Iron Ore

Sam Walsh
Chief executive, Iron Ore group

Rio Tinto's Iron Ore group is the second largest supplier to the world's seaborne iron ore trade based on 2008 production. It has a global supply capacity to serve both Pacific and Atlantic markets. RTIO has established a global integrated platform of mines and rail and port infrastructure, which is designed to respond rapidly to changes in demand for iron ore.

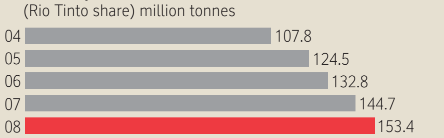
In January 2009 it agreed to sell the Corumbá mine in Brazil for US$750 million. RTIO's most significant mineral resource base is located in the Pilbara in Western Australia. Its portfolio of operations also includes production in Canada, a major development project in West Africa and a project in India. RTIO operations, supported by integrated and technologically advanced infrastructure linking mines to port, will maintain its ability to supply the largest and fastest growing markets. RTIO's Australian portfolio also includes the HIsmelt® plant south of Perth, which applies innovative technology to convert iron ore fines with significant impurities into high quality pig iron. RTIO took responsibility for managment of Dampier Salt during 2008 due to the proximity of salt operations in Western Australia. All 2007 numbers have been restated to include Dampier Salt.

RTIO believes it is well positioned to meet the challenges posed by recent developments in major steel markets, including the economic slowdown in China amid the severe downturn in global financial markets. Following a programme of continuing investment, and a transition in shorter term focus from production growth to cost control, RTIO's portfolio of long life, low cost assets positions it to withstand cyclical fluctuations and take advantage of the eventual rebound.

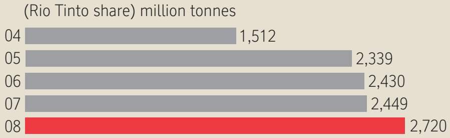
At 31 December 2008, the Iron Ore group had operating assets of US$7,632 million, which accounted for 13 per cent of the Group's operating assets and compared to US$9,311 million of operating assets at 31 December 2007. In 2008, the Iron Ore group contributed US$16,527 million in revenue and US$6,017 million in underlying earnings, which accounted for 28 per cent and 58 per cent of the Group's gross sales revenue and underlying earnings, respectively, compared to US$9,193 million of revenue and US$2,664 million of underlying earnings in 2007. At year-end RTIO employed 7,660 people in Western Australia and 11,109 worldwide.

Sam Walsh, chief executive Iron Ore, is based in Perth, Western Australia.

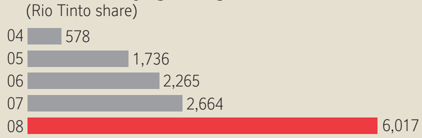
Iron ore production
(Rio Tinto share) million tonnes



Iron ore reserves
(Rio Tinto share) million tonnes

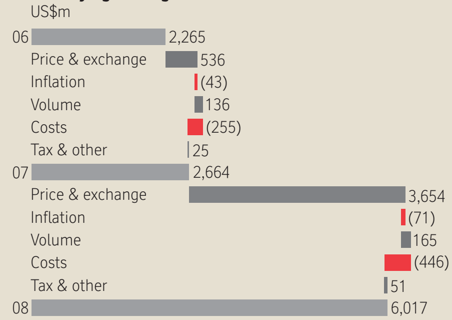


Iron ore underlying earnings contribution*
(Rio Tinto share)



Underlying earnings contribution

Underlying earnings contribution* 2006-2008
US$m



*A reconciliation of the net earnings with underlying earnings for 2006, 2007 and 2008 as determined under EU IFRS is set out on page 37.
All amounts presented by the product groups exclude net interest and other centrally reported items.

STRATEGY

RTIO's strategy of remaining the world's best positioned supplier of iron ore is a key component of the Group's strategy of maintaining a strong position in products that underpin global economic growth. RTIO seeks to expand its business by operating its assets with an emphasis on maximising efficiency and therefore margins.

In part due to the implementation of its investment programme during the past five years, RTIO has positioned itself to expand its business while maintaining its ability to respond to changes in global demand for iron ore.

While capital expenditure has been reduced in response to the economic downturn, RTIO believes it is capable of reactivating its planned expansions in the Pilbara (beyond 220 million tonne annual capacity), and IOC in Canada (beyond 18 million tonnes of pellets and concentrate) in a short timeframe. Projects in Guinea and India can be activated in response to changes in market conditions and as the Group's capital expenditure budget permits.

