100 years of growing with Australia

Peter Hardie: bought his first BHP shares 25 years ago.
By 1987, Darwin will be switching on electricity generated by natural gas instead of coal or oil. The benefits are easy to see. But one of the biggest pipelines in Australia will be invisible.

Most of the high-pressure pipes will be buried. And hardly anyone will see them. The same goes for the pipes we design and build for Australian power stations like Eraring and for oil refineries.

Nobody sees them either. Some people might notice some of our product in schools, houses and offices. Or see some of our landscape or security fencing.

And if they are in the military they might know about the role we play in the defence of Australia. But whoever thinks about all the tubes we make for refrigerators and the automobile industry?

And who would ever know that Tubemakers has a network of over 60 metal service centres around Australia? Or that we are the agent for BHP on the west coast of the USA? Or that the water that comes from our taps is clear because of the quality of the Tubemakers ductile iron pipes that carry it?

Caterpillar earthmoving equipment is a little harder to overlook. But who would know that William Adams Tractors, the Caterpillar dealer in Victoria and Tasmania, is a wholly owned Tubemakers company?

And what about the wide range of Vocas facsimile machines, telephone products and special telecommunications equipment we sell and service throughout Australia?

Tubemakers, BHP's largest steel customer. And a whole lot more besides.
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THESE DAYS, INVESTING IN BHP IS CONDUCTED WITH A LITTLE MORE DECORUM.

One hundred years ago, the House of Were was in its forty-fifth year of successful trading. Two years later, shares in the young Broken Hill Proprietary Company were being traded by Were's on a 'hysteric' Melbourne Stock Exchange.

Records show that over the Christmas period in 1887, J.B. Were & Son staff worked frantically, often far into the night, the fever of speculation having affected every stratum of society.

In a single day, 20th January, 1888, operations exceeded $2,000,000, J.B. Were & Son one of Australia's great investment houses.

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And now, like BHP, J.B. Were & Son's interests and influence cover many areas of corporate and private investment, with offices around the world.

But even though the circumstances have changed, the excitement of trading, and the satisfaction of wise investment decisions will always suffice the spirit of the House of Were.

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SECURING THE BEACH HEAD FOR A NEW GOLDEN ERA

Robert Gertken, Managing Editor, BEP Publications

100 YEARS OF BHP

Key dates in BHP’s history

1883: BHP founded by J.B. Were & Son

1903: First shipment of iron ore from Broken Hill

1939: World War II

1954: BHP listed on the London Stock Exchange

1967: BHP becomes the first Australian company to be included in the Dow Jones Industrial Average

1985: 100 years of BHP

BHP delivers the goods for its owners


Growing too big for its roots

Alan Dean, Business Review Weekly

Unearthing the resources wealth of a nation

J.N. Pierce, The Sydney Morning Herald

Port Kembla: A great big smelting pot

Paddy Ginnane, The Illawarra Mercury

In search of management excellence

Nigel Berrill, The Australian Financial Review

The far flung soul of a corporate empire

Terrence Maher, The Australian Financial Review

In search of progress

John Kavanagh, Today’s Computers

How BHP took on the Japanese and won

Peter Robinson, The Australian Financial Review

Peter Horley is one of about 170,000 shareholders who own the BHP. In a special tribute to mark 100 years of achievement, Broken Hill Proprietary Company Limited and John Fairfax and Sons have combined to produce this centenary publication. The huge print run of 1.5 million copies is being installed into Australia’s leading newspapers and will be made available to every high school in Australia.

Printed by Macquarie Publications Pty Ltd of 51 Wheeler Lane, Dubbo, NSW for the following publishers.

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Cover photo: Alan Jongs
I would like to thank the editors for this opportunity to contribute a few words of introduction to this review of BHP's first century. There is much to reflect upon in the past hundred years of unsurpassed human achievement in Australia and throughout the industrialised world. BHP and the people who work for it are proud of its contributions, large and small, to past and present generations of Australians.

Much is owed to those who have gone before and built our company, from small beginnings in a primitive and testing environment. Today BHP has many millions of stakeholders, people who benefit from our enterprises. These stakeholders are direct and indirect shareholders (the latter through the investments of superannuation and life assurance funds), employees, customers and the various communities where we have operations. Although we have not had prior sight of these pages, I am sure they will generate widespread interest not solely for what they contain but because of the depth of our continuing commitment to Australia.

Our second century will be, we hope and believe, another period of economic progress for Australians and the world.

Brian Loton
Managing Director and
Chief Executive Officer

Ansett seats are wonderfully comfortable for all Australians, however big they are. Happy Birthday.
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Securing the beach-head for a new golden era

1985 will be the springboard that launches BHP into its fourth golden era, reports the managing editor of BRW Publications, Robert GottliebSEN. He explains how the acquisition of Utah establishes an important beach-head for the company's future.

The board and shareholders of BHP in the year 2000 will look back on the centenary year, 1985, and rank it as the fourth key date in the company's history. The other three are 1885, when the company was founded to develop the Broken Hill ore; 1911, when Guillaume Delprat convinced directors that they should establish a steel industry at Newcastle; and 1964, when Ian McLennan went looking for oil in Bass Strait.

In 1985 the board of BHP decided that instead of being "the Big Australian," BHP would look for much of its expansion overseas. No other board in BHP's history has ever made such a far-reaching decision. It means that a very big slice of the cashflow from BHP's oil, steel and minerals operations will be invested overseas to widen the horizons of the group.

This policy overturns the habits of almost three quarters of BHP's 100-year history. However, it is fascinating to reflect that when Delprat selected Newcastle as the site for BHP's steelworks he was influenced, in part, by the ability of the port to be used in the export trade. BHP has always been an exporter of steel, but has usually looked to supply the home market first. Exports have been a handy by-product when local demand was depressed. The 1985 decision to change the company's direction was accompanied by a massive alteration in management structure which included a new role for the board, managing director and divisional heads. Although the changes are designed to achieve many objectives, including faster decision making, the internationalisation of BHP is an integral part of the moves.

There is no doubt that the 1982-83 slump, which saw BHP incur a loss in its steelworks, jolted the company and set in train a very different process of thinking. But it was the takeover of Utah which gave BHP the opportunity to gain a beachhead overseas.

The-then BHP chairman, Sir James McLenn, described the Utah purchase as "buying straw hats in winter." Later events have shown that it was one of the most brilliant strokes ever executed by the company.

With the benefit of hindsight, BHP probably would have liked to retain more than the 35 percent of Utah coal that eventuated. But BHP wanted to limit its exposure to coal (which was already high) and to the Australian continent, where almost all its assets were placed.

There were two other prized parts of the Utah deal which BHP retained. The first was the network of Utah mines around the world and the second was the Utah board, based in San Francisco. It would have been very easy to have broken up the San Francisco board. Its power and influence had been reduced during the time it was owned by General Electric, which was not excited about heavy investment in minerals. Normally, when a large company takes over another group it puts its own nominees in charge, and those who were there before take a lesser role or leave.

But one of the great attractions of
Securing the beach-head for a new golden era

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But one of the great attractions of the Utah purchase was that it put its own nominees in charge, and those who were there before take a lesser role or leave.

Above: Sir James McNeill, who presided over the Utah purchase. Top and right: An ore carrier loading at Great Finland, one of the major parts of BHP's mineral operations.
Congratulations to BHP on their 100th year.

Although we’d rather say we have been working together for 100 years, it wasn’t until some months after BHP were incorporated that they became one of the first customers at our Silvertown branch in N.S.W.

That first account which was opened with the Bank of Australasia on the 24th February, 1886, was to form the basis of a relationship spanning practically a century.

The Bank of Australasia was to go on and help form A.N.Z. Bank Ltd. in 1951, which in turn became the Australia and New Zealand Banking Group Limited that we know today.

From someone who has been with them for 99 years, 6 months.

and New Zealand Banking Group Limited that we know today.

From that first day, we have been with BHP as their bankers in a world of constantly changing economic variables. So, on their 150th anniversary, it gives us great pleasure to extend our sincere congratulations to BHP on having attained their 100th anniversary.

BANK...SERVES YOU BEST.
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\[\text{BANK...SERVES YOU BEST.}\]
BHP is looking to internationalise its steel operations. Many overseas BHP shareholders — and the total percentage of BHP shares owned overseas exceed 25 percent — bought the scrip as an Australian “counter”. In other words, it represents a diversifying. With BHP increasingly extending overseas, the company ceases to be such a counter, and many of these institutions will look to other Australian companies or be dissatisfied.

BHP has to convince overseas shareholders that, rather than being an Australian “counter”, it should be seen as a strong world resource company that happens to be based in Australia. There is evidence that it has achieved some success in this view.

As more companies follow the BHP pattern it must inevitably mean less long-term power for unions and governments in Australia. If they push their strength too far, then Australian companies could increasingly switch their capital, resulting in higher unemployment in the areas covered by the deficient governments or unions.

Another area in which BHP is leading Australia is in the decentralisation of management. Throughout its history BHP has been led by a dominant person. There is no question that Delprat, Essington Lewis, Ian McLennan and even James McNeill were some of the most dominating personalities ever to emerge on the Australian corporate stage. Their personalities and management style played an enormous part in the development of BHP.

But the latest management reorganisation of BHP devolves responsibility much further down into the operating areas. For example, managing director Brian Loton will be accountable to the board for “overall performance, strategic planning, resource allocation and the generation of investment opportunities.”

And the board of the company, while continuing its present responsibilities, will concentrate more on strategic direction. It will also concern itself more with assessment of management, performance and with succession planning.

It is a rather unusual step for a board and its managing director to effectively reduce their power. It stamps Brian Loton as a very different leader from his predecessor.

This restructuring will take several years to really change the way BHP comes to its decisions because old habits die hard. But there is no doubt that the BHP of the 1980s will find that the elderly of its three divisions — oil, steel and minerals — will have a great deal more power and influence over the day-to-day running of the company than they did in the 1970s and 1980s.

In many ways this is a recognition that BHP is too big a company for a managing director to assume day-to-day accountability. For example, if Brian Loton reports that his profit has increased 20 percent, it would greatly grate shareholders but might conceal substantial problems in certain areas.

By shifting downwards the responsibility it should be possible to evaluate management and make much more rational decisions about where to allocate capital.

BHP hopes that through this process — rather than by the dominant leader at the top system — it will significantly improve its performance in the years ahead and retain the loyalty of its shareholders.

There are few big companies in Australia which have undertaken such a critical examination of the role of their management and accepted that unless managers and directors perform, the shareholders will replace them with new people.

Just as it was BHP which was at the forefront of developments in Australia so many of the decades of the last century, so the experiences of BHP as it runs into its second century will have an immense impact on the way the private sector in Australia develops, on the attraction of ordinary shares to investors and on the long-term thinking of governments and unions.

The resource you can always rely on. Caterpillar product support — the best in the business.

- 36 Dealer branches throughout Australia.
- 20 times as many servicemen as any other earthmoving machine manufacturer.
- 98% parts availability within 24 hours.
- The most comprehensive range of product support services in the industry.

Caterpillar Cat and its Trademarks of Caterpillar Tractor Co.
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More companies follow the BHP pattern in that they are driven by the same motives as their major shareholders have either already been thrown out or will be.

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Although BHP is setting an example for the entire Australian corporate community, it faces some problems with groups of its overseas shareholders.
The men who made it all happen. BHP founders George McCulloch, left, and boundary rider Charles Rasp, right.

How a boundary rider founded an empire

Despite its huge size, BHP started like any other small company — on the dreams of its entrepreneurial founders. Derek Sawyer traces an empire that began in the isolation of western NSW

BHP's story begins with a quiet, battle-scarred man, something of a loner, scrambling around the black rocks atop a low hill just south of the Barrier Ranges in western New South Wales. The place abounded in wallabies. The hill formed a part of Mt Gipps station, where Charles Rasp was the boundary rider. It was 1883, a drought year. Rasp had migrated to Australia from Bismarck's Germany 14 years before and worked at several properties along the western rivers.

For 10 years or more prospectors had been finding silver-bearing ore in the ranges, but the word around the pubs at Silverton, the local centre, was that Mt Gipps had only a hill of inulin. Despite its huge size, BHP started like any other small company — on the dreams of its entrepreneurial founders. Derek Sawyer traces an empire that began in the isolation of western NSW.

Perhaps typically, Rasp was defying local opinion by fossicking around on the broken hill, helped by a prospectors' guide bought on a trip to Adelaide. He was also defying George McCulloch, the station manager, who wanted no diggers disturbing his sheep.

In September, Rasp decided he had discovered something. He thought it was oxide of tin, then found it was carbonate of lead. But it was enough for him to seek to peg a 40-acre stretch. McCulloch, told of this, proposed instead that all of the hill within the property, about 300 acres, should be claimed in the names of all seven men at Mt Gipps.

