bt

Slide 29

Source: CRU, BHP Billiton analysis

Iron Ore cost delivered to Asia

(\$/dmt)

Cumulative production (Mt)

WA Iron Ore weighted

average cost delivered to Asia

0
100
200
300
400
500
600
700
800
900
1000
0
140
130
120
110
100
90
80
70
60
50
40
30
20
10

2008 Delivered
2007 Delivered
Low cost supply to customers

Proximity to market drives a delivered cost advantage

Freight costs have become a much larger component of delivered cost

Supply side pressures has seen increased supply of low cost Chinese domestic ore in 2008

Tier 1 direct ship ore producers are best placed to deliver sustainable low cost product in an environment of rising input costs

Slide 30
Iron Ore
A world class iron ore business
2008
A record year
Continued rapid growth
Key messages

Slide 31

2.3

2.4

3.0

7.0

8.0

11.7

FY2006

FY2007

FY2008

+15%

increase

+46%

increase

Pilbara Resources and Reserves

(Bt, 100% basis)

46% increase in the Pilbara Resource base

Ore Reserve

Mineral Resource

Ore Reserve increased by 0.6 bt

to

3 bt

total (23% increase on FY07)

Mineral Resource increased by 3.7 bt

to 12 bt

Added 2.3 bt

Resource in Central

Pilbara hubs:

2

1.4 bt

Resources at Jinayri

2

0.9 bt

Resources at Marillana

Added 1.4 bt

Mineral Resource at

existing hubs (Yandi, Area C, Newman)

Source: BHP Billiton News Release, [24-Jun-2008]

Equity

basis:

The

FY2008

Mineral

Resource

of

11.7bt

and

Ore

Reserve

of

3.0bt

in

100%

terms
translates
to
an
attributable
Mineral
Resource
and
Ore
Reserve
of
10.3bt
and
2.6bt
respectively.
Similarly,
the
attributable
Mineral
Resource
and
Ore
Reserve
in
FY2007
was
7.1bt
and
2.1bt
respectively,
and
in
FY2006
was
6.3bt
and
2.0bt
respectively.
The
increase
in
the
Mineral
Resource
between
FY2007
and
FY2008
on
an

attributable

basis was 44%, and between FY2006 and FY2007 was 14%.

Additional detail on attributable Reserves and Resources is provided in the BHP Billiton Resource and Reserve News Release,

This

BHP

Billiton

Mineral

Resource

information

should

be

read

together

with

and

subject

to

the

notes

set

out

in

the

BHP

Billiton

Resource

and

Reserve

News

Release,

dated

24

June

2008.

This

document

can

be

viewed at: <http://bhpbilliton.com>.

Slide 32

RGP3 completed under budget and on time
a

System Operating at RGP3 design rate of
129 mtpa (100%)

b

-

New stockyard at Finucane
Island

-

C Berth and shiploader
upgrade

-

Area C mine expansion, new processing
plant and stockyard

Samarco expansion completed

-

New concentrator, third pellet plant and
pipeline

-

7.6 mtpa

C

capacity added (+ >50%)

-

Reserves increased by 30%

-

Resources increased by 11%

2008

Growth projects delivered

Notes:

a)

Budget: Capex forecast to completion tracking under budget in operating currency

b)

110 mtpa in attributable terms

c)

3.8 mtpa in attributable terms

Above: New stacker and reclaimer at Area C operating at design rates

Below: Samarco pellet plant 3

Slide 33

2008

Continuing excellent operating performance

Continued rate of safety improvement

Record production in Q1 CY08

Strong cost performance

Outperforming on volumes:

-

Record ore mined at Area C and Yandi

-

Railing to port

-

High performance from all ship loaders

Samarco rapid ramp-up: new pellet plant already operating at design rates

Above:

Stockyard operations

at

Area

C

Below:

Loading

first

ore

from

shiploader

3

in

October

2007

Slide 34
0
10
20
30
FY02
FY08

Volumes growing at an average annual rate of 9%
Quarterly production, BHP Billiton Iron Ore
(mt, WAIO and Samarco equity basis)

Strong historical growth

Beating production targets

Record quarterly production in
Q1 CY08

Delivering 100% of contracted
tonnes

Slide 35
Iron Ore
A world class iron ore business
2008
A record year
Continued rapid growth
Key messages

Slide 36

Clear plan for growth to 300 mtpa and beyond

26

112

20

45

40

60

50

Western Australia Iron Ore capacity

(mtpa, 100% basis)