In addition to its reductions in capital expenditure, RTIO has also introduced a series of initiatives to reduce its operating costs in order to enhance its flexibility. Production from the HIsmelt® ironmaking plant outside Perth was suspended for three months starting in December 2008. RTIO is reducing its level of employment and is in the process of implementing certain structural reforms to consolidate its operating units. Similarly, at Corumbá in Brazil, RTIO has reduced employment levels.

KEY ACHIEVEMENTS

In November 2008, RTIO achieved a major milestone with the completion of the Cape Lambert upgrade to 80 million tonnes annual capacity (Mt/a), well ahead of schedule and within budget. Construction continued on Mesa A in the Robe Valley and Brockman 4 west of Tom Price, with both of these mines intended to enhance RTIO's production in the future.

Rio Tinto's 50:50 joint venture with Hancock Prospecting increased annual production capacity at the Hope Downs mine to 22 Mt/a. In addition, the Hope Downs South extension was completed on time and within budget, and the first ore was processed in November 2008. In early 2009, Hope Downs South will be fully incorporated into the Pilbara network.

In July 2008, RTIO achieved a significant milestone, reaching a major agreement with the Ngarluma people over the proposed expansion of coastal infrastructure in the Pilbara, clearing the way for a comprehensive new Indigenous Land Use Agreement for the area.

In September, RTIO's HIsmelt® pig iron-making plant was awarded the prestigious "Golden Gecko" award for environmental excellence from the Western Australia Government. The Expansion Projects team's construction of the Lang Hancock Railway to Hope Downs mine was also highly commended in the same awards.

During 2008, the Group was honoured at the Australian Business Arts Foundation awards and the WA Business and the Arts awards for its partnerships with leading cultural organisations. In Western Australia Rio Tinto strongly supports community organisations such as the Perth International Arts Festival, SciTech, Black Swan Theatre Company and Fiona Stanley's Telethon Institute for Child Health Research and the Committee for Perth.

KEY PRIORITIES FOR 2009

Rio Tinto has long worked towards increasing the employment of traditional owners and other indigenous people. In July a goal of building indigenous participation to 20 per cent of the RTIO workforce by 2015 was established. This includes a commitment that any local Aboriginal person who finishes year-10 schooling will have the opportunity of a traineeship with Rio Tinto.

Commute services were introduced to assist indigenous workers from several regional centres in Western Australia, as part of a wider expansion of fly-in, fly-out programmes operating from regional centres across the state. The year 2009 will see an escalation of activity in this area, a fundamental aspect of Rio Tinto's community licence to operate. RTIO plans to escalate a comprehensive network of land use agreements with traditional owners.

The environment will continue to be a major focus for RTIO in 2009, particularly the more efficient use of energy and water. In the past year a number of studies examined improved water management practices in the Pilbara, such as harnessing dewatering discharge to achieve environmental benefits and also providing potential commercial opportunities for traditional owners.

RTIO will continue its strategy of bringing advanced technology and innovative applications to its traditional open pit mining techniques, with a number of exciting projects already under way. Several academic partnerships have been established, including a A$10.5 million partnership with Curtin University in Western Australia to develop a world class innovation centre dedicated to strategic research and development in materials and sensing in mining. The Centre will play a significant role in Rio Tinto's drive to incorporate world class R&D in its operations and vision for the Mine of the Future™.

Safety will continue as a priority focus throughout 2009. Specific areas to focus on include contractor familiarity and adherence with Rio Tinto standards, the frequency of hand injuries and the continued risk of driving related issues – still the single greatest risk area across our operations.

OVERVIEW OF SUSTAINABLE DEVELOPMENT

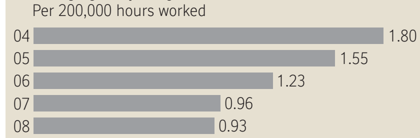
Safety

Performance for the Iron Ore group remained broadly in line with the previous year at a 0.93 all injury frequency rate (AIFR), compared with 0.96 in 2007. Sadly, the performance was marred by a tragic double fatality in a dump truck incident at the Simandou project in Guinea in early November involving employees of a contractor. Resources were put in place to support employees and affected families.