So the original syndicate was formed. It took until early 1885 to establish that there was indeed silver in the hill, a whole treasure trove in an orebody rich, deep and wide, overshadowing everything else on the Barrier.

By this time, three of the first group had sold out and the syndicate had grown to 14 as local businessmen and pastoralists bought in. Those partners meeting in June at Mt Gipps homestead decided to float a public company to raise the money needed for large-scale mining. The shares, 2000 issued at £9 pounds each, were received coolly in Melbourne but were rushed in Sydney, Adelaide and Silverton.

Within three years, Australian share markets were valuing them at 45 times as much as that issue price. Within six years the new company was paying out £1 million pounds each year in dividends in a bonanza that could not last.

Four of the original seven found themselves rich. Rasp married the girl he had befriended in a coffee shop on trips to the assay office in Adelaide and built a mansion there in which to live a gentleman's life. David James, a dam-sinker, settled at Kapunda, South Australia, entered state parliament and raced horses, including the 1895 Melbourne Cup winner. Young Philip Charley, the Mt Gipps jackaroo, went on to the BHP board at the age of 21 but soon retired to the Hawkesbury River district to breed horses and cattle.

George McCulloch also became a director, was company chairman briefly in 1884, and then retired to London and collected paintings.

To the three who sold out, Jim Poole, George Lind and George Urquhart, went none of the riches from the fabulous hill. Within 18 months of BHP's birth the Big Mine at Broken Hill had produced one million ounces of silver. The town that grew up around it had 10,000 people by 1888 and a rail link to South Australia. Other mines were quickly established along the line of lode. BHP kept three of its original blocks and floated off four to other companies.

Early mining efforts were haphazard, resulting in ground subsidence, working conditions were dangerous and living conditions above ground poor. Silver and lead prices fluctuated, putting pressure on costs, but gradually the whole scene improved. Open-cut mining solved BHP's ground stability problems, although from 1885 fires broke out in old underground workings and burned for years.

The BHP directors, in what was to become a characteristic move, brought in the ore from McCulloch's shaft at Broken Hill in 1887.

The men who made it all happen. BHP founders George McCulloch, left, and boundary rider Charles Rasp, right.
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The BHP directors, in what was to become a characteristic move, brought...
1883 Syndicate of seven formed at Mt Gipps station.
1885 Silver, lead and zinc ore discovered at Broken Hill in NSW.
     First BHP prospectus.
1887 BHP leased Iron Knob and then Iron Baron area.
1907 Trial smelting of iron by BHP at Port Pirie.
1911 BHP's decision to enter iron and steel making.
1912 Newcastle Iron and Steel Works Act (NSW) passed.
1916 Newcastle Steelworks officially opened.
     Completion of Whyalla jetty.
1920 Officers Provident fund begun for male staff.
1927 Staff training scheme introduced at Newcastle steelworks.
1935 BHP bought all of AIL shares.
     Group employment reached 10,000.
1939 BHP ceased mining at Broken Hill.
1941 Blast furnace and shipyard opened at Whyalla.
1947 Female Staff Provident Fund introduced.
1950 Iron ore quarries established, Cockatoo Island.
     Yampi Sound.
1954 Kwelina fencet post plant opened.
1955 Flat products division established at Port Kembla.
1956 Commissioning of No 2 open hearth steelmaking shop, Port Kembla.
1957 Cariral Research Laboratories, Shortland opened.
1958 Iron Baron quarries reopened.
1961 Ferro alloy plant established, Bell Bay, Tasmania.
1962 Open hearth steelmaking at Newcastle replaced by BOS furnaces.
1964 Koolan Island iron ore quarries opened, Whyalla steelworks commissioned.
1965 BOS furnaces and second blast furnace at Whyalla commissioned.
     BHP and Esso discover commercial quantities of natural gas in Bass Strait.
     BHP Wages Employees Retirement fund introduced, for wage employees.
1966 Coffin Bay limesands opened up.
     Groote Eylandt manganese quarries commissioned.
1967 Commercial quantities of crude oil discovered by Esso and BHP in Bass Strait.
     Kooyongtubing iron ore quarries commissioned.
     Group employment reached 50,000.
1968 Sinter plant and blast furnace established at Kwinana.
     Mt Newman iron ore project opened.
1971 BHP and Esso's oil and natural gas fields in Bass Strait in full production.
1972 BOS shop at Port Kembla established.
     BHP House completed.
     BHP Staff Superannuation fund replaced Officers Provident Fund.
1973 Port Kembla steelmaking expansion to 5.5m tpa completed.
1974 Rheem Australia Ltd becomes BHP subsidiary.
1975 Australian Industrial Refractories Ltd acquired.
1976 BHP joins with Shell to develop North West Shelf natural gas.
     Geelong Rod Mill opened.
1977 BHP completes purchase of Peabody Coal interests.
     55% of the Moura and Kanga export coal operations in Queensland.
     BHP-Monsanto styrene monomer plant in Melbourne commissioned.
     BHP-Newton Taffet gold mining operation in Western Australia commissioned.
1978 Port Kembla Steelworks 50th anniversary; continuous slab caster commissioned.
     Hot strip mill commissioned at Westport.
1979 Iron ore beneficiating plant at Newman opened.
     Remaining 50% of shares in Greenland (Australia) Ltd purchased from GKN.
1980 Work starts on first phase of North West Shelf project.
     Papua New Guinea Government approves Ok Tedi development proposals.
     Gregory Coal mine opened.
1981 BHP Employees' Superannuation Fund succeeded the Wages Employees Retirement Fund.
     Sales agreement reached for TOCM Riverside Coal Project.
     BHP announced as manager for third Newcastle coal loader.
     North West Shelf LNG memorandum of intent signed by Japanese buyers.
     BHP to participate in full feasibility study of uranium enrichment plant.
1982 Universe rail plant opened at Whyalla.
     Saxtonvale coal mine commissioned.
     cessation of open hearth steelmaking (Port Kembla, Hill in NSW.
1982-83 Steel Division sheds one-third of industry jobs.
1983 Utah international mining interests bought from General Electric Company (deal covered by conditional agreement).
     BHP awarded oil exploration rights in China Seas.
     Group employment reached 5,000.
     Five-year Steel Industry Plan launched.
     Offshore oil discovered in Northern Territory (Jabiru).
1984 Utah acquisition completed.
     Worsley alumina refinery commissioned.
     Ok Tedi commissioning (gold production).
     Koonagag coal loader commissioned.
     Gillett South gold project at Ora Banda announced.
     North West Shelf domestic gas phase commissioned.
     Brisbane steel mill announced.
1985 Energy Resources Group Inc. acquired.
     Joint BHP/Shell bid for Woodside Petroleum.
     New BHP Steel International group formed.
### 100 Years of BHP

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1883</td>
<td>Syndicate of seven formed at Mt Gipps station.</td>
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<tr>
<td>1885</td>
<td>Silver, lead and zinc ore discovered at Broken Hill in NSW.</td>
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<tr>
<td>1885</td>
<td>First BHP prospectus.</td>
</tr>
<tr>
<td>1887</td>
<td>BHP leased Iron Knob and then Iron Baron area.</td>
</tr>
<tr>
<td>1890s</td>
<td>Trial smelting of iron by BHP at Port Pirie.</td>
</tr>
<tr>
<td>1911</td>
<td>BHP's decision to enter iron and steel making.</td>
</tr>
<tr>
<td>1912</td>
<td>Newcastle Iron and Steel Works Act (NSW) passed.</td>
</tr>
<tr>
<td>1915</td>
<td>Newcastle Steelworks officially opened.</td>
</tr>
<tr>
<td>1920s</td>
<td>Completion of Whyalla jetty.</td>
</tr>
<tr>
<td>1927</td>
<td>Staff training scheme introduced at Newcastle steelworks.</td>
</tr>
<tr>
<td>1935</td>
<td>BHP bought all of AIS shares.</td>
</tr>
<tr>
<td>1939</td>
<td>BHP ceased mining at Broken Hill.</td>
</tr>
<tr>
<td>1941</td>
<td>Blast furnace and shipyard opened at Whyalla.</td>
</tr>
<tr>
<td>1947</td>
<td>Female Staff Provident Fund introduced.</td>
</tr>
<tr>
<td>1950</td>
<td>Iron ore quarries established, Cockatoo Island, Yampi Sound.</td>
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<tr>
<td>1954</td>
<td>Kirlinana farm post plant opened.</td>
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<tr>
<td>1955</td>
<td>Flat products division established at Port Kembla.</td>
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<tr>
<td>1956</td>
<td>Commissioning of No 2 open hearth steelmaking shop, Port Kembla.</td>
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<tr>
<td>1957</td>
<td>Central Research Laboratories, Shortland opened.</td>
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<tr>
<td>1958</td>
<td>Iron Baron quarries reopened.</td>
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<tr>
<td>1961</td>
<td>Ferro alloy plant established, Bell Bay, Tasmania.</td>
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<tr>
<td>1962</td>
<td>Open hearth steelmaking at Newcastle replaced by BOS furnaces.</td>
</tr>
<tr>
<td>1964</td>
<td>Koolan Island iron ore quarries opened, Whyalla steelworks commissioned.</td>
</tr>
<tr>
<td>1965</td>
<td>BOS furnaces and second blast furnace at Whyalla commissioned.</td>
</tr>
<tr>
<td>1966</td>
<td>BHP and Esso discover commercial quantities of natural gas in Bass Strait.</td>
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<tr>
<td>1968</td>
<td>Coffin Bay limesands opened up.</td>
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<tr>
<td>1969</td>
<td>Groote Eylandt manganese quarries commissioned.</td>
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<tr>
<td>1969</td>
<td>Commercial quantities of crude oil discovered by Esso and BHP in Bass Strait.</td>
</tr>
<tr>
<td>1969</td>
<td>Koolan Island iron ore quarries commissioned.</td>
</tr>
<tr>
<td>1969</td>
<td>Group employment reached 10,000.</td>
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<tr>
<td>1972</td>
<td>Remaining 50 per cent share in John Lysaght (Australia) Ltd purchased from GKN.</td>
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<td>1972</td>
<td>Gregory Coal mine opened.</td>
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<tr>
<td>1973</td>
<td>BHP Employees Superannuation Fund succeeded the Wages Employees Retirement Fund.</td>
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<tr>
<td>1974</td>
<td>Sales agreement reached for TDM Riverside Coal Project.</td>
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<td>1974</td>
<td>BHP appointed as manager for third Newcastle coal loader.</td>
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<td>1975</td>
<td>North West Shelf LNG memorandum of intent signed by BHP and Esso in Bass Strait.</td>
</tr>
<tr>
<td>1976</td>
<td>BHP Staff Superannuation Fund opened to women.</td>
</tr>
<tr>
<td>1977</td>
<td>BHP completes purchase of Peabody Coal interests.</td>
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<tr>
<td>1978</td>
<td>Staff training scheme introduced at Newcastle steelworks.</td>
</tr>
<tr>
<td>1979</td>
<td>Port Kembla Steelworks 50th anniversary; continuous slab caster commissioned.</td>
</tr>
<tr>
<td>1980</td>
<td>Hot strip mill commissioned at Westport.</td>
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<td>1983</td>
<td>Five-year Steel Industry Plan launched.</td>
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<tr>
<td>1984</td>
<td>Sale of BHP Steelmaking division.</td>
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<tr>
<td>1986</td>
<td>New BHP Steel International group formed.</td>
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**Additional Events:**

- 1977: BHP completes purchase of Peabody Coal interests, 58% of the Moura and Kanga export coal operations in Queensland.
- 1978: BHP and Esso discover commercial quantities of uranium enrichment plant.
- 1982: Uniform rail plant opened at Whyalla.
The same message has many forms. Progress and success has many shapes.

One of the most outstanding is BHP’s centenary. We are fortunate that we have been working closely with BHP for almost two decades in writing new pages in the growth of exports to Japan. We believe that this productive cooperation will continue as BHP enters its second golden century.

We warmly congratulate BHP and all its people with whom we have been associated for many years.

TOKYO BOEKI LTD.
The company had invested about 15 million pounds in the works. It was the ore from another fabulous hill that now engaged the interest of the BHP directors of the day. Guillaume Delprat, a mining man of Dutch background and international repute, was recruited as general manager.

Delprat solved the riddle of separating metals in the ores won from deeper levels which had heavy sulphide inclusions. With BHP metallurgist A.H. Carmichael, he devised the flotation technique which is now basic minerals processing the world over. This restored BHP’s profits.

Twenty years of operation had produced some 8 million pounds in dividends for shareholders, who by 1905 numbered about 9000. A London newspaper described the Big Mine as “the best managed in the world”. By 1907 there were 5000 men on the company payroll.