2015

Pre-feasibility

Quantum 1

2007

RGP3*

RGP4

RGP5

RGP6

Quantum 2

Status

CY07 Actual

Production

Ramping up

to full capacity

Construction

Feasibility &

early works

Pre-feasibility

Concept

Completion (CY)

2007

2010

2011

2012

300

capacity

in 2015

Completed

Advanced planning

Construction

Notes:

109

mtpa

capacity

pre

RGP3

Attributable

basis:

CY2007

=

95

mtpa;

240

mtpa

=
~
204
mtpa;
300
mtpa
=
~
255
mtpa;
350
mtpa
=
~
298
mtpa
> 350
capacity
240
capacity
in 2012

Slide 37

Resource evaluation programme to support growth

Focus on identifying new resource
to support new mining hubs

FY08 resource evaluation

programme has delivered a 46%
increase in Mineral Resources

~US\$500m in expenditure planned

Resources have significant
geological upside

The evaluation programme is in
place to continue to deliver results

Drill metres

(000s)

Source: BHP Billiton.

0

50

100

150

200

250

300

350

400

450

500

FY07

Current

FY09F

FY10F

FY11F

FY12F

FY13F

Resource

drilling

Reserve

drilling

Slide 38
Rapid Growth Project 4
Capacity 155 mtpa
Notes:

Budget:
Capex

forecast
to
completion
tracking
on
budget
in
operating
currency

155
mtpa
in
100%
terms
translates

to
~132

mtpa
in
attributable
terms

Above:
Construction
of
Jimblebar,
including
new
rail
loadout

,
May
2008
Below:
Construction
of
the
Newman
Hub,
May
2008

155 mtpa capacity by 2010 (100%)

Project ~40% complete

Accelerating delivery

Port works are complete: Car Dumper 2,
Stacker 12, 2nd row East Yard

Major construction fronts at Newman
and Jimblebar underway including:

- Mine expansion
- Rail shuttle and car dumper
- Crushing and screening plant
- Blending yard
- Train loadout

Slide 39
Rapid Growth Project 5
Capacity 200+ mtpa
Notes:

200+mtpa in 100% terms translates to ~170+ mtpa in attributable terms

US\$1.1B pre-approval funding is 100% terms.

Above: RGP5 Drilling Barge at Port Hedland (Finucane Island in the background)

Below: Yule River bridge, starting dual tracking construction

200+ mtpa capacity by 2011 (100%)

Approval for early works in January

2008

US\$1.1bn

Ordering long lead equipment

Critical tenders under evaluation

Dual tracking of rail at Yule River

Bridge commencing

Seeking final investment approval in

4th quarter of 2008

Harriet Point port geotechnical program

80% complete

Slide 40
Above: Nelson Point Port Plans
Below: Port Hedland Inner Harbour
Rapid Growth Project 6
Capacity 240 mtpa
Nelson Point

RGP6 targeting 240 mtpa capacity by
2012 (100%)

Pre-feasibility study on track for
completion in H1 CY09

Leveraging off RGP5 works for rapid
start:

-

Dredging

-

Equipment and plant procurement

-

Rail corridors

Nelson Point geotechnical work
complete

Inner harbour port design well
advanced

Notes:

240 mtpa in 100% terms translates to ~204 mtpa in attributable terms

Slide 41

Quantum Outer Harbour Development
Capacity 300+ mtpa

Quantum delivers the Outer Harbour

Pre-feasibility study has identified a simpler
channel solution

Stage 1: 300 mtpa capacity by 2015 (100%)

Stage 2: planning to deliver 350 mtpa
capacity is underway (100%)

Key marine studies underway or complete

Major landside infrastructure studies
complete

Preliminary environmental modeling and
surveys complete

Delivery of environmental approvals on
track

Phase 1

Link into

existing

channel

Phase 2

Dual

Channel

Concept

Study

Channel

Option

Notes:

300 mtpa in 100% terms = ~ 255 mtpa in attributable terms; 350 mtpa in 100% terms = ~ 298 mtpa in attributable terms

Slide 42
Iron Ore
A world class iron ore business
2008
A record year
Continued rapid growth
Key messages

Slide 43

Key messages

A clear and deliverable strategy to achieve 300 mtpa of installed capacity by 2015

Expanding the resource base to support our growth plans and operating strategy of large, long life, low cost hubs

Delivering our committed volumes

Growth projects delivered on time and on budget

An advantaged cost position into the growth markets of Asia

Dave Murray, President Coal
24 June 2008
Metallurgical Coal

Slide 45

The premier metallurgical coal business

Global metallurgical coal supply

Strong resource position and growth options

Key messages

Metallurgical coal

Slide 46

- 0
- 10
- 20
- 30
- 40
- 50

60

Leading supplier in seaborne metallurgical coal market

Source:

McCloskey,

country

trade

statistics,

Barlow

Jonker,

AME

and

BHP

Billiton

estimates.