The Dampier port upgrade project was completed in early 2008 with the excellent record of 2.3 million man hours lost time injury free.

The Corumbá operation in Brazil was one of the recipients of the Chief Executive's Safety Award in 2008, for its sustained excellence in safety performance. All operations conducted semi-quantitative risk assessments to identify potential fatality risks, with plans to mitigate those exposures. Other safety initiatives included the improvement of the Contractor Management System as well as an improved pre-task risk assessment tool.

All injury frequency rate
Per 200,000 hours worked



Greenhouse gas emissions

Energy reduction plans have been rolled out across the majority of Iron Ore sites, where energy champions have been appointed to identify energy reduction opportunities. Energy sub-metering and data tracking is being enhanced across the business to assist this and meet imminent compliance requirements. Energy consumption targets are in place for all sites and progress will be tracked.

RTIO's total greenhouse gas (GHG) emissions were 4.2 million tonnes of carbon dioxide equivalent in 2008. In the past two years increased production, longer rail and truck hauls and increased stripping have contributed to the emissions increase.

Total greenhouse gas emissions
Million tonnes carbon dioxide equivalent

Iron Ore is preparing for energy assessments to meet the Australian Government's Energy Efficiency Opportunities Act.

RTIO will replace its ageing and inefficient power generation infrastructure at the Pilbara coast with new generation plant which includes technology able to emit 25 per cent less GHG emissions and have the ability to retrofit a combined cycle which could further reduce emissions in the future.

Housing and Town Services have implemented several initiatives to improve energy efficiency in towns and camps. RTIO's technology division continues to work towards demonstrating a number of new technologies which could significantly reduce energy use and GHG emissions.

A number of these technologies, such as hybrid locomotives and alternative fuels for haul trucks and trains, are being managed under an alliance with General Electric, bringing together the Eco-magination and Mine of the Future™ programmes. In addition, the division is studying new technologies for alternative electricity generation, including the use of solar power.

2008 IN REVIEW

In April 2008, the High Court of Australia ruled in RTIO's favour over the rights to its Shovelanna deposit, east of Newman in the Pilbara. The decision upheld the Western Australian Minister for Resources' decision to terminate a rival exploration licence application by Cazaly Resources. Another action by Cazaly Resources, calling into question the rights held by the Rhodes Ridge Joint Venture (Rio Tinto 50 per cent share) to its eponymous deposit east of Yandicoogina, and applying for tenure over that area, is in progress. The Rhodes Ridge Joint Venture rights have, notwithstanding, been renewed by the State for a further annual term commencing 1 January 2009.

In June 2008, RTIO, through Hamersley Iron, announced that it had reached agreement with Pilbara mining junior Iron Ore Holdings (IOH) on commercial terms for an innovative mine gate sales arrangement, enabling the purchase of iron ore from a new IOH mine at Phil's Creek, 90 kilometres from Newman – a deposit that would be otherwise "stranded" by its remoteness from infrastructure. This innovative agreement was hailed for demonstrating the use of a commercial agreement to reach a satisfactory outcome without resort to mandating rail access.

In November 2008 Rio Tinto appealed to the Australian Competition Tribunal against the decision of the Australian Federal Treasurer to declare its Pilbara rail network available for competitors seeking access to infrastructure, as provided for under the Trade Practices Act 1974. The hearing starts in late 2009.

The decision of the Federal Treasurer is now stayed pending the outcome of that appeal. If the decision of the Treasurer is not overturned on appeal this would not of itself allow access to third parties. Rather they would be entitled to seek that access terms be agreed or arbitrated, and additional requirements would have to be met at this second stage (some within and some outside the control of those third parties). If those additional requirements are not met, or are not able to be met, then access would not occur.

Rio Tinto also engaged with State representatives during 2008 in relation to a rail haulage regime being considered by the State. The State has indicated that it will not seek to unilaterally impose such a regime.

Significant operational challenges during 2008 were proactively managed to mitigate value destruction caused by external events (loss of a majority of Pilbara power supply due to an explosion at Apache Energy's gas plant, and threats to commuter air services as a result of industrial action at National Jet Systems) and internal events such as the ineffective industrial action taken by a small number of trade union members in the rail division.

FINANCIAL PERFORMANCE

2008 compared with 2007

RTIO's contribution to 2008 underlying earnings was US$6,017 million, US$3,353 million higher than in 2007.