BHP had faced its first strike at Broken Hill in 1889 when unions won recognition. Fresh disputes followed and in 1893 six strike leaders were jailed on conspiracy charges. Then, after the metal market collapsed in 1899, BHP moved to cut wages, resulting in a stoppage which lasted until 1911 with more arrests of union men.

Despite the noisy marches, fiery speeches and scuffles with police, the strikes produced a highly-charged climate of industrial bitterness which became legendary in its intensity. The BHP directors of the day developed a marked hostility to arbitration systems concepts of justice.

The uneasy industrial peace of the early war years was broken in 1917. Then a series of strikes culminated in a 1920 award giving the miners a 25-hour week, higher wages and other gains. The generous judgment was made when lead was at a record 38 pounds a ton. That price fell away almost at once and stayed low for 25 years.

The Big Mine was already substantially depleted and full working was never resumed there after 1936. It closed in 1930 after yielding 16 million tons of silver and more than two million tons of lead and other metals.

Labor helps the capitalists into the steel industry

It was the ore from another fabulous hill that now engaged the interest of the men at BHP.

The company had built its smelters at Port Pirie on the eastern shore of Spencer Gulf, a small wheat port linked to the South Australian rail system which was used to ship supplies to Broken Hill.

Base metal smelting furnaces need ironstone as a fluxing agent, and that was found in Iron Monarch, a hill some 30 miles inland from the opposite shore of the gulf.

Iron Monarch and its smaller neighbor Iron Knob were rich deposits indeed, but already under lease. In 1899 BHP disputed the claim, won the case, and bought the rights from the Iron Monarch ore and supplied them. It was broken in 1917 when unions won a strike.

BHP also had an adviser, one David Baker, a consulting engineer from Philadelphia. He was already “esteemed” by the Iron Monarch ore and satisfied that Australia could support a modern steelworks profitably. He recommended Newcastle with its nearby coalfields as the site. All this was explained to Treasurer Calwell, how would the government view such a proposal?

The Labor cabinet hesitated only briefly. By November the necessary legislation for the Newcastle development was passed amidst protests from the Labor faithful. The newly-established (and Labor-sponsored) Commonwealth Bank agreed to underwrite the necessary share and debenture issues. BHP shareholders had already approved the venture.

WARMEST WISHES TO BHP ON ITS CENTENARY!

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pounds invested in steel, about 10,000 employees and the same number of shareholders. Four out of every five shareholdings were registered in Australia. The steelworks had just produced a record 98,710 tons.

The years since the 1918 peace had not been easy. The works were closed for nine months from May 1922. Competition from cheap imports while local wages and costs remained high lost 500 men their jobs. Later, the steel industry was temporarily exempted from the introduction of the 44-hour week and gradually the order book was refilled.

Satellite industries helped. In the post-war years BHP encouraged the building of wire-drawing, sheet and steel, and pipe-making plants at Newcastle and supplied them with feedstock. Besides that, BHP itself had a new source of inspiration for efficient operation. Delprat had told his board in 1919 that he wanted to retire. In the following year one of his technical recommendations was challenged and in February 1921 he stood down. The new man was Essington Lewis, then 40, the first Australian-born general manager. He had gone to work for BHP as a young mining engineer in 1904 and had earned widespread respect for his capacity and energy. Under Lewis’s leadership, plans for further expansion were set aside for the time and all efforts were concentrated on containing costs. Ships and collieries were bought as part of the cost-control measures. Good housekeeping became a fetish and extensive safety and training programs introduced. When world depression followed the Wall Street crash of 1929, Newcastle had to cut back output but fared much better than most other producers. BHP steel was the cheapest in the world and Lewis was proud to claim that Newcastle’s technical standards compared with any.

The other steelworks, Australian Iron & Steel Ltd’s Port Kembla plant, was not doing as well. Sydney steel founders George and Charles Hoskins had bought the Lithgow steelworks in 1900, but found after the war that making steel meant prohibitive costs. So, from 1929 and with the next generation of the Hoskins family in control, AL & S was formed to build a new plant at Port Kembla, with the good quality south coast coal nearby. But world depression caught the new company over-extended and there was no financial help at hand. In July 1933 the Hoskins brothers sought a meeting with Essington Lewis, and in October AL & S became a BHP subsidiary. The Australian steel industry had become a monopoly. Port Kembla was bought with an exchange of scrip; it involved an increase in BHP’s shares on issue of only 17 percent.

Essington Lewis leads the industries into the war

In 1937 BHP profits passed the 1 million pound mark for the first time since 1929 and steel output topped 1 million tons for the first time. The performances were satisfying but both Essington Lewis and Harold Darling were gravely concerned with the portents of coming war. Lewis brought this concern back from an overseas trip in 1934, and from then on made as many preparations as possible.

In 1935 BHP joined the Broken Hill Associated Smelters Ltd (whose chairman was W. S. Robinson) and four other companies to form Commonwealth Aircraft Corporation Pty. Ltd. CAC established a plant at Fisherman’s Bend in Melbourne in time to build more than 1000 planes.
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Siemens and BHP
The partnership continues

In many of BHP's mightiest projects, Siemens has been a partner supplying high technology electrical and electronic systems and products. In coal mining, winning the raw coal, through preparation and treatment, to coal handling and ship loading, Siemens is involved.

For the iron and steel industry, Siemens' systems help BHP mine iron ore in the north-west of Western Australia and operate the mills at Newcastle and Port Kembla and run four of the BHP roll-on roll-off ships which ply Australia's coastline.

Siemens' motors, switchgear, control and automation systems are continuing to play an integral part in major BHP developments around Australia. It is a partnership benefiting two leaders in their fields.

Siemens has been involved at these facilities:
- Riverside Coal Preparation Plant and Coal Loading Facility, Queensland
- Koongabong Coal Loader Limited, Newcastle
- BHP Bloom Mill, Newcastle
- BHP Billet Mill, Newcastle
- BHP Flying Shear, Newcastle
- AUS 140 inch Plate Mill, Port Kembla
- AUS 180 inch Plate Mill, Port Kembla
- AUS Blast Furnace, Port Kembla
- AUS 330 inch Plate Mill, Port Kembla
- AUS Blast Furnace, Newcastle
- AUS 450 inch Plate Mill, Port Kembla
- AUS 540 inch Plate Mill, Port Kembla
- AUS Flying Shear, Port Kembla
- AUS 625 inch Strip Mill, Port Kembla
- AUS 650 inch Plate Mill, Port Kembla
- AUS 660 inch Plate Mill, Port Kembla

Siemens' systems help BHP mine coal and prepare it for export, through the use of loaders and straddle carriers, to raise the capacity for work. It remained chief general manager of the company (but resigned the board seat he had been given in 1900) and took a small personal staff of company people to work with him.

The pressure fell away as the tide of the fighting turned, and in March 1945 Lewis went back to BHP. He found a company facing difficulties on every direction, including one into oil exploration, but the worth of his leadership was soon recognised and he was made responsible for aircraft production as well. In 1946, after some demurrer on Lewis's part he was accorded the rare distinction of being made a Companion of Honour.

The years of war meant a punishing schedule even for a man with Lewis's capacity for work. He remained chief general manager of the company (but resigned the board seat he had been given in 1900) and took a small personal staff of company people to work with him.

Peace was clearly to bring a new range of opportunities and some problems. There were moves in new directions, including one into coal exploration.

The cornerstone of post-war steel expansion was the building of a 900,000-tonne per annum hot strip mill at Port Kembla at a cost of 40 million pounds. The opening of the mill in 1965, together with Arthur Calwell's migration program, was the new settlement from Europe who made the extra manpower needed for Port Kembla's future.

At Newcastle, sidero plant units were replaced, land was reclaimed from a river channel to provide much-needed space, and in the early sixties new basic oxygen converters were installed instead of the ageing open hearths to deal with the West Australian Government providing access to new iron ore deposits. BHP agreed to build first a rolling mill and then a blast furnace at Kwinana. A stockpiling plant and rolling mill, opened in 1986, was added to the Whyalla works.

In 1963 BHP minerals man Keith Rowell and Murray Lorie agreed with low cadmium and lead people on Groote Eylandt in the Gulf of Carpentaria to open up the greenstone manganese ore deposits there. First shipments were made in 1969 to the new manganese plant at Bell Bay in Tasmania, and soon the manganese was also being sold competitively on world markets.

In 1970 came an agreement to power two new shipyards at Woy Woy and the South Australian State side and was well ahead of schedule.

Siemens Ltd.
925 3000 025 4721
Melbourne 3020, Sydney 2000, Brisbane 369 9666, Perth 925 4723
Siemens and BHP

The partnership continues

In many of BHP's mightiest projects, Siemens has been a partner supplying high technology electrical and electronic systems and products.

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Siemens Ltd.

Siemens, Tomorrow's technology today

BHP's rolling mill at Port Kembla. Siemens has been involved at these BHP projects by providing high technology electrical and electronic systems and products.

Guillaume Delprat, BHP general manager from 1999 to 2001, came from a Belgian family that had migrated to Holland. His father, a major general, became Dutch Minister for War. Young Guillaume was a brilliant student who studied mining engineering in Britain and Europe. He was fluent in languages and a man of some charm.

Lewis, Delprat and Lewis.
after BHP in 1907 joined the McNewman venture to work a huge ironstone deposit in the Pilliga.

The company’s fleet was greatly expanded and a new research establishment opened at Shortland in New South Wales. Profit for 1905 was an all-time high, shareholders’ funds at $90 million pounds had not moved in five years.

Essex Lewis had become chairman in 1950 after the death of Harold Darling, but two years later stepped down to become deputy chairman. Colin Syme took his place. Lewis remained a director until 1960, when he died aged 80. Syme was chairman until 1961.

On the advice of American management consultants the company was reorganised in 1956 with the aim of setting up operating divisions as profit centres. Engineer Ian McLennan became managing director. It was a conscious planning for growth.

It needed to be, for in the late fifties BHP had begun looking for oil in the Sydney sedimentary basin. That came to nothing. But in 1960 an American expert named Lewis Weeks was brought in to investigate, and told Ian McLennan that BHP could expand its operations into the Bass Straight oil and gas fields established new horizons.

Going offshore and finding new horizons

The development of the Bass Strait oil and gas fields established new horizons for scale and speed in Australia and transformed the national economy in the process.

Ian McLennan had little trouble persuading his fellow directors to take Lewis Weeks to his word, and by 1961 BHP held permits for much of the stretch. Seismic survey of the Gippsland Basin in 1963 proved promising, and on the basis of this, BHP invited 10 leading oil companies to bid for a partnership. Lewis’s offer of offshore surpassed all others. The first well drilled in 1963 by the new partnership struck gas in February 1965, and the third well struck more.

The result was Bass Strait oil and gas, but before a major oil field was found it was Kingfish in the Timor Sea off Australia’s north-west coast which resulted in the discovery of two fields, Jove and Jirrah, which were being prepared for development.

It was in 1965 that an exploration group led by the Australian company Woodburn and Burnham Oil of Britain found a huge gas field in the north-west continental shelf, Burnman Oil, facing financial problems elsewhere, sold out to BHP in 1970. After various changes in the partnership arrangements, including BHP and Shell Australia taking over control of Woodburn, those two companies have become the main participants in the $11 billion North West Shelf Project, supplying gas to Western Australia.

One of the modern engineering marvels of the world. On left gold and copper mine in the semi-desert highlands of Papua-New Guinea.

Western Australia’s Great Sandy Desert and in a different kind of resource development project – took a half share in BHP’s investment in the Telfer gold project on the edge of

The first gas was delivered in March 1969 and the first oil seven months later.

In three years to 1970 BHP had come to control nearly 1.81 billion dollars in Bass Strait. Much more has been spent since.

Flushed with success, BHP set about converting its coal mines division and began exploring over much of Australia and overseas. By the eighties these efforts included oil search in China (both on land and offshore) in the North Sea and in the US. Exploration in the Timor Sea off Australia’s north-west coast resulted in the discovery of two fields, Jove and Jirrah, which are being prepared for development.

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The seventies had opened on a high note with BHP committed to spending $220 million to expand the capacity of its plants at $152 million a year.

In 1969 BHP had taken up a half share in John Lysaght Australia and intended to build a steelworks at Victoria’s Western port. But costs were rising, and while profits held for a time, the return of funds was poor. The Federal Government had the Industries Assistance Commission investigating.

In 1978 Lysaghts became a wholly owned subsidiary, but the downward trend was continuing. In 1983 the market collapsed. Only five of 12 blast furnaces were operating. Rationalisation became essential.