Note:

Production

figures

represent

100%

of

production

regardless

of

ownership

structure.

BMA

BHP

Billiton

Mitsubishi

Alliance

(50%

BHP

Billiton),

BMC

BHP

Billiton

Mitsui

(80%

BHP

Billiton).

BHP Billiton share ~28mt

Estimated seaborne metallurgical coal supply

(CY2006, mt)

Slide 47

BHP Billiton's world class operations

2.5

0

2.5

.

5

Kilometres
Port Kembla
Coal Terminal
Mining Licences
Illawarra Coal
Appin
West Cliff
Dendrobium
Maruwai Project (100%)
BMA (50%) & BMC (80%)
Illawarra Coal (100%)
S. Banto
River
Lahai
Pari
Maruwai
Central Kalimantan
Juloi
Sumber
Banto
Ratah
Kalteng
East Kalimantan
Province Boundary
Maruwai Project
Access Road Stage 1
Access Road Stage 2
0km
5km
10km
20km
30km
Abbot
Point
DalrympeBay
leBay
Gladstone
HayPoint
Coal
Goonyella
Riverside
BroadmeadowUG
PeakDowns
Saraji
NorwichPark
GregoryCrinumUG
Blackwater
100km
South
Walker

Creek
Poitrel
BMA (50%)
Exploration Licences (EL)
Mining Licences (ML)
BMC (80%)

Slide 48

Low cost coal operations drive competitive advantage

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Average Canadian

cost position (all suppliers)

BMA/BMC/BHP Billiton operations

World export metallurgical coal FOB cash cost curve

(CY2007, US\$/t)

0

10

20

30

40

50

60

70

80

90

0

50

100

150

200

250

Volume (mt)

Slide 49

A broad range of high quality metallurgical coal

Source:

BHP

Billiton

Annual

Report

2007.

Production

rate

for

FY2007.

Bubble

size

represents

approximate

resource

size

on

a

100%

basis.

Production

Approximate Resource

Size (mt)

Blackwater

Peak Downs /

Peak Downs East

Goonyella

/

Broadmeadow

/

Red Hill

South Walker

Creek

Norwich

Park

Poitrel

Gregory Crinum

Saraji

Illawarra

500

1,000

Slide 50

BMA/BMC

Large scale, low cost, high quality &
expandable operations

Large volumes of good quality coals

Large resource base

Large pipeline of low cost, brownfield expansion options

Hay Point, a wholly dedicated operating coal port on Australia's east coast

Hay Point takes ~70% of BMA / BMC product

Slide 51
BMA/BMC
Recovering well from flooding

Two extraordinary floods (1 in 100
year events)

Production loss of 3.7
4.6mt (BHP
Billiton share)

Force Majeure from 24 January 2008,
lifted on 5 June 2008

Recovery of operations well advanced
operating on average ~90% capacity

Slide 52

Illawarra Coal

Performing strongly

Notes:

a)

High ash thermal.

Illawarra Coal sales

(mt, FY2007)

Strong operational performance

West Cliff Mine -
yearly, monthly production
records

Dendrobium -
yearly, monthly production
records

Reconfiguration of Appin Mine to be completed in
FY09

"Creep" potential with some spare port capacity

Domestic

3.6

Export

2.7

Energy Coal

0.9

Metallurgical Coal

(a)

Slide 53

The premier metallurgical coal business

Global metallurgical coal supply

Strong resource position and growth options

Key messages

Metallurgical coal

Slide 54
Bowen Basin is the pre-eminent global supply basin
195mt
Seaborne metallurgical
coal trade (2006)
Exports
Imports

S America

16mt

China

(a)

2mt

Australia

125mt

North Asia

96mt

Europe

58mt

India

19mt

Canada

24mt

USA

22mt

South

Africa

2mt

Trade flow

Russia

6mt

Around 64% of the world's seaborne metallurgical coal is sourced from the Bowen Basin