RTIO experienced strong demand for its iron ore during the first nine months of 2008. This was reflected in the 86 per cent weighted average pricing increase achieved in June 2008 following RTIO's agreement with China's Baosteel on the price for Hamersley iron ore deliveries for the contract year commencing 1 April 2008. During the final three months of 2008, however, RTIO experienced a contraction in demand for its iron ore, due to the global economic slowdown and in particular slower economic growth in China. Despite this contraction in demand, RTIO's total shipments of iron ore for the full year 2008 were 153 million tonnes, nine million tonnes higher than in 2007.

Although the price for iron ore on the spot market decreased during the final three months of 2008, the impact of this decrease on RTIO was limited since the vast majority of RTIO's sales during this quarter were at annual prices under long term contracts. RTIO sold 15.8 million tonnes of iron ore at the spot rate during 2008. However, most of these sales were made prior to the significant market deterioration from October 2008 and were consistently above the benchmark contract price.

2007 compared with 2006

RTIO's contribution to 2007 underlying earnings was US$2,664 million, US$399 million higher than in 2006.

Demand for iron ore remained extremely strong across the product range throughout 2007, driven by the continuing robust growth in global steel demand and production, significantly exceeding seaborne suppliers' capacity to match. Total Chinese iron ore imports rose from 326 million tonnes to 383 million tonnes, accounting for more than 90 per cent of world growth. Hamersley Iron and Robe River in Australia operated at record or near record levels of production in 2007.

OPERATIONS

Iron ore

Hamersley Iron (Rio Tinto: 100 per cent)
Hamersley Iron operates nine mines in Western Australia, including three mines in joint ventures, approximately 700 kilometres of dedicated railway, and port and infrastructure facilities located at Dampier. These assets are run as a single operation managed and maintained by Pilbara Iron.

In November 2008, RTIO completed the final phase of construction of Pilbara infrastructure to support an annual production capacity of 220 Mt/a. Dampier port's terminals at East Intercourse Island and Parker Point account for a combined capacity of 140 Mt/a, together with Cape Lambert's increased capacity of 80 Mt/a.

RTIO made substantial investments in rolling stock and replacement track across much of its rail network, including the acquisition of 40 new generation, energy efficient locomotives.

Hope Downs mine, a 50:50 joint venture with Hope Downs Iron Ore Pty Ltd (owned by Hancock Prospecting Pty Ltd), enjoyed its first year as a significant contributor to the production of the Pilbara Blend iron ore product. This was complemented by the first production of ore from the Hope Downs South expansion, completed ahead of schedule in November 2008.

RTIO also commenced several projects in connection with its plans to expand annual production capacity beyond 220 million tonnes. These included a US$149 million commitment for studies in respect of a new mine at the Western Turner Syncline, near Tom Price, which has a projected annual capacity of up to 29 million tonnes. Rio Tinto also invested US$500 million for a regional power upgrade in the Pilbara, including the installation of a new gas powered power plant adjacent to the 7 Mile rail operations centre. This plant is intended to replace the ageing, steam driven turbine plants at Dampier and Cape Lambert.

Hamersley Iron's total shipments of iron ore to major markets in 2008

	Million tonnes
China	**73.0**
Japan	**28.5**
Other Asia	**17.9**
Europe	**1.3**
Other	**0.4**
Total	**121.2**

NOTE: This table includes 100 per cent of all shipments through joint ventures.

Aerial view of the Mt Tom Price mine in Western Australia

Robe River Iron Associates
(Rio Tinto: 53 per cent)
Robe River Iron Associates (Robe) is an unincorporated joint venture in which Mitsui (33 per cent), Nippon Steel (10.5 per cent) and Sumitomo Metal Industries (3.5 per cent) hold interests. Robe River is the world's fourth largest seaborne trader in iron ore.

Robe River operates two open pit mining operations in Western Australia. Mesa J is located in the Robe Valley, south of the town of Pannawonica. The mine produces Robe River fines and lump, which are pisolitic iron ore products. The West Angelas mine, opened in 2002, is located approximately 100 kilometres west of the town of Newman. The mine produces Marra Mamba iron ore products, which are incorporated into the Pilbara Blend.

The upgrade of Cape Lambert port to an annual capacity of 80 million tonnes was completed in November 2008. This was the final step in the achievement of total annual export capacity of 220 Mt/a.