In a comprehensive recovery plan, old plans were put on hold and normal capacity reduced to 6.6 million tonnes a year. Steel division workers were cut from 36,000 in 1981 to 22,000 in 1984. Extra protection against imports was provided by an authority, which included union representatives, was appointed by the government to moratorium periods.

The leaner steel plants produced better results as productivities improved and demand increased. The company’s 100th year was seeing the benefits of recognising with the steel-using subsidiaries more closely integrated.

Meanwhile, there were new opportunities arising overseas.

In 1976, BHP agreed with Michael Syme’s Government to look into the possibilities of the Mt. Fudan gold-copper deposit in spectacular but inaccessible area of New Guinea. H.K. Copper of the US had discovered the ore but then declined to work it.

After protracted engineering studies, Ok Tedi’s onshore and offshore operations, agreement was reached with Reynolds Metals of the US and other companies to build an alumina refinery at Wewak in Western Australia, based on a bauxite deposit in the Murraya Islands in which BHP had a half interest. Efforts to get into aluminium smeltering failed.

By 1986 Ok Tedi was producing 1.2 million tonnes of bauxite a year. BHP is also actively involved in various joint ventures in other parts of the world, including the construction of a new copper refinery in Canada, and the development of a new alumina refinery in the US.

In 1980 BHP took a 30 percent interest in the Telfer gold project on the edge of

The company’s operations now make up about 2 percent of Australia’s GDP, and provide about 8 percent of the nation’s exports.

It all seems a long way back to that rocky hill alive with wallabies and the current of the Darling Ranges in which BHP had a controlling share of the Moura-Kianga mines. It is a long way back to that small iron ore mine in the Pilbara that was owned by the BHP shareholders who remained on the board for 45 years.

Western Australia’s Great Sandy Desert and in a different kind of resource development project – took a half share in BHP’s investment in the Telfer gold project on the edge of

Looking overseas to find room for the next 100 years

BHP approached its centenary year with a cloud hanging over steel, the industry which had proved the basis for the company’s financial strength.

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In a comprehensive recovery plan, old plans were put on hold and normal capacity reduced to 6.6 million tonnes a year. Steel division workers were cut from 36,000 in 1981 to 22,000 in 1984. Extra protection against imports was provided by an authority, which included union representatives, was appointed by the government to moratorium periods.

The leaner steel plants produced better results as productivities improved and demand increased. The company’s 100th year was seeing the benefits of recognising with the steel-using subsidiaries more closely integrated.

Meanwhile, there were new opportunities arising overseas.

In 1976, BHP agreed with Michael Syme’s Government to look into the possibilities of the Mt. Fudan gold-copper deposit in spectacular but inaccessible area of New Guinea. H.K. Copper of the US had discovered the ore but then declined to work it.

After protracted engineering studies, Ok Tedi’s onshore and offshore operations, agreement was reached with Reynolds Metals of the US and other companies to build an alumina refinery at Wewak in Western Australia, based on a bauxite deposit in the Murraya Islands in which BHP had a half interest. Efforts to get into aluminium smeltering failed.

By 1986 Ok Tedi was producing 1.2 million tonnes of bauxite a year. BHP is also actively involved in various joint ventures in other parts of the world, including the construction of a new copper refinery in Canada, and the development of a new alumina refinery in the US.

In 1980 BHP took a 30 percent interest in the Telfer gold project on the edge of
after BHP in 1967 joined the Mt Newman venture to work a huge ironstone deposit in the Pilbara.

The company's fleet was greatly expanded and a new research establishment opened at Shortland in New South Wales. Profit in 1965 was an all-time high, shareholders' funds at 331 million pounds had more than tripled in five years.

Essington Lewis had become chairman in 1959 after the death of Harold Darling, but two years later stepped down to become deputy chairman. Colin Syme took his place. Lewis remained a director until 1961, when he died aged 80. Syme was chairman until 1971.

On the advice of American management consultants the company was reorganised in 1966 with an aim of setting up operating divisions as profit centres. Engineer Ian McLennan became managing director. It was conscious planning for growth.

It needed to be, for in the late 1950s BHP had been looking for oil in the Sydney sedimentary basin. That came to nothing, but in 1966 an American expert named Lewis Weeks was brought in to advise, and he told Ian McLennan that BHP could bid for a stake in the vast Bass Strait area. This was important not only to BHP, but to Australia, based on a bauxite deposit in Western Australia, which was reached with Reynolds Metals of the US.

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In a comprehensive recovery plan, old plants were put under scrap and nominal capacity reduced to 6.6 million tonnes. Steel division workers were cut from 44,250 in 1981 to 29,000 in 1983. Extra export credits were provided to the authority, which included union representatives, was appointed by the government to monitor progress. The leaner steel plants produced better results in productivity improvements and demand increased.

The 14th year 1978 was seeing the benefits of recognition with the steel-using subsidiaries more closely integrated. Meanwhile, there were new opportunities arising overseas.

In 1974, BHP agreed with Michael Sarich's company to look into the possibilities of the Mt Olympus gold-copper deposit in spectacular but inaccessible ground in the Bougainville Province of Papua New Guinea. Kenzech Copper of the US had discovered the ore but then declined to work it.

After protracted engineering studies, Ok Tedi Mining Company was formed with BHP, American and German interests and the PNG Government as shareholders. The mine's first development stage was opened in 1984 at a cost of $1.1 billion. The operation will cost twice as much.

In August 1982, John Bunting of General Electric of the US came to lunch at BHP House in Melbourne. He put the question to chairman for James McNeill: would BHP be interested in buying GE subsidiary Utah International Inc., the San Francisco-based resource group?

Negotiations took until January 1983 and a complex $2.4 million proposition emerged. BHP bought Utah's mining interests in the US, Canada, Brazil, Chile and other countries, and set up the US managing coal mine in Queensland with BHP's own Gregory mine in two trusts with 35 to 45 percent BHP interest. Utah International became a BHP subsidiary and continued to manage the properties involved.

Then in late 1984 the company rounded off its overseas forays with a successful $US94 million bid for a Kansas-based petroleum company, Energy Resources Group Inc. ERG has an extensive exploration program and 1,400 producing wells in the US and Canada.

These developments capped a decade of progress that was indeed impressive. In the 10 years to 1984, group sales trebled to nearly $10.3 billion, BHP passed the $1 billion mark for the first time in 1972, rose to more than $300 million in 1983, then leaped by $1.5 billion each year for three years. After checks in 1982 and 1983, the 1984 result was $328.8 million. The centenary year will be better still.

The company's operations now make up about 2 percent of Australia's GDP, and provide about 8 percent of the nation's exports.

It all seems a long way back to that rocky hill alive with wallabies and the first boundary rider thumbing through his prospector's guide.

Western Australia's Great Sandy Desert and in a different kind of resource development — took a half share in Rupan Sarich's invention of a new design for an auto engine.

Looking overseas to find room for the next 100 years

BHP approached its centenary year with a cloud hanging over steel, the industry which had proved the early basis for the company's financial strength.

The seventies had opened on a high note with healthy commitments to spending $2.5 billion to expand the capacity up to 12 million tonnes. In 1969 BHP had taken up a half share in John Lysaght Australia and intended to build a steelworks at Victor's Westport. But costs were rising, and while profits held for a time, the return of funds was poor. The Federal Government had the Industries Assistance Commission investigating.

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The success of a company like BHP is due to many different things. But one crucial element is ready access to funds to fuel growth. In the everyday excitement of the stockmarket, the Stock Exchange's role in providing that access is often forgotten. Over its hundred years, BHP has raised over $1.408 billion by way of share issues and special placements of shares. A striking illustration of the basic purpose of the Stock Exchange – to facilitate the transfer of funds from those with a surplus to those who need funds for manufacturing or business. Last year, the Stock Exchange of Melbourne celebrated its own one hundredth birthday. So it gives us a special pleasure to welcome BHP to the ranks of the centenarians and to know that in a significant way the Stock Exchange has helped it reach that milestone.

The Stock Exchange serves small investors as well as big companies like BHP. If you'd like to know more about its role in the economy, or about investment generally, simply complete and mail the coupon below.

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100 years old and going strong.

Where do you find the energy?

Congratulations BHP on the centenary of your success story. You have delved into every aspect of energy from research to production.

Your commitment to growth in the field of exploration is taking you worldwide in the increasingly important quest for energy and natural resources.

We are therefore proud to have been associated with you in your recent acquisition of Utah International Inc.

The NatWest Group is one of the world’s major resources of economic energy.

Today, our commitment to Australia alone is over A$3 billion. Tomorrow, we may prove to be still more resourceful to Australia’s international resource companies.

The NatWest Group is one of the world’s major resources of economic energy.

BHP is Australia’s biggest blue chip investment. Graeme Adamson looks at the investment track record of the stock and we talk to five BHP shareholders on what it feels like to be a part-owner of the country’s biggest company.

After the Second World War, Australian sharebrokers recognised the potential support of overseas investment institutions. Headed by J B Were & Son, they either established offices or travelled to London to market Australia to the growing number of fund managers in the City.

Their strategy was unchanged from broker to broker. They all landed in London carrying a review on BHP, and almost invariably the second string was the largest bank — in those days, the Bank of New South Wales.

BHP was “sold” to the London managers because of its role as Australia’s only steel producer in a world where post-war rebuilding was creating expanding demand. The overseas interest spread to New York in the late 1950s. It was support emanating from Wall Street which resulted in BHP spreading an almost boom market which more than quadrupled the stock’s capitalisation in the five years to 1960, accompanied by demand for steel. BHP perhaps did not have time to accelerate its own move into the resources sector at a time when the great discoveries of mineral and energy wealth were about to put the nation on the international investment market.

Bass Strait changed all that. But in an investment market where steel on a world-wide basis moved from a lender to a juggler, BHP shares have not always received the recognition that is merited by the company’s pre-eminence in the oil exploration industry.

BHP is clearly Australia’s largest stock in mid-1985. Only once in recent years has there been another company with greater capitalisation, and that was for a few weeks. It is, though, no longer automatically the first stock that visiting Australian brokers recommend abroad.

To a large degree that reflects the perception of BHP as being too big for the Australian market, with more than 190 million shares on issue and with the holdings spread among 164,000 share holders.

All investment institutions have their fill of BHP in Australia. Probably the serious private investors have a portion of their holdings in the company.

It is therefore somewhat surprising to discover that the number of shareholders in BHP has fallen from a peak of 250,000 in 1974, against the trend of other leading energy shares. The capital ad

ments of 1984-85 have resulted in a lower ticket price on the stock, which may have the effect of regenerating interest among smaller holders.

In part, however, the dwindling interest of smaller shareholders reflected in those figures may indicate a perception of BHP as a non-performing company in the inflation-savaged second half of the 1970s.

The company’s policy, abandoned in 1980, of stating profit after a fixed asset utilisation charge, was an important factor. This effectively provided accelerated depreciation for replacement of assets at current costs.

With the flat economy of the period and sustained inflation, BHP’s stated profit performance was sluggish. The company appeared to put considerable public relations effort into emphasising its own lack of performance as a means of attracting government policies and assistance.

The result was that the awareness of investors was more of BHP’s massive investment and lack of profitability in steel, rather than the potential growth in earnings from oil production and in reserves from exploration.

BHP no longer had the image of the dynamic leader in the market. Brokers were confused as to how to assess the stock. They were sympathetic initially to the FAU accounting approach adopted by the company. However, progressively their analysts reassessed their view.

For a period, brokers in their recommendations to clients stated profit on both a before and after FAU basis. This approach had the inevitability of adding to the confusion, no matter what the
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Bluer than blue, BHP delivers the goods for its owners

BHP is Australia's bluest of blue chip investments. Graeme Adamson looks at the investment track record of the stock and we talk to five BHP shareholders on what it feels like to be a part-owner of the country's biggest company.

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underlying analysis proved.

In 1982, BHP's stated profit, after fixed asset charges of $219.7 million utilisation, was $164 million. The following year, after the company changed its FAU policy, profit was $228.8 million and brokers and the market were putting question marks over the investment merits of BHP.

As so often over the past century, this changed dramatically.

There was an audacious takeover offer for BHP from Wigmores Limited, later to be renamed Bell Resources. Evidence accumulated that BHP was possibly serious about restructuring its steel division with an emphasis on profitability.

Oil was discovered at Jabiru during a bull share market with some instant predictions from brokers' oil analysts as to the size of the find, that, however, were not substantiated.

The company, consciously or otherwise, began a policy of closer communications and better understanding with investors and brokers.

Today, movement in BHP shares reflect strategy developments based on the resource sector such as the Jabiru discovery and the Utah acquisition.

The company is Australia's biggest coal producer, the largest oil producer and explorer and the only steel producer. Yet despite that remarkable strategic strength its shares invariably sell on a lower price earnings ratio than much smaller companies in metals or energy.