Source: Barlow Jonker, CRU, BHP Billiton.

a)

Note: China is net seaborne figure

Indonesia

4mt

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Global supply limited by infrastructure constraints

Source: The Australian

Photo: The Australian

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BMA/BMC has a strong infrastructure position

Our strategy:

Position in all rail/port corridors

Expansion of wholly owned

Hay Point terminal

Hay Point expansion #3
currently in pre-feasibility

Contracted positions support
growth plans

Source: BHP Billiton

Abbot Point

Hay Point Coal Terminal

Dalrymple

Bay

Blackwater

Gregory Crinum UG

Norwich Park

Saraji

Peak Downs

Poitrel

South

Walker

Creek

Goonyella

Riverside

Broadmeadow UG

100km

Slide 57

Chinese structural shortage of supply emerging

China metallurgical coal net imports

(mt, seaborne and landed)

Source: Barlow Jonker, CRU, Chinese customs data and BHP Billiton

Total China met coal tonnage refers to consumption calculated from pig iron output by applying blast furnace coke rate and co

Met coal market

Total China

=

493mt

Global Seaborne

=

195mt

<9

<50

Gas (cubic metres/tonne)

China

Bowen Basin

Age of

mining areas

+100 yrs

~40 years

Depth of mining

0-800m

0-350m

Operations

> 95%

underground

~70% open

cut

(14)

(12)

(10)

(8)

(6)

(4)

(2)

0

2

4

6

May-2004:

VAT rebate

removed

Nov-2006:

Export tax

imposed

Slide 58

The premier metallurgical coal business

Global metallurgical coal supply

Strong resource position and growth options

Key messages

Metallurgical coal

Slide 59

Our premier resource position facilitates low risk expansion

Source: BHP Billiton 2007 Annual Report JORC Resource Estimate. Bubble size represents approximate resource size on a 100%

(a)

100% basis. On an equity basis, BMA/BMC's Reserves are 852mt, Mineral Resources are 5,418mt and FY2007 production is

(b)

The

Elouera
Mine
was
sold
in
December
2007
and
has
therefore
not
been
included
in
the
Illawatta
Coal
Reaserve
or
Mineral
Resources
total.

(c)
Reserve
and
Mineral
Resources
estimates
referenced
from
BHP
Billiton
2007
Annual
Report
Resource
Life
is
an
indicative
figure
only
and
is
calculated
on the basis of $[(\text{Total Resource} \times \text{Estimated Saleable Conversion Factor}) / \text{current mining rate}]$.
6.9
58.2
FY2007
Production

Million
tonnes
(JORC)
(a)
BMA /
BMC
(FY07)
Illawarra
(FY07)
Reserve
1,651
76
(b)
Mineral
Resources
9,758
1,135
(b)
100km
Abbot Point
Dalrymple
Bay
Hay Point Coal
Wards
Well
Red Hill
Goonyella
Riverside
Broadmeadow UG
Daunia
Peak Downs
Norwich Park
Gregory Crinum UG
Blackwater
South
Walker
Creek
Poitrel
18
60
103
21
61
Saraji
40
31
32
FY07 Measured, Indicated &
Inferred Resource (mt)
Resource Life

(c)
12
Gladstone

Slide 60

BMA/BMC is accelerating growth to capture demand

Accelerating growth:

Speed to market

Volume growth

Focus on accelerated development

Dragline and equipment build slots
secured

Standardisation of preparation
plant design

Deep inventory of growth options

Peak Downs

Saraji

Blackwater North and South

Wards Well

Red Hill

45

55

65

75

85

FY07

FY08

FY09

FY10

FY11

FY12

FY13

FY14

FY15

Current operations

Note:

BHP

Billiton

estimates.

Forecast

production

based

on

100%

basis.