Work progressed during 2008 on the new US$901 million Mesa A/Warramboo mine west of Pannawonica township, which is intended to replace Mesa J as the main source of Robe's pisolite production once the Mesa J deposit is depleted. In September 2008, Rio Tinto announced the US$257 million upgrade of Pannawonica to support the new mine.

Robe River primarily exports under medium and long term supply contracts with major integrated steel mill customers in Japan, China, South Korea and Europe.

Robe River's total shipments of iron ore to major markets in 2008

	Million tonnes
Japan	**23.2**
China	**19.6**
Europe	**4.5**
Other Asia	**3.0**
Total	**50.3**

2008 operating performance
Rio Tinto operates its mines, rail and port operations in the Pilbara as an integrated system to maximise value through efficiencies of scale and flexibility. The assets and operations of Hamersley Iron and Robe River are effectively combined for operational management purposes, notwithstanding the varying financial interests in the joint ventures managed by RTIO.

Hamersley Iron's total production in 2008 was 125.1 million tonnes, 13 million tonnes more than the 112.1 million tonnes in 2007.

Robe River's total production in 2008 was 50.2 million tonnes, comprising 25.0 million tonnes from Mesa J, and 25.2 million tonnes from West Angelas. Sales were 24.8 million tonnes of Mesa J and 25.5 million tonnes of West Angelas products. These results were achieved amid significant construction activity.

One of RTIO's key projects during 2008 was the Drumbeat initiative, which was designed to eliminate bottlenecks across the system following the expansion to 220 Mt/a, completed in November 2008. The Drumbeat initiative focuses on improving rail assets such as rolling stock and achieving a more efficient integration between rail and port operations. While challenges remain, during the second half of 2008, production rates were regularly in excess of 200 million tonnes on an annualised basis.

A major gas explosion at Apache Energy's Varanus Island plant off the Pilbara coast effectively removed nearly two thirds of RTIO's power supply, necessitating urgent curtailment of power usage and the sourcing of alternative supply from other sources. The outage lasted two months in June and July, however gas supplies in Western Australia are not expected to return to pre-incident levels until May 2009. While contingency planning enabled the issue to be managed, operations were impacted, and a significant additional cost of approximately A$70 million has been incurred up to the end of 2008.

The strike by a small number of locomotive drivers in October and November 2008 also produced challenges to efficiency, but were overcome with the assistance of the vast majority of rail workers who prevented any real impact, such that October was a record month for tonnes railed.

In August a Cape Lambert rail car dumper was severely damaged in an accident. The dumper was returned to service in mid September 2008 after repair, integrity and operational checks. While out of service, RTIO's other four dumpers at Dampier and Cape Lambert operated at peak capacity, demonstrating the flexibility of the port loading system and helping to minimise loss of tonnage and demurrage.

In November 2008, RTIO announced that, as a result of the global economic crisis and the sudden decrease in Chinese demand for iron ore, it would cut its shipments by ten per cent from the expected 190-195 million tonnes (on a 100 per cent basis) for 2008. Production was subsequently limited across the Pilbara, with significant redeployment of staff and assets to assist with new stockpiles and operational shutdowns. Initially operations at the Channar and Brockman 2 mines were suspended. This was followed by a two week general shutdown of all mine and rail operations across the Pilbara in late December. Operations at all mines were restarted in early January 2009.

Iron Ore Company of Canada
(Rio Tinto: 58.7 per cent)
RTIO operates Iron Ore Company of Canada (IOC) on behalf of shareholders Mitsubishi (26.2 per cent) and the Labrador Iron Ore Royalty Income Fund (15.1 per cent).

IOC is Canada's largest iron ore pellet producer based on 2008 production. It operates an open pit mine, concentrator and pellet plant at Labrador City, Newfoundland and Labrador, together with a 418 kilometre railway to its port facilities in Sept-Îles, Quebec. IOC has large ore reserves with low levels of contaminants.

Products are transported on IOC's railway to Sept-Îles on the St Lawrence Seaway. IOC's port on the St Lawrence Seaway is ice free all year and handles both ocean going ore carriers and Lakers, providing competitive access to all seaborne pellet markets and to the North American Great Lakes region. IOC exports its concentrate and pellet products to major North American, European and Asian steel makers.