In 1985 the company has responded to the need of greater investor appreciation. A presentation on the ramifications and potential of BHP was put together, and directors took this message abroad to the world's investment hand managers.

The short-term returns from such an exercise are not necessarily reflected in the share market price. Longer term there will be a wider awareness of the importance of BHP and its potential.

Within Australia, there has also been a marked improvement in communications between investors and BHP. The company, once considered remote, is now seen to be moving to achieve real growth in profits for its shareholders.

This is reflected in the share split, the bonus issue and the cash issue which have occurred since 1984.

It is also reflected in the growth of market capitalisation of BHP in the 1980s, despite the unfavorable trend for resource and energy producers in the share market over the past five years.

Australian sharemarkets since the late 1970s have been strongly influenced by takeover activity and speculation. For much of the time, BHP was excluded from this trading. Indeed, in one of those end-of-year summaries which fill in summer space for newspapers, Chanticleer of the Financial Review wrote that one of the three certainties for the year ahead in the investment world was that BHP would not make a takeover.

That view has changed. BHP has taken part in two of the largest and most important acquisitions in Australia. It acquired the Utah mines in Australia and abroad from General Electric from the start of 1984. In 1985, together with Shell, it has bid for and obtained a majority interest in Woodside Petroleum. It has also merged its Comalco subsidiary with Vickers.

The result of the moves is that in the day-to-day theorising of corporate strategists that is so much part and parcel of the Australian stockbroking industry, BHP is now regarded as a thriving, expansion-oriented group which seeks to grow by acquisition in its existing areas of operation. When the ta...
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Greek-born Sylianos Nicolaidis, 46, came to Australia in 1955 and joined BHP's Port Kembla steelworks, a job he has held ever since. He is a welding hand welder working as an acting foreman. He has two sons, Adam, 24, and Michael, 26, and both work with BHP. Earlier this year Nicolaidis and son Michael decided to invest in BHP shares. They bought 300 in April, the first shares that the Nicolaidis family had ever owned.

"We bought them because we felt they would be a good investment for the long run. We might make a bit of money or lose the money but we have already added 60 shares with the dividends and bonus. We felt it would be a good idea just to get a part in BHP."

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Floyd Brooks is 58 and has three married daughters. His 600-hectare property is 135 kilometres north of Adelaide, and eight kilometres outside the wine-producing town of Clare. There he runs sheep and broods horses. His paddocks grow wheat, barley and oats.

"We hold about 800 shares in BHP. My parents and I bought them about 30 years ago. Price was the attraction. They were selling at less than $4. But we bought them not with the idea of making money but something we would pass down to the children and grandchildren. We're very happy with the shares. We have no complaints at all. We consider them to be a very stable investment. BHP is a very powerful, well-run and successful company."

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Photo: GRANTHAN COX

ke over fever was at its height in mid-1983. Wigmores, which itself had just been acquired by Bell Group after a protracted battle, made what was widely regarded as the most unlikely bid in Australian corporate history when it offered its shares in exchange for those of BHP.

Brokers, investors, financial commentators and, one suspects, the board of BHP alike did not know how to respond to this move. In the end the bid attracted a modicum of response. However, it concentrated investors' minds on the underlying value of their BHP shareholdings.

This reassessment by brokers was reinforced by the coincidental discovery of the Patrim oilfield within days of the Wigmores' bid. Jabiru has not justified the claims of brokers to having a potential similar to that of Bass Strait, but it has served to demonstrate that BHP is an active company beyond its existing operational centres.

Sharebrokers quickly recognised that Wigmores, renamed Bell Resources, would follow with a further offer for BHP shares, especially as its own shares were outperforming those of BHP in the market. BHP anticipated well the second offer by Bell. It took Bell to court over various aspects of the deal . . . and won.

However, the concept of BHP as a stock too big for the corporate strategists of Australia has changed. Those close to the sharemarket now recognise that BHP shares can be part of a play by the larger conglomerates. The disclosure that Adelaide Steamship Company had been a buyer of the shares late in 1984 served to reinforce this view.

BHP's approach to investor relations appears to have changed remarkably in the past two years. Cynics would say this is a result of the interest of the corporate strategists in the stock; the company's management would probably claim it is coincidental. Whatever the rationale, the company has made members of its board increasingly available to speak to groups of investment analysts and institutional shareholders.
around the world. It has facilitated visits by American sharebroking houses to write in-depth reviews on the company. It has enlarged its publications prepared for investors and invited enquiries from shareholders large and small.

The result of all these moves is that the investment community around the world has changed its perception of BHP over the past two years. As it enters its second century, BHP promotes itself. It is a fair cry from a quarter of a century ago when the concept of BHP held by Australian shareholders was that it should be in a portfolio solely because it was the nation's largest company. But BHP's attitude then was considered to be that profit and returns to shareholders were less important than the company's role in the national economy. What was good for BHP was good for Australia.

This led in the years before the Bass Strait find to criticism and cross examination of directors by the company's largest personal investor, Albert Shepherd. At annual meetings, in letters to the press and in speeches around the country, Shepherd criticised the board for what he claimed was a lack of consideration for the legitimate aspirations of shareholders.

The pointed and inherently hostile questions at the annual meetings were handled defensively by a BHP board unused to such an approach. It developed a defusing technique at the meetings of calling for questions, writing them down and then answering them collectively. This circumvented the prospect of cross-examination.

Today the company goes out of its way to encourage questions.

In BHP, distributed a glossy book to shareholders in which it described itself as Australia's international resources company. It said that the company was destined to push outwards beyond Australia's borders . . . ."BHP is committed to growth wherever profitable opportunities exist." The Utah acquisition included coal mines in the US and South Africa, iron ore in Brazil and copper and molybdenum in Canada. At the start of 1985, it acquired the Energy Resources Group, which is an oil and gas producer in the US. Despite the overseas emphasis and the expectation by analysts that BHP's future thrust will be abroad, shareholders the market continue to assess BHP as an investment based upon its oil and coal pricing in Australia and on its steel production margins.

Participation in another big oil find is the perennial prime objective of traders in the stock; rather than the merited growth from its investment in actual resource development and corporate acquisition.

On investment fundamentals, BHP is assessed as an international stock. It is too big and too well held within Australia for our sharemarkets to absorb. Its transient share price behavior may be directed by local strategists, but in the longer term movements, BHP in the 1980s only develops direction with the impetus of non-Australian buying or selling of the shares.

The BHP Board recognises this, so do Australian shareholders. BHP as an international stock is the reality of the perception of J. B. Were and its fellow brokers post war when they walked the streets of the City of London successfully interesting fund managers in the shares of 'The Big Australian.'

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Congratulating BHP in their Centenary Year ...

The New Parliament House, Canberra has the best bars in the world.

W e believe that the best bars in the world are to be found in The New Parliament House, Canberra. We're talking, of course about BHP's Tempcore 410Y steel reinforcing bar, the world's most advanced bar and the one that we believe is the most appropriate for the Australian construction industry.

Some of Australia's wisest specifiers seem to agree.

At The New Parliament House, for example, BHP's Tempcore 410Y bar has been chosen for its ductility and toughness, particularly the way in which it can be bent, re-bent and welded any number of times without any special precautions.

For similar reasons Tempcore has also been specified by Jennings

Constructions Limited for Jupiter's Casino, Surfers, and by St. Martins Victoria and Grollo Australia for the Rialto project in Melbourne. Perhaps you should consider joining these wise men by specifying BHP's Tempcore 410Y bar for your next project.

Tempcore is available from our Reinforcing Engineering Distributors throughout Australia: Aquila Steel, Boral Steel, Humes-ARC, Albion (NSW).

To find out more about BHP Tempcore 410Y bar please call one of our BHP men direct, listed below:

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- Melbourne - (03) 333 3333
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- Brisbane - (07) 333 3333
- Perth - (08) 333 3333
- Canberra - (02) 333 3333
- Townsville - (07) 333 3333

For further information, see our toll free number 1300 811 717.
around the world. It has facilitated visits by American sharebroking houses to write in-depth reviews on the company. It has enlarged its publications prepared for investors and invited enquiries from shareholders large and small.

The result of all these moves is that the investment community around the world has changed its perception of BHP over the last two years. As it enters its second century, BHP promotes itself. It is a fair cry from a quarter of a century ago when the concept of BHP held by Australian shareholders was that it should be a portfolio stock solely because it was the nation's largest company. But BHP's attitude then was considered to be that profit and returns to shareholders were less important than the company's role in the national economy. What was good for BHP was good for Australia.

This led in the years before the Bass Strait find to criticism and cross examination of directors by the company's largest personal investor, Albert Shepherd. At annual meetings, in letters to the press and in speeches around the country, Shepherd criticized the board for what he claimed was a lack of consideration for the legitimate aspirations of shareholders.

The pointed and inherently hostile questions at the annual meetings were handled defensively by a BHP board unused to such an approach. It developed a deflecting technique at the meetings of calling for questions, writing them down and then answering them collectively. This circumvented the prospect of cross-examination.

Today the company goes out of its way to encourage questions.

In 1986, BHP distributed a glossy book to shareholders in which it described itself as Australia's international resources company. It said that the company was destined to push outwards beyond Australia's borders... "BHP is committed to growing wherever profitable opportunities exist."

The Utah acquisition included coal mines in the US and South Africa, iron ore in Brazil and copper and molybdenum in Canada. At the start of 1986, it acquired the Energy Resources Group, which is an oil and gas producer in the US.

Despite the overseas emphasis and the expectation by analysts that BHP's future thrust will be abroad, shareholders and the market continue to assess BHP as an investment based upon its oil and coal pricing in Australia and on its steel production margins. Participation in another big oil find is the potential prime objective of traders in the stock, rather than the ministerial growth from its investment in actual resource development and corporate acquisition.

On investment fundamentals, BHP is measured as an international stock. It is too big and too well held within Australia for our sharemarkets to absorb. Its transient share price behavior may be directed by local strategists, but in the longer term movements, BHP in the 1980s only develops direction with the impulse of non-Australian buying or selling of the shares.

The BHP Board recognises that; so do Australian sharebrokers. BHP as an international stock is the reality of the perception of J. B. Were and his fellow brokers post war when they walked the streets of the City of London successfully interesting fund managers in the shares of "The Big Australian."
BHP found its most productive site without the help of surveyors or geologists.

In 1885 when BHP was looking for the best position to locate its headquarters, Melbourne, the economic, intellectual and political hub of the Australian nation, was the obvious choice.

One hundred years later, the choice for anyone looking for the best place to headquarter their business is just as simple.

Today, Victoria has the only State Government in Australia committed to a long term Economic Strategy to build on its competitive strengths.

And results are already showing in the short term. The latest ABS figures show Victoria to be the most rapidly growing employment centre. And to have the best growth in fixed capital investment.

If you'd like to know more about how Victoria offers your company some golden opportunities for the next century, just contact the Victorian Business Centre at the Department of Industry, Technology & Resources on (03) 418 8200.

Victoria. You couldn't have your business in a better State.

All over the world there's one resource BHP doesn't have any trouble finding.

Arthur Andersen & Co. is not only the world's largest accounting firm, it's also one of the most widely situated. Our understanding of BHP's requirements is a result of a professional relationship that stretches back over 50 years. Together we've seen each other grow way beyond expectations and today Arthur Andersen & Co. is proud to be associated with BHP as it launches into an exciting and promising second century.

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Together we've seen each other grow way beyond expectations and today Arthur Andersen & Co. is proud to be associated with BHP as it launches into an exciting and promising second century.
Together, we've made each other stronger.

World Trade Centre, Melbourne - Reinforced with A.R.C. materials.

At Humes A.R.C, it's taken more than 60 years' hard work to build our company up to its current strong position.

Australia's number one reinforcing supplier. And a great part of this strength has depended on the people who supply us.

Our raw materials ... Our steel ... And that's BHP. Together we've helped each other grow. As we've both helped Australia grow.

We've been involved in the foundations of more construction projects than any other team in this country.

The experience and expertise gained has resulted in Humes A.R.C. being recognised as one of the world leaders in the reinforcing field.

If you would like to share in our strength and experience, you can.

We offer advice, technical assistance, estimating and scheduling services through 46 branches throughout Australia.

Growing too big for its roots

As BHP outgrows its own backyard the company is casting offshore for expansion opportunities. Alan Deans reports on these international plans and looks at the impact on our local economy.

BHP has grown too big for its roots. Realising that the sheer size of its Australian operations could severely curtail further business development, the company is spending surplus funds on buying mineral and energy interests around the globe. At the same time, it is aiming to internationalise itself by encouraging greater foreign investment in its shares.