Production

on

an

equity

basis
of
31mt
in
FY2007,
38mt
in
FY2012
and
43mt
in
FY2015.
BMA/BMC creep
Goonyella
O/C
Goonyella U/G
Caval Ridge
Daunia
BMA/BMC production forecast
(mtpa, 100% basis)

Slide 61

Maruwai an exploration success with construction underway

A world class coal discovery

Major metallurgical and thermal coal basin

100% BHP Billiton

Stage 1 development

~US\$100m development

1mtpa

First coal expected CY2009

Stage 2 development

Currently in feasibility

~3-5mtpa

S. Banto

River

Lahai

Pari

Maruwai

Central Kalimantan

Juloi

Sumber

Banto

Ratah

Kalteng

East Kalimantan

Province Boundary

Maruwai Project

Access Road Stage 1

Access Road Stage 2

0km

5km

10km

20km

30km

Slide 62

The premier metallurgical coal business

Global metallurgical coal supply

Strong resource position and growth options

Key messages

Metallurgical coal

Slide 63

Key messages

BHP Billiton is the leading supplier in seaborne metallurgical coal

Low cost, high margin operations

Superior product offerings

Efficient port facility at Hay Point

Contracted growth in port and rail

Freight advantage -
close to key growth markets

Met coal market conditions remain very tight

Infrastructure constraints

India and China driving demand

Premier resource position facilitates low risk brownfield
expansion

Accelerating growth projects to capture market
demand

Peter Beaven, President
24 June 2008
Manganese

Slide 65

Manganese

Manganese industry structure

The industry leading Manganese business

Significant future growth and resources

Key messages

Slide 66

Manganese demand chain is driven by steel production

Source: IMnI, IISI

~90% of manganese production is
consumed in steel making

Removes oxygen and sulphur
in the
steel making process

Hardening alloy for steel

No practical substitute
1.3bt of crude steel production CY2007
~14mt of Manganese alloy demand
~37mt of Manganese ore demand

Slide 67

Source: IMnI

Majority of alloy production located close to major steel producers (eg. China)

Balance produced in countries with high

grade ore or low cost power (e.g. Australia, South Africa, Brazil)

Silico
manganese

57% of CY2007 production

Used in construction steels

Lower grade ores can be used to produce

High and medium carbon ferro
manganese

43% of CY2007 production

Used in flat products and better quality steels

Requires higher grade ore
China is a major producer of manganese alloy
Manganese alloy production by country/region (mt, CY2007)

48%

15%

10%

7%

6%

6%

8%

China

CIS

Europe

Africa/

Middle East

India

Americas

Other Asia

Slide 68

13.8

7.4

17.0

0

3

6

9
12
15
18
>43% Mn
>30% & <=43% Mn
<=30% Mn

China
Ghana
Ukraine
India
Australia
South
Africa
Gabon
Brazil
Other

Source: IMnI

a) Includes Australia, Burma, Indonesia, Phillipines, Taiwan, Vietnam and Korea

Ore is produced globally

Individual ores are unique, large
variation in grade and quality

Low grade ore (less than 30% Mn)

Cannot carry transport cost thus
used domestically

Largest producers China, India
and Ukraine

Medium and high grade ore (between
37-48% Mn)

Dominates seaborne market

Largest producers South Africa,
Gabon and Australia
...but based on lower grade ores. High grade ore is located
principally in Australia and South Africa
Manganese ore production by grade and country
(mt, CY2007)

Slide 69

High grade ore has significant value in use benefits

Source: BHP Billiton estimates.

a) Assumed ore inputs for example of 40% domestic ore (25% Mn), 20% imported ore (44% Mn) and 40% rich slag (33% Mn)

Low grade ore performance in alloy
production is substantially inferior

Using low grade ores:

Increases input costs

Produces a greater amount of
slag output

Decreases volume of saleable
product

Decreases quality of final
product

High grade ore therefore has a
higher value in use

High Grade Ore

Low Grade Ore

China

(a)

3.3 MWh

2.2 MWh

Electricity (MWh)

0.80mt

0.01mt

Flux (mt)

0.48mt

0.41mt

Reductant

(mt)

32%

48%

Ore grade (av. %)

3.4mt

1.8mt

Ore (mt)

19%

34%

Slag (% MnO)

1.9mt

0.5mt

Slag (mt)

70%

75%

HCFeMn

grade (%)

1mt

1mt

HCFeMn

(mt)

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Adjusting the supply curve for the value in use highlights
the benefits of high grade ore

Alloyers

recognise relative ore
value in use

Will pay for the differentials

Chinese ore grades are generally low (typically 22%)

Cost curve has to take value in use differentials into account

Seaborne and domestic cost curves have integrated

Samancor
Manganese s (BHP Billiton 60%) high grade ores are well-placed on the delivered supply cost-curve

Low cost

High VIU
Manganese ore relative value in use index (CIF China, 2008)

(a)
Units of Supply
China domestic
Samancor
Manganese (BHP Billiton 60%)
Other seaborne suppliers
China domestic VIU adjustment
GEMCO
Wessels
Mamatwan
Source: BHP Billiton estimates.

a)
Delivered cost index benchmarked to GEMCO siliceous lump product.