In December 2008, RTIO decided to bring production into line with reduced demand through a number of measures. A pellet line was closed, and another scheduled for a maintenance shutdown early in 2009. The capacity expansion programme was suspended, including the PODS (parallel ore delivery system). As with all slowdown measures, the priority is to best position IOC to take advantage of the eventual improvement in market conditions.

IOC employs approximately 2,000 people.

IOC's total shipments of iron ore to major markets in 2008

	Million tonnes
Europe	**6.0**
Asia Pacific	**3.5**
North America	**5.1**
Middle East	**0.5**
Total	**15.1**

2008 operating performance
Production of pellets and concentrates continued strongly through the year, which highlighted the record mine performance from the first half and de-bottlenecking efforts at the plant.

The demand for IOC's products strengthened further in 2008 with concentrate prices increasing by 68.75 per cent and pellet prices by 86.67 per cent over last year's benchmark prices.

Total saleable production was 15.8 million tonnes, up from 13.2 million tonnes in 2007 during which a strike occurred. Pellet production was 12.6 million tonnes (11.3 million tonnes in 2007) with saleable concentrate being 3.2 million tonnes (1.9 million tonnes in 2007). Higher production levels and higher sales prices more than offset higher input costs.

Mineração Corumbaense Reunida (Corumbá) (Rio Tinto: 100 per cent)
In January 2009, Rio Tinto announced the sale of Corumbá to the Brazilian diversified miner, Vale, for US$750 million. The transaction is expected to close in the second half of 2009.

Corumbá produced 2.0 million tonnes of lump and fines iron ore in 2008, selling 1.8 million tonnes to customers across South America, Europe and Asia. A number of developments through the year led to improved efficiency, including the introduction of a dry-ore plant (designed to encourage a greater market for direct reduction processes).

Work continued on a number of studies to increase capacity substantially from approximately 2 Mt/a to more than 12 Mt/a, together with early work towards establishing better barging arrangements and a new port in Uruguay.

Corumbá received the Chief Executive's Safety Award for the third time, firmly establishing its leadership credentials in this most important aspect of operations.

HIsmelt® (Rio Tinto: 60 per cent)
The HIsmelt® iron making project at Kwinana in Western Australia is a joint venture among Rio Tinto (60 per cent interest through its subsidiary, HIsmelt Corporation), US steelmaker Nucor Corporation (25 per cent), Mitsubishi Corporation (ten per cent), and Chinese steelmaker Shougang Corporation (five per cent).

Plant and process performance improved in 2008, and towards the end of the year, installation of process improvements resulted in a fundamental improvement in the output. As a result of the improvements, HIsmelt® achieved a range of new production records, including an average daily production rate of 1,660 tonnes of pig iron sustained over a five day period.

Due to substantial reduction in demand for HIsmelt® product, in December 2008 a three month shutdown was instituted. RTIO will consider reopening HIsmelt® in 2009, following an assessment of prevailing market conditions. As a result of this decision an impairment charge of US$182 million was recorded in 2008.

Interest in the HIsmelt® technology remains strong, and licence negotiations continue with several Chinese and Indian steelmakers adding to the existing three licences already agreed. The European Union supported ULCOS (Ultra–Low Carbon dioxide (CO_2) Steelmaking) consortium announced plans to build a HIsarna® pilot plant in Germany from 2010, combining HIsmelt® technology with an alternative iron ore pre-treatment option in a quest to reduce the CO_2 emissions of current steel technologies by at least 50 per cent.

The winning of the Golden Gecko award for environmental excellence was an endorsement of the unique selling proposition of HIsmelt® technology in a world increasingly conscious of the need to limit industry's environmental footprint.

Minerals

Dampier Salt (Rio Tinto 68.4 per cent)
In 2008 RTIO took responsibility for Dampier Salt (DSL). DSL manages three salt operations located in the Pilbara and Gascoyne regions of Western Australia. Salt is produced by solar evaporation of natural sea water at its Dampier and Port Hedland operations, and by solar evaporation of a concentrated brine extracted from the natural aquifer that sits within the halite layer beneath Lake MacLeod.

Salt customers are located across Asia and the Middle East. The majority are chemical companies who use salt as feedstock for the production of chlorine and caustic soda (together known as chlor-alkali production). Salt is also used for food preparation and other general purposes including road de-icing.