During the next few years, BHP is expected to have annual cash flows approaching $1.2 billion. Sydney stockbroker Meares & Phillips estimates that up to $500 million of that could be spent on buying overseas enterprises, providing the right opportunities exist. Although the company will remain dedicated to Australia through its huge oil, coal and steel operations -- and has plans to explore for oil and develop the North West Shelf gas project -- these ventures are not enough for the funds that are flowing into BHP's coffers.

The company's scope for further growth is already limited by the surplus capacity it has in many of its domestic operations. This is a prime reason why capital expenditure has dropped from a record $909 million in fiscal 1982 to only $461 million in 1984.

If Meares & Phillips is right, and BHP does spend $500 million a year overseas, its international worth will reach about $4.5 billion by 1994 or 27 percent of total group assets. Five years further down the track and international assets could grow to about 40 percent.

BHP's plans will have an important impact on the Australian economy. BHP already generates about 8 percent of our export earnings, with sales in the year to May 1984 totalling more than $14 billion. By expanding its overseas assets, the group will have greater influence on Australia's investment policy, the currency and, indeed, the general business outlook.

The company has been accumulating overseas expertise for some time and already has a number of smaller operations including a tin mine in Indonesia, steel processing in the Philippines and New Zealand and oil exploration in the North Sea. Big investments were demonstrated last year when BHP joined a consortium to explore for oil off the coast of China and contributed as a 30 percent partner in the $5 billion first stage development of the Ok Tedi gold and copper mine in Papua New Guinea. It now has interests in more than 15 countries.

The extent to which the company is prepared to commit itself to overseas investments was demonstrated last year when it paid nearly $US3 billion in two takeovers. The first deal was the $US2.4 billion purchase of General Electric's mineral subsidiary Utah International. The bulk of the deal involved the Utah coal mines in central Queensland (equity in which has subsequently been sold on to other companies), but BHP also bought a range of other assets upon which it plans to expand its international thrust.

Among these overseas assets are the San Juan, Nova's coal and coal properties in the US, the Island copper mine in Canada and 49 percent of the Samanco iron ore operation in Brazil. Importantly, the company also bought several potential mineral developments and a strong portfolio of exploration interests.

This will lead to the development of the La Plata steam coal mine in New Mexico. It will cost $US90 million to build and its 1.5 million tonnes of annual output will supplement shipments from the nearby San Juan mine. The development with most promise, however, is the La Escondida copper deposit in Chile.

La Escondida was discovered in August 1981 and has already become known as the largest undeveloped copper deposit in the world, containing 1.7 billion tonnes of material grading 1.6 percent copper. This reserve is 50 percent greater than all of the known copper deposits in Australia. BHP is believed to favor developing a mine and has completed a feasibility study, but the go-ahead awaits the sale of Texaco's 50 percent interest which it acquired last year through the takeover of Getty Oil. An open pit is planned with an ore
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For the world belongs to the bold.
Omega Constellation. Claws... For the world belongs to the bold.

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for steel users what steel did for iron users!

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Steel Australia's most rapidly expanding

and tempered steel, a material that is doing

the vital connections 131years ago- and they still do. Closeto % million tonnes of steel is shipped

to transport their product to the people and places needing it most. It was the railways that made the

total connections 131 years ago - and they still do. Close to ⅛ million tonnes of steel is shipped

from the mighty mills of BHP on specially

constructed wagons made of steel themselves and running on steel rails. A unique link. And one that

has helped make the state what it is today.

what BHP

doesn’t know

about steel

We'd all still commute on horseback

without BHP. Steel really does mean that much
to this wide brown land. So we 'tips

our lid' to the Big Australian.

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business.

It takes BHP's special expertise
to produce hundreds of steel sections several
times a year.

It takes Union Steel's special expertise
to make these sections available every day
in Sydney, Melbourne, Perth, Brisbane,
Cairns, Townsville, Gladstone, Emerald and
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A special expertise that's made Union
Steel Australia's most rapidly expanding
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Union Steel Company Pty, Ltd.

BHP is the one company in Australia with
the expertise to make steel.

Bunge Industrial Steel is the one
company in Australia with the expertise
to take BHP steel and dramatically change its
properties so it becomes several times
stronger or many times harder.

Simply by heating it and cooling it in a
way that's scientifically exacting and
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So it becomes Bisalloy quenched
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The making of Victoria

In the middle of the last century, when the state of Victoria was only nineteen years old, a
dramatic undertaking was completed. The laying of four kilometres of iron railway line. It wasn't
very long - but it began forging the links that enabled the miners and farmers of a brave new land
to transport their produce to the people and places needing it most. It was the railways that made the
vital connections 131 years ago - and they still do. Close to ¼ million tonnes of steel is shipped
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constructed wagons made of steel themselves and running on steel rails. A unique link. And one that
has helped make the state what it is today.
as oil exploration in China or the North Sea.

The Utah takeover indicates that BHP also considers minerals attractive. That is a time when disinvestment oil companies are selling their mineral interests after paying top money for them several years ago.

In taking a contrary view, BHP is pursuing its policy of “buying straw hats in winter,” first adopted in the takeover of Utah. The company believes that there is no better time to buy than when commodity prices are down and good, cheap assets are available.

The managing director, Brian Loton, emphasised this theme in a recent interview when he said: “The name of the game now is to change our outlook to get profits in a low-growth or no-growth environment. We have to improve the performance of our existing businesses and sell resources at lower costs.”

If Loton can achieve this, he will go a long way towards promoting BHP’s second international goal: to attract more foreign investment in its shares. BHP has 913 million shares on issue, and this year has been valued by the stock market at up to $6154 million. That is about 10 percent of the value of all publicly listed stocks in Australia. Such dominance has its drawbacks, especially because it has kept a lid on the company’s share price and limited the market for its scrip.

A recent survey of shareholders conducted by the company showed that most wanted share price appreciation, although there was a strong expectation of increased dividends. BHP hopes to boost the share price to a level which better reflects its asset backing by attracting greater foreign investment. Foreigners now hold around 25 percent of the issued capital and this could be boosted to 30 percent. This year the company has started a sales campaign aimed at British and US investors.

The general manager, corporate affairs, David Adams, held seminars over several days with fund managers and stockbrokers in London. But the main roads show came in May when Loton and the executive general manager finance, Greff Henley, addressed investment managers in San Francisco, Chicago, Boston, New York and Los Angeles.

The main sales pitch has centred around the quality of the group’s assets, its international expansion, the strong profit outlook and the strength of its balance sheet. The insular company slogans of the past, such as ‘the Big Australian’ and ‘Australia’s BHP’, have been replaced by one with broader appeal, ‘Australia’s International Resources Company’.

The aim is no less ambitious than to alter the entire investment perception of BHP. Until now it has been regarded as a prime blue-chip stock to buy if you are interested in Australia. BHP wants to become known as a company that warrants investment in its own right.

It is not an image that the company can achieve overnight, however. While the recent overseas promotions are said to have been successful, it will take similar efforts over several years to draw

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What BHP doesn’t know about steel

We’d all still commute on horseback without BHP. Steel really does mean that much to this wide brown land. So we “tip our lid” to the Big Australian.

At Bunge we know what it’s like! In the business of supplying Australia with steel Bunge’s two steel companies take up where BHP leaves off.

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It takes BHP’s special expertise to produce hundreds of steel sections several times a year.

It takes Union Steel’s special expertise to make these sections available every day in Sydney, Melbourne, Perth, Brisbane, Cairns, Townsville, Gladstone, Emerald and Toowoomba (not to mention hundreds of other remote points on the map). Often cut to size and shape

A special expertise that’s made Union Steel Australia’s most rapidly expanding steel company.

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BHP is the one company in Australia with the expertise to make steel.

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Bunge Industrial Steel is the one company in Australia with the expertise to take BHP steel and dramatically change its properties so it becomes several times stronger or many times harder. Simply by heating it and cooling it in a way that’s scientifically exacting and technologically difficult. So it becomes Bisalloy quenched and tempered steel, a material that is doing for steel users what steel did for iron users!
greater world attention to BHP. Indeed, some fund managers expressed concern at the London meetings that the drop in the Australian dollar this year had led them money on their investments, despite the drop in record levels in BHP's share price.

Apart from the public relations-type approach of emphasising the company's qualities, BHP is also tempting share buyers with cash. Its dividend record has been criticised in the past as being poor, but since last year it has twice boosted dividends, made two bonus share issues and a substantially discounted rights issue. In May 1984, a shareholder with 100 shares would have received a dividend of $2, whereas the same investment would have yielded $4.25 up to April this year.

Brian Lottos says: "It is understandable that shareholders should want and receive better returns in times of positive interest rates." He has lowered their worries, but the 1984/85 payout ratio of 24.7 percent was the second lowest made by the company in 10 years. This was artificially depressed by the 153 percent increase in net profit in that year to a record $639 million and it has led Lottos to joke that perhaps the way to make the figures look better would be to cut earnings. However, it indicates that the company has ample leeway to make much higher payouts.

Despite the improved returns and rosier outlook, BHP shares are still trading at a prospective price earnings ratio of a low 7.5. Some analysts estimate that the company is between 50 percent and 100 percent undervalued, but any significant upgrading will occur only if the share base can be broadened.

The company has taken other steps to endear itself to shareholders. During the past two years it has improved its reporting by dropping the confusing inflation accounting system and has begun issuing quarterly profit statements. It has introduced a dividend reinvestment plan and an employee share plan, and for the first time in 10 years has held a board meeting in Sydney followed by a mock annual meeting for local shareholders and financial managers.

It has been argued that these moves are a direct result of share buying by two corporate raiders, Robert Holmes a Court and John Spalvins. Holmes a Court has mounted two takeover bids and has indicated that he wants to gain control of BHP and split the company up, implying that he could do better than the existing management. Spalvins began buying last December and it is speculated that he is acting with Holmes a Court.

Lottos admits that this is "a constant reminder that we have to improve our performance." But he notes that initiatives had been taken before Holmes a Court appeared on BHP's share register.

Outside say that Lottos is sweeping away many of the cobwebs from the company, (as witnessed by the recent takeover shakeout) and is promoting a new air of confidence. In the past two years it has improved its report by dropping the confusing inflation accounting system and has begun issuing quarterly profit statements. It has introduced a dividend reinvestment plan, and an employee share plan, and for the first time in 10 years has held a board meeting in Sydney followed by a mock annual meeting for local shareholders and financial managers.

The MetalIgesellschaft Group congratulates BHP and MG take pride at its historic commercial links with BHP - continuing many of the cobwebs from the company (as witnessed by the recent takeover shakeout) and in promoting a new air of confidence. Whether it's establishing joint business ventures, financing new projects or gathering and analysing data, a link-up with C. Itoh gives you access to a formidable global network, unmatched organisational and financial expertise and the full backing of a company that gets information fast and first.

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MG takes pride at its historic commercial links with BHP - links which over the years, continue to strengthen. The Metallgesellschaft Group congratulates The Broken Hill Proprietary Co. Ltd. on this important milestone - its centenary - and wishes it all success and continued growth and prosperity in the future.

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Grosvenor Place, Sydney. Complex, attractive, energy efficient. Destined to find fame as an Australian landmark, and as a flagship for steel frame construction.

The high technology of steel frame construction was chosen to meet design criteria of “State of the Art” modernity, superior tenancy space, low energy usage, as well as environmental and aesthetic considerations.

Enormous advantages available through steel frame construction are:
- Large column free areas: Maximization of natural light and wide sweeping views.
- More lettable space generates more rental income.
- Speed of erection: Increased standardisation in fabrication methods means faster construction, and earlier rental income.
- High technology: Computer aided design can produce design drawings in a fraction of the time taken by drawing offices.
- Ease of installation: All services including plumbing, electrical and mechanical.
- Lower foundation costs: Due to comparatively lower overall weight of the building.
- Ease of cladding: Glass and other fascia materials.

The result is greater cost effectiveness for all concerned, and stunning opportunities for design excellence.

It’s a beautiful proposition.

We’re there. In their smiles. We helped make those smiles. By making their lives a little nicer.

We did it through electronics.

Electronics is a field you touch wherever you turn these days.

And in the years to come, you’re going to touch it more.

And much of what you touch is going to be Toshiba. Because Toshiba is one of the biggest electronics makers in the world.

We make everything from semiconductors to computers to color TVs to medical equipment to satellite communications systems.

And everything we make, makes life a little nicer. That’s what electronics are all about. That’s what we’re about. We’re Toshiba. We’re making electronics come to life.
Unearthing the resources wealth of a nation

The transformation from a steel maker to a diversified resources group has seen BHP unearth the mineral wealth of the country. J. N. Pierce chronicles the company's major resource discoveries.

When I first started writing about BHP close on 40 years ago, its empire was divided like Cixias' Gaul into three parts: steel at Port Kembla, steel at Newcastle and pig iron at Whyalla.