1
0

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Source: BHP Billiton estimates and IMni.

50

72

88

120

197

193
258
281
246
150
153
171
187
241
275
424
313
287
0
100
200
300
400
500
600
700
CY2000
CY2001
CY2002
CY2003
CY2004
CY2005
CY2006
CY2007
CY2008E
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Domestic supply (LHS)
Seaborne supply (LHS)
% supplied by seaborne (RHS)
China manganese ore demand
(mmtu)

China is demanding more high grade
manganese ore

Growth in supply has not kept pace

High grade ore supply has also reduced
(Ghana and Brazil)

Chinese alloy producers have to again
increase use of lower grade ores

Price of high grade ore now fully reflects
relative value in use compared to
marginal tonne
Chinese alloyers
refocus on high grade manganese ore
demand has exceeded seaborne supply capacity

Slide 72

Ownership of low cost alloy smelters

Source: BHP Billiton estimates.

High carbon ferro
manganese cost curve

(Index, FOB 2008)

Samancor

Metalloids
TEMCO
Units of Supply

Alloy is a global commodity with essentially
homogenous products

Pricing is driven by marginal producer

Cost curve has steepened in recent years

Ore and alloy integration adds value:

Markets can be accessed using an
optimal mix of products

Deep understanding of ore
performance in smelters adds to ore
market offering

Ore and alloy output can be optimised
to best suit market conditions

Alloy plants significant profit
contributors in their own right

1
0

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Manganese industry structure

The industry leading Manganese business

Significant future growth and resources

Key messages

Manganese

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Samancor
Manganese business overview

Largest producer of manganese ore
globally

22% global market share

35% seaborne market share

Significant global alloy producer

High quality ore with a high value in use

Low cost ore and alloy operations

Large resource base

~80% of ore sold to third parties

Record ore and alloy production

Key challenges for the business

South African power crisis
limited
impact to date

South African transport bottlenecks

BHP Billiton

(Operator)

Anglo American

Samancor

Manganese

60%

40%

Slide 75
Samancor
Manganese ore
GEMCO
GEMCO
Wessels
(a)

0.9mtpa capacity

Underground mine

High in situ ore grades

-

42-49%

Mamatwan

(a)

2.8mtpa capacity

Open-cut low cost mine

Average grade ~37%

0.9mtpa sinter plant
upgrades ore to 46%

Manganese Ore

HOTAZEL

Mamatwan

& Wessels

3.4mtpa capacity

Open-cut mine

High grade product 43-48%

Lowest cost mine globally

Situated on coast

Close to China

Notes:

a)

An

agreement

has

been

signed

between

Samancor

Manganese

and

empowerment

consortium

Ntsimbintle

Pty

Ltd.
Under
the
transaction
Prospecting
Rights
held
by
Ntsimbintle
are
to
be
vended
into
a
new
vehicle
in
exchange
for
a
9%
equity
interest
in
Hotazel
Mines,
reducing
Samancor
Manganese's
equity
interest
in
Mamatwan
and
Wessels
to
91%.
The
transaction
remains
subject
to
Government
approval.

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HOTAZEL
Mamatwan
& Wessels
Samancor
Manganese alloy
TEMCO

Metalloys
& Advalloy
MMC (51%)
Manganese Alloy
Metalloys
Advalloy
MMC (51%)
TEMCO
GEMCO
Manganese Ore

370ktpa HCFeMn
capacity

82ktpa MCFeMn
capacity

120ktpa SiMn
capacity

One of the largest alloy
plants in the world

HCFeMn
128ktpa
capacity

SiMn
126ktpa capacity

336ktpa sinter per
annum

Power supplied by
Hydro Tasmania

Mn Metal producer
27ktpa capacity

Hydrometallurgical
extraction process

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0%

5%

10%

15%

20%

25%

30%

35%

40%

0

200

400

600

800

1,000

1,200

1,400

1,600

0

50

100

150

200

250

300

Samancor Manganese is an industry leader

Manganese ore production

(a)

(mmtu, CY2007)

Notes:

a)

Source:

CRU,

Metal

Expert,

company

reports,

BHP

estimates.

b)

Source:

Metal

Expert,

company

reports.

c)

Source:

Company

reports.

Samancor

Manganese

excludes

third

party