2008 operating performance
Salt production and shipping increased to 6.1 million tonnes and 5.9 million tonnes respectively (Rio Tinto share), as recovery from cyclones experienced in 2006 and 2007 continued, and with the commissioning of the two stages of a one million tonne per annum expansion of the Lake MacLeod field. The last stages of repairs at Port Hedland following Cyclone George in 2007 have been extended and will be completed in the second quarter 2009. Until recently, gypsum has also been dredge

mined at Lake MacLeod. This operation was placed under care and maintenance in December 2008 due to the general demand for gypsum based wallboard being reduced as a result of the downturn in Asian housing markets. Shipping of the remaining gypsum stocks will continue through 2009 as product leaching is completed.

IRON ORE GROUP PROJECTS

RTIO's growth strategy has involved a commitment of more than US$9 billion to expand the global production platform for iron ore since 2003. The feasibility study into expanding Pilbara capacity beyond 220 Mt/a capacity by 2012 was well advanced before the economic slowdown began in the third quarter of 2008.

Rio Tinto spent A$103 million in the Pilbara on evaluation of iron ore deposits that form part of the medium to long term production plan. Evaluation in 2008 largely focused on the Nammuldi/Silvergrass region and the Rhodes Ridge Joint Venture and Brockman 4 sites.

RTIO is reassessing the expansion in the context of the current economic situation. A decision is expected in the first half of 2009, and a number of critical components of the expansion have continued unchanged.

Upgrade beyond 220 Mt/a

Rio Tinto has introduced an aggressive expansion programme during the past five years, and remains well positioned to execute the next phase in its strategy. Cape Lambert has been nominated as the preferred site for expansion of Pilbara port facilities beyond 220 Mt/a. Early planning for reaching 320 Mt/a involves construction of a new terminal (Cape Lambert West) capable of berthing four Capesize ships, and vacant and available land to the west of the existing rail line was selected to accommodate stockpiles under this plan.

During 2009 the economic slowdown may lead to reduced competition, which may provide options for accelerated execution of some projects, as well as improved cost expectations when there are credible signs of market recovery. A key goal of RTIO's cutbacks in operations and projects is to maintain a robust platform from which to capitalise on an upturn.

Work has progressed in anticipation of the next expansion of iron ore production capacity. An array of projects designed to support increased production is under way, and some will be progressed through to completion notwithstanding the short term slowdown. These will include:

Mesa A (Rio Tinto 53 per cent), a US$901 million development of the Mesa A/Waramboo deposits, which will sustain pisolite production for the Robe River lump and fines products from 2010, when Mesa J mine stocks are scheduled for gradual depletion. Mesa A is expected to ramp up to 25 Mt/a capacity from 2011.

Brockman 4, a US$1.5 billion development of the Brockman 4 site as a 22 Mt/a capacity mine, scheduled to be completed in 2010. While there is scope to expand this to 36 Mt/a capacity subject to favourable market conditions.

Western Turner Syncline, a US$149 million study into the establishment of a new mine near Tom Price, with the ore to be fed into the latter's processing plant.

Hope Downs 4, (Rio Tinto 50 per cent) a US$71 million pre-feasibility study into developing the deposit, which is 45 kilometres east of the Hope Downs 1 mine. No decision has been made yet on the pre-feasibility study.

Remote Operations Centre (ROC), announced in December 2007, is a new facility located near Perth Airport, designed to accommodate staff and electronic equipment to operate by remote control a range of assets and processes in the Pilbara. The new building, big enough for 350 people, is under construction and is expected to be completed in mid-2009.

Dampier power station, a US$538 million (Rio Tinto US$425 million) new plant is expected to provide more efficient supply of power to Dampier and Cape Lambert ports and operations. The 160MW station will have four open cycle gas turbines, and a 220kV transmission line is being built to Cape Lambert from the 7 Mile Rail Operations site, where the new station is sited. When complete the new plant will replace the ageing stations at Cape Lambert and Dampier.

Mine of the Future™, an industry leading plan announced by Rio Tinto in January is testing the implementation of a number of innovative mining technology applications in the Pilbara. Several of these are being introduced at Pit A at the West Angelas mine, which has been designated as a pioneer site for Mine of the Future trials. The system consists of a fleet of Komatsu mining equipment that loads and hauls ore automatically. Artificial intelligence in the equipment learns the layout of the mine, how to recognise and avoid other vehicles and obstacles, and how to ferry loads from loading face to dump with the least wear and tear, delay and use of fuel. Without drivers, the system revolutionises productivity and the way mining has been conducted. The new mining process incorporates automated drilling, an alliance with Atlas Copco announced in September. The blast hole drill without an on board operator is guided by satellite GPS to sink its holes in the pit floor on a precise grid. Drilling and blasting by this method would revolutionise the speed of open pit developments.