In 1982-83 financial year, the company felt the full crunch of the worsening world oversupply of steel, its division lost $144 million and its raw steel output plummeted from 7.2 million tonnes to 5.3 million tonnes. The number of workers was slashed from 130,000 to 30,000.

In the latest year— with raw steel output back up to 6 million tonnes, the workforce cut further to 27,300 and profit at better than $140 million—Brian Lotten was able to report that BHP had restored its position among its peers as a low-cost steel producer and was aiming to be "the most efficient privately owned steel producer in the world".

As a measure of this, the BHP board approved at the end of May a series of projects bringing capital expenditures at Port Kembla to more than $800 million since the start of the five-year Steel Industry Plan at the beginning of 1984.

The outlays are not aimed at lifting BHP's raw steel capacity, which remains at a trimmed-back level of 5.6 million tonnes at its Port Kembla, Newcastle and Whyalla plants, but to retain and improve on the advantages already gained. The name of the game is productivity.

In the crunch year of 1982-83, only 180 tonnes of raw steel were produced for each steel division employee. In the following year there was an impressive 45 percent recovery to 240 tonnes; a further gain in the latest year has put BHP in sight of its interim target of 300 tonnes by the time the steel plant is completed at the end of 1989. Beyond that there is a target of 350 tonnes for each employee in the 1990s.

PETROLEUM: What will probably stand as the most significant decision made by a BHP board was reached after less than an hour's deliberation. After the Rough Range oil discovery in November 1953 shook the conventional wisdom that Australia was geologically far too old to have liquid hydrocarbons, BHP decided that it should look for oil in the Sydney Basin, the source of the oiling coal which fed its iron and steel operations at Port Kembla and Newcastle.

The search went on for six years without success. The then chief general manager, Ian McLennan, sought expert advice from a recently retired Esso geologist, Dr. Lewis Weeks.

Weeks told McLennan to forget the Sydney Basin but pointed him in the direction of Bass Strait, one of the roughest stretches of water in the world. The initial cost for surveys to test its potential he estimated at around 1.25 million pounds. McLennan took this bare bones information to his board, asked for the money, and after brief discussion was told, "Let's give Mac a go".

The rest is history. The 50-50 partnership formed with Esso started turning up gas in the Barcarraa field in February 1965, and then went on in 1967 to outline the huge Kingfish and Halibut oilfields. The first production oil started flowing in 1986 and now supplies about two-thirds of Australia's needs. It is by far the biggest source of BHP's net earnings.

For an average of 140,000 barrels a day in 1982, Bass Strait's yield had climbed to 445,000 barrels a day in 1984 under the combined influences of better industrial relations, improved pipeline technology and the opening up of export markets. In 1985 it has often exceeded the 500,000 barrel-a-dey level and in May it touched the highest point ever of 525,000 barrels.

There are 1.23 billion barrels left in the recoverable crude oil and condensate reserves still to be tapped.
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The mining of silver-lead-zinc at the ragged Barrier Range outcrop, which in 1885 gave the company its name and its reason for being, had ceased before the Second World War. Silver-lead-Zinc is a notable absentee from BHP's long list of mineral products, but a rejuvenated steel division is an integral part of the complex web of activities now stretching from the black monolith in Melbourne's William Street to a dozen countries.

Nowadays you find BHP executives in London's Hanover Square or just along the street from Bloomingdales in New York's Lexington Avenue. Hard-hatted BHP engineers can be seen on oil drilling rigs in the South China Sea or in a rain-soaked jungle in the Star Mountains of Papua New Guinea.

This is how BHP's basic activities stack up:

STEEL: in BHP's 1982-83 financial year, when the company felt the full crunch of the worsening world over-supply of steel, its steel division lost $144 million and its raw steel output plummeted from 7.2 million tonnes to 5.5 million tonnes. The number of workers was slashed from 130,000 to 30,000.

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From an average of 240,000 barrels a day in 1982, Bass Strait's yield had climbed to 445,000 barrels a day in 1984 under the combined influences of better industrial relations, improved pipeline technology and the opening up of export markets. In 1985 it has often exceeded the 500,000 barrel-a-day level and in May it touched the highest point ever of 525,000 barrels.

There are 1.23 billion barrels left in recoverable crude oil and condensate reserves still to be tapped, and Russell Eymore, executive general manager of BHP Petroleum, is confident that Bass Strait will still be producing oil in the year 2000, although it will start to go into decline by 1988.

There is no hope of finding another Halibut or Kingfish field in Bass Strait, but BHP feels that new frontiers have
How BHP makes the Telecom Network work even harder.

Reciprocal assistance
Help in remote quarters however is not just one way. In providing outback communities with modern communications, Telecom is currently erecting two repeater masts each day. By the time this programme is completed in 1990, enormous quantities of BHP steel will have been consumed in their construction. While BHP uses the Telecom network on a massive scale, even the smallest company can use it to its benefit. To find out how, call Telecom on 008101311* for the cost of a local call and discover how the network can be better for your business.

*In Tasmania call 311 0806

The project started supplying pipeline gas to industrial and domestic consumers in the Perth area a year ago and is now on track for a start in LNG deliveries to Japan in October 1988, following the successes of ownership which have been the joint BHP/BHP equity in Woodside Petroleum to nearly 80 per cent. Added to its direct one-sixth interest, this means that BHP's total equity in the LNG phase is about 22.3 percent. LNG deliveries to the eight Japanese electricity and gas utilities will take a few years to build up to the target level of six million tonnes a year which, on the basis of present prices of around $US69 billion, would result in annual sales of about $1.4 billion.

MINERALS: BHP started life a century ago as a mineral producer. It retained the role even as an iron and steel base in the United States. It took a further big step last November with the $US504 million takeover of Energy Resources of Australia and overseas to the tune of about $140 million a year. BHP is a partner in a British Petroleum-led consortium which has so far unsuccessfully drilled offshore permit areas in the South China Sea and Yellow Sea. It recently joined CSIRO and other Australian oil explorers in a consortium which will explore and drill over three years in the northern sector of Hainan, the 24,400 square kilometre island in the South China Sea. As a 25 percent shareholder in Australia's largest Telex major cities around the world; other Offices in Fremantle, Brisbane, Port Moresby and 100 other

Munai held by the Telecom network to the Kimberley region. Twelve months ago, as part of its ongoing network development programme, Telecom installed in the Kimberley region of north west Australia the world's longest solar powered microwave system. In turn this enabled BHP to provide its remote Koolan Island ore mine with the full gamut of advanced telecommunications it needed.

Whether opening up the Kimberleys or maintaining its Bass Strait oil fields, BHP has long known the value of using Telecom's network to the full extent. On the spot transmission of seismological data; analysis of satellite surveys; instant, in writing communications on one of Australia's largest Telex installations - both the exotic and common place are made possible by the network.

There's no question that the world is filled with potential business opportunities. The problem is how to find and develop them.

Puzzled? Try Nissho Iwai.

We're one of Japan's leading sogo shosha, or general trading companies. But our diverse global capabilities cover much more than trade. We're one of Japan's leading sogo shosha, or general trading companies. But our diverse global capabilities cover much more than trade. Throughout the world, we seek out the gaps between supply and demand, then utilize our vast resources to fill them. By developing new markets. Transporting goods and technologies. Providing finance. Offering information and advice. Arranging joint ventures. Or doing whatever it takes to get the job done well.

So if you're interested in expanding the dimensions of your business, make it a point to contact Nissho Iwai. We can help turn slight possibilities into exciting opportunities!
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As a 25 percent shareholder in Australian Petroleum, it is taking part in the appraisal drilling of the Juna and Manananda gas-condensate fields in western Papua New Guinea. BHP has negotiated with the national oil company of Morocco for offshore permits on the North Atlantic coast and has secured interests in the British sector of the North Sea.

BHP set up an office in Denver, Colorado, in the mid-1970s as an exploration base in the United States. It took a further big step last November with the $US80 million takeover of Energy Resources Group, with oil and gas properties in 18 US states as well as Canada.

But the main hydrocarbon development focus continues to follow on from Bass Strait.
own use and for export — by the time the OPEC oil shocks of 1973 and 1979 brought an end to the strong growth which had characterized the post-war steel industry.

Last year's huge takeover of Utah assets from General Electric brought BHP another large slice of Bowen Basin coking coal mining operations, recognized as the most efficient and cheapest to run in the world.

But aside from the Utah purchase, which brought an impressive package of non-coal mineral resources, BHP's mineral division has spent in recent years to move into non-traditional areas such as copper, gold, bauxite, alumina, nickel and tin.

Taken on its own, the mineral division — with annual net profits of about $90 million and sales of $800 million — would rank among the top mining houses in Australia. It is likely to have a period of consolidation for a year or two as it assimilates the addition of the 1980s of large projects such as the Riverina and Saxonvale coal mines, the Koongarag coal loader, the Worsley alumina refinery and the Ok Tedi gold/copper project.

The division is spending about $20 million a year in exploring for world-class deposits — particularly gold and copper-lead-zinc — which could lead to projects with a price tag of $US50 million or above.

Its aspirations in the next decade are to find a big gold mine, a large base metal mine, and perhaps to "integrate downstream" into processing aluminium, or copper, or both.

These ambitions are not new. BHP has had plans at the beginning of the 1980s to take a 35 percent equity in a 350,000-tonne aluminium smelter to be built at Lochinvar in the Hunter Valley as a flow-on from its West Australian bauxite interests.

The smelter project was scuttled in April 1982 when first the major partner, Alumina, and then some of the Japanese investors pulled out of the joint venture. BHP is left with an entitlement of 30,000 tonnes of Worsley alumina a year, which at present it is having to sell on a depressed and over-supplied international market, rather than having a captive outlet in a domestic smelter.

 Apart from the Utah division's British Columbia copper mine and a huge unexplored copper-lead-zinc deposit in southern Utah, BHP has a 30 percent stake in the Ok Tedi gold/copper project.

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developed prospect in Chile. BHP has a big stake in copper through its 80 percent interest in the Ok Tedi project, now getting down to Stage III as a gold producer after weathering a number of setbacks and mishaps not normally encountered by new mining operations.

At the moment Ok Tedi is mining the gold cap of its remote Mount Fubilan deposit in the Star Mountains of eastern Papua New Guinea. Stage II will see the production of both gold and copper and Stage III the production of copper alone as the gold ore becomes exhausted. The copper will be sold in the form of a concentrate, and there are no plans for any Ok Tedi-related smelting or refining operations.

Apart from the initial Ok Tedi output, gold is represented in BHP's mineral portfolio through its 90 percent interest in the Telser project in West Australia's Great Sandy Desert (Newmont has the rest), through a small developing operation at Ora Banda, near Kalgoorlie, and potentially through the Boddington project, which is looking at winning gold from the bauxite deposits which support the Worsley alumina refinery.

Other interests include a wholly-owned tin mining operation on Benington Island in Indonesia and a 44 percent stake in a small nickel mine (WMC has the rest) at Carnavil Hill north of Kambalda. But the dominant elements in the mineral division are steel-related and export-oriented.

BHP has a 30 percent stake in the Mount Newman iron ore joint venture, acts as the project's manager and uses a large part of its iron ore entitlement from the project's 10 million tonne annual output in its Australian steel mills.

It is the sole owner of the 2.3 million-tonne-a-year capacity manganese mining operation at Qwesite Baylands in the Gulf of Carpentaria. Part of Groote's output feeds into BHP's ferro-alloy operation near Launceston, Tasmania, but most is exported to markets around the world, including China.

Coal interests are represented by the 30 percent interest in Thiess Dampier Mining's Boddington project, which brought an impressive package of world-class coal assets to BHP.

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Taken on its own, the mineral division — with annual net profits of about $90 million and sales of $300 million — would rank among the top mining houses in Australia. It is likely to have a period of consolidation for a year or two as it assimilates the addition during the 1980s of large projects such as the Riverbank and Saxonvale coal mines, the Kooragang coal loader, the Worsley alumina refinery and the Ok Tedi gold/copper project.

The division is spending about $28 million a year in exploring for world-class deposits — particularly gold and copper-lead-zinc — which could lead to projects with a price tag of $US250 million or above.

Its aspirations in the next decade are to find a big gold mine, a large base metal mine, and perhaps to “integrate downstream” into processing aluminium, or copper, or both.

These ambitions are not new. BHP had bold plans at the beginning of the 1980s to take a 35 percent equity in a 350,000-tonne aluminium smelter to be built at Lochinvar in the Hunter Valley.