Iron Ore Company of Canada
(Rio Tinto: 58.7 per cent)
In March 2008, IOC announced an investment of C$500 million to increase its annual production of iron ore concentrate to 22 million tonnes. In September 2008, it announced a further investment of C$300 million to increase annual production of iron ore concentrate to 22.8 million tonnes and pellet production to 13.8 million tonnes by 2011.

In December 2008, in response to market conditions, IOC announced the suspension of these expansion projects. A re-start will be considered once market conditions improve.

Simandou (Rio Tinto: 95 per cent)
The Simandou project in eastern Guinea, west Africa, lies within one of the best undeveloped major iron ore provinces in the world. During the year RTIO conducted advanced studies into establishing an iron ore mine of 70 Mt/a capacity, and potentially of up to 170 Mt/a capacity. A number of options are being reviewed to establish the most efficient and economic means of transporting the mined ore from the project.

Rio Tinto has spent nearly US$400 million on the work necessary to develop a long life iron ore mine at Simandou. During 2008, RTIO spent an average US$20 million per month on drilling, engineering and support. RTIO has conducted exploration and development efforts throughout the 738 square kilometre concession area. A total of 16 drill rigs has been deployed to complete more than 200,000 metres of drilling on over 1,200 sites.

In August, Rio Tinto received correspondence from the Guinean Government purporting to rescind the Concession, the legality of which Rio Tinto questioned. In December it received further correspondence referring to a purported compulsory relinquishment of the northern half of the Concession whilst confirming Rio Tinto's entitlement to the southern half of the Concession. A number of political developments in Guinea since then have occurred and RTIO has engaged in top level discussions with various stakeholders in an effort to clarify the status of the project. Rio Tinto remains of the view that it has complied with all its obligations in relation to the Concession such that it is entitled to hold and retain the entire Concession. It will continue working with the Guinean Government to seek to resolve this matter on that basis.

The project has employed an average workforce of 1,800 staff and contractors across the year, 90 per cent of them Guinean, operating from offices in Conakry and Kerouane, and construction camps at Canga East and Oueleba in the mining concession.

The International Finance Corporation (the private sector arm of the World Bank Group) retains a five per cent stake in the project and is working with Rio Tinto to develop it in an environmentally and socially sustainable way.

The successful implementation of this project will include a competitive infrastructure solution, which may be dependent upon the outcome of the analysis of transportation alternatives.

Orissa, India (Rio Tinto: 51 per cent)
Orissa is one of the key iron ore regions of the world. RTIO has a joint venture with the state owned Orissa Mining Corporation to develop its iron ore leases. With expectations of significant infrastructure and industrial development in India in the medium and long term, Rio Tinto remains keen to contribute to the development of the Indian iron ore sector. Rio Tinto has continued discussions with major domestic iron ore and steel companies and expects to commence mining in 2009.

OUTLOOK

The operations of RTIO are in broad alignment with the market demand for iron ore, with imminent expansions able to match increased demand. There is clearly a consolidation of the industry under way, during which time the advantages of Rio Tinto being the only producer with a truly global supply strategy should become more apparent.

RTIO will maintain its focus on creating value through reducing discretionary costs and cutting waste wherever possible to preserve margins. In early 2009 an organisational restructuring was under way to eliminate 4,400 full time equivalent roles. Capital expenditure reduction targets for 2009 and 2010 are estimated at US$5 billion, comprising US$1.4 billion in 2009 and US$3.6 billion in 2010. Other cost reductions are expected to be achieved through reduced market pressures on input costs and the implementation of various procurement savings.

While reduced iron ore demand has reduced the urgency of RTIO's capacity expansion, in many cases RTIO will postpone rather than cancel its expansion projects. Many expansion projects are sufficiently advanced to enable a rapid resumption in response to increased demand (such as the Automated Train Operations project in the Pilbara).

In every case, increases in market demand will be the key factor. RTIO has invested a substantial portion of its earnings since 2003 in expanding and improving its production network, including developing two world class ports capable of maintaining a 220 Mt/a capacity. This has left it in an ideal position to capitalise on a market recovery.