As a flow-on from its West Australian bauxite interests, the smelter project was scuttled in April 1982 when the major partner, Alumina, and then some of the Japanese investors pulled out of the joint venture. BHP is left with an entitlement of 30,000 tonnes of Worsley alumina a year, which at present it is having to sell on a depressed and over-supplied international market, rather than having a captive outlet in a domestic smelter.

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BHP has a 30 percent stake in the Mount Newman iron ore joint venture, acts as the project’s manager and uses a large part of its iron ore entitlement from the project’s 30 million tonne annual output in its Australian steel mills.

It is the sole owner of the 2.3 million-tonne-a-year capacity manganese mining operation at Gwanda, near the Gulf of Carpentaria. Part of Groote’s output feeds into BHP’s ferro-alloy operation near Launceston, Tasmania, but most is exported to markets around the world, including China.

Coal interests are represented by the 36 percent interest in Thiess Dampier Mitsui Bowen Basin coal mine, the wholly-owned Saxonvale steam coal mine in the Hunter Valley and a 30 percent stake in the Kooragang coal loader at the port of Newcastle.

BHP’s takeover of Utah, effective from April 2, 1984, put the Big Australian into a new dimension. With a total net cost to BHP of $1.7 billion it was by far the biggest corporate takeover that Australia had seen. More important, it put BHP on the world stage as a form-

And what a great hundred years it’s been. We’re now the world’s largest producer of steel. We feel pretty proud of it too. But credit where it’s due, we couldn’t have done it without the loyal support of our customers. Through good times and bad. So to all of you, thanks a million.

And get ready to share the next hundred years with us. We promise they’ll be ten times better than the first.
doble international resource group.

In Australia, the takeover lifted BHP's strategic stake in Central Queensland's Bowen Basin coking coal resources by giving it interests of 35 percent in the Central Queensland Coal Association (joint venture which includes the Goonyella, Peak Downs, Saraji, Norwich Park and Blackwater open-cut mines and the Harrow Creek trial underground colliery) and 47 percent in the joint venture now owning BHP's previously wholly-owned Gregory mine.

In addition, there was the one-third interest (since lifted to 41.66 percent through the sale of MMG's shares in June) in the Mount Goldsworthy iron ore project in the Pilbara.

In the 15 months it took to stitch together the purchase of Utah from General Electric, public attention tended to focus on the Bowen Basin coking coal mines which had formed the conspicuously successful base for Utah Development's emergence as Australia's biggest and most profitable coal exporter.

But that was only part of the widely scattered collection of existing operations and undeveloped resources which Utah had assembled in the Americas and beyond. The main components of the package are:

- The Island Copper copper/molybdenum open-cut mine set among a snow-dusted spruce and hemlock forest in the northern part of British Columbia's Vancouver Island.
- Besides being a low-cost producer with an annual output of about 60,000 tonnes of copper in concentrate sold to long-term customers in Japan and Taiwan, Island Copper has other unusual attributes. Its open-pit mine is within half a kilometre of its shipping port on Rupert Inlet, which boasts some of the best sockeye salmon fishing in Canada.
- It is also the only BHP operation to have a problem with marauding bears, which come into the camp in search of food and knock over garbage bins.
- The Navajo and San Juan steam coal mines in the co-energised mesas country of north-west New Mexico. They have a combined output of 13 million tonnes and feed nearby coal-fired power stations supplying electricity to markets as far away as Los Angeles.
- Other coal mines in Kentucky and West Virginia and Atlantic coast port-loading facilities.
- A 49 percent interest in the Samarcos iron pellet project in the Brazilian state of Minas Gerais. Like Tasmamia's Savage River project, Samarcos's iron ore is mined in the hinterland, purified and made into a slurry, then carried by a 395-kilometre pipeline to a pellet plant at the South Atlantic port of Point Ubu.
- A man-made island between Florida and the Bahamas, used as a base for dredging aragonite from the seabed.
- Aragonite, a high grade calcium carbonate, is used in the cement, glass and agricultural lime industries.
- A half interest in the huge Escondida ("the Hidden One") copper prospect discovered in 1981 by the Utah/ Getty Oil partnership high in the bare Andean foothills behind the Chilean nitrate port of Antofagasta.

Claimed to be the biggest undeveloped copper deposit in the world, Escondida has 1.3 billion tonnes, of which 147 million tonnes averaging 2.16 percent copper can be mined by open-cut methods. At current prices the copper contained in these open cut reserves is worth nearly $A32 billion.

At last, a stockbroker with something unique to say.

The new Komatsu D375A is the most efficient bulldozer in its class on the market today.

**MORE PRODUCTIVITY.**

Our tests show that the Komatsu D375A is capable of shifting approximately 20% more than its nearest competitor. A larger blade, boosted power, better fuel economy, new design and increased driver comfort all contribute to its amazing productivity.

If you're after an efficient heavy duty bulldozer, you can't afford to ignore the Komatsu D375A.

**LESS DOWNTIME.**

Komatsu's unique modular system means that the power train can be removed without oil spillage. Other power train components can also be removed without cutting oil pipes. Each of the modular packages can be carried away and disassembled without the danger of dust entering the components.

The instrument panel's LCD monitors help prevent any minor problems from becoming major ones.

**BREAKTHROUGHS IN FUEL ECONOMY.**

Komatsu's 6A6D108B engine has been designed to keep fuel consumption to a minimum.

**OPERATOR COMFORT.**

The innovative semi-rigid undercarriage and pressure-inserted rubber bushings around the sprocket hub offer better traction and increased operator comfort.

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At last, a stockbroker with something unique to say.

"Success!" That's what it's all about.
Surely, a stockbroker that has grown consistently must have managed their clients' money more successfully than anyone else. Which brings us to McIntosh's.

Over the last 12 years, McIntosh's have grown from nowhere to be one of Australia's 4 top brokers.
Their recent affiliation with Hoare Govett Ltd has opened the door to a worldwide network of resources. It all adds up to a stockbroking firm with a genuinely businesslike attitude to your hard-earned money. Which should come as a breath of fresh air.

McIntosh Hamson
Hoare Govett Ltd.

IF YOU'RE NOT USING A KOMATSU D375A

YOU MIGHT AS WELL USE THIS.

The new Komatsu D375A is the most efficient bulldozer in its class on the market today.

SAFETY
Our tests show that the Komatsu D375A is capable of shifting approximately 30% more than its nearest competitor. A larger blade, boosted power, better fuel economy, new design and increased driver comfort all contribute to its amazing productivity.

LEARN MORE
If you're after an efficient heavy-duty bulldozer, you can't afford to ignore the Komatsu D375A.
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KOMATSU
BHP's world network

Map shows the spread of BHP's activities in 84 locations stretching from a wire products plant in Hobart to oil exploration in the North Sea.

Minerals division

Minerals division activities principally relate to the exploration, development and production of minerals for sale outside the group including iron ore, coal, energy coal, manganese ore, alumina, and, to a lesser extent, ferro alloys, gold, nickel, and tin.

Australia

2. Newcastle
   Coal coating facilities under construction.
   Group interest 30%.
   Joint venture with Western Mining Corporation.

4. Saxonvale
   Open cut energy coal mine.

11. Bell Bay
   Ferro alloy plant.

19. Carnilya Hill
   Nickel mine.
   Group interest 44%.
   Joint venture with Western Mining Corporation.

20. ore Banda
   Gold exploration.

22. Worsley
   Bauxite deposits and alumina refinery.
   Group interest 20%.
   Other participants: Beyond Australia Alumina Ltd 40%, The Shell Company of Australia Ltd 50%, Kobe Alumina Australasia (Australia) Pty Ltd 10%.

27. Deception Island
   Iron ore deposits and a 50% interest in rail and shipping facilities at Cape Lambton, C.R.I.A. 50%.

29. Newman
   Iron ore mine; beneficiation plant and a 43% iron ore rail link to Port Hedland. Group interest 30%.
   Joint venture with subsidiaries of CSR Ltd, AMAX Inc, Mittal & Co Ltd, C. Iron & Co Ltd, Selection Trust Ltd.

30. Port Hedland
   Iron ore crushing, screening and shipping facilities. Group interest 20% (see 25).

31. Telfer
   Open cut gold mine, treatment plant.

33. Fitzroy Crossing
   Lead-zinc exploration.
   Group interest 60%.
   Joint venture with The Shell Company of Aust Ltd 38.5% and Trans Exploration Pty Ltd 11.5%.

34. Yampi Sound
   Iron ore mines and shipping facilities at Cockatoo and Keel Island.

35. Forrest River
   Diamond exploration.

36. Groote Eylandt
   Manganese ore mines, concentrator and shipping facilities.

38. Thalanga
   Copper-lead-zinc exploration. Group interest 39%.
   Joint venture with Panayrino (Aus) Pty Ltd 50% and F.I. industries 11%.

41. Riverico
   Coking coal development.

43. Murrum
   Open cut and underground coking and energy coal mines.

International

45. Balrnung Island
   Tin mine and concentrator.

46. Papua New Guinea
   Oil, Tedi gold and copper mine. Group interest 20% in Ok Tedi Mining Ltd. Other shareholders: State of Papua New Guinea 20%; Amoco Minerals Company 30%; Consortium of German companies 20%.

Manufacturing, engineering and research

Australian Wire Industries Pty Ltd group — steel wire and wire products; mining and engineering equipment.

Commonwealth Steel Co Ltd — railway rolling stock components; grinding media; special alloy and tool steels; stainless steel flat products.

Australian Industrial Refracactories Ltd — industrial refractories.

Bhema Australia Ltd — water heaters; steel, plastic and paper-based containers; woven polyester fabrics; soft drinks.

BHP Engineering — engineering, construction and preproject management for group and client projects.

Corporate Research — research and development of new technology for the group.

Manufacturing: Australia

1. Brisbane
   Stainless steel casings.
   Wire products, tanks and concrete transit mixer; flexible packaging and plastic moulded containers.

2. Newcastle
   Wire, wire rope, special steels, railway products, grinding media, forgings and casting, cast steel abrasive, mining products, refractories, steel drum recycling.

3. Newcastle
   Lead-zinc exploration.

5. Sydney
   Wire and fibre steel; railway bogie assembly; water heaters; steel drums, light poles, moulded containers, flexible packaging and end uses, spraying plants.

6. Port Kembla
   Stainless steel rolling mill; mining products; and refractories plants.

9. Melbourne
   Wire products, steel drums, flexible packaging and plastic moulded containers.

10. Geelong
    Wire and wire rope and tyre cord plants.

12. Launceston
    Steel drums plant.

13. Hobart
    Wire products plant.

14. Adelaide
    Steel drums, sheet metal and steel fabrication plants.

23. Kudmande
    Wire plant.

24. Perth
    Steel drums plant.

38. Cairns
    Soft drink plant.
Mitsui can show you what the world has to offer

The world has an abundance of products, technologies, skills, and markets. The problem is getting all of them to balance in the most harmonious way. Mitsui has been doing just this for three centuries.

Since we opened our first overseas offices over 200 years ago, we've been expanding our global network to better understand all that the world has to offer. Today in our 209 offices, Mitsui experts in every field from food to energy work closely with our clients to make trade a truly global concern.

In the field of technology, for example, Mitsui was the first of the major general trading companies to understand the growing importance of technical expertise as an international commodity. We established our technology division more than 20 years ago as a way of assuring our clients access to the latest developments in their industries. We can do the same for you, no matter where you are or what business you may be in. Why not call your local Mitsui representative and ask him to show you what the world has to offer.

40. Townsville - Steel fabrication and soft drink plants
41. Jakarta - Steel drums and reinforcing mesh plants
51. Auckland - Steel drums and water heater plants
52. Wellington - Steel drums and moulded containers plants
81. Christchurch - Steel fabrication and forging plants
82. Taiwan - Carbon products

Engineering
1. Brisbane - Engineering, procurement and project management
5. Sydney - Engineering, procurement and project management
6. Port Kembla - Engineering, procurement and project management
24. Perth - Engineering, procurement and project management

Corporate research
2. Newcastle - Research laboratories
9. Melbourne - Research laboratories
24. Perth - Global Engine Co Pty Ltd

Petroleum division
This oil and gas division conducts the group's activities in hydrocarbon exploration, development and production in Australia and overseas through Namatjira Petroleum Pty Ltd. The division is also responsible for the group's petrochemical investments.

Australia
8. Gippsland Basin, Bass Strait - Petroleum exploration and production, onshore processing and distribution facilities at Longford, and Long Island Point; fabrication and servicing facilities at Barry Beach refer to map on page 561; Group interest 50%.
9. Melbourne - Styrene monomer plant; Group interest 50%
25. Exmouth Plateau and Carnarvon Basin - Petroleum exploration; Group interest 50%
26. North West Shelf - Offshore petroleum exploration and the establishment of offshore production facilities; Overall group interest 19%.
32. Canning Basin - Petroleum exploration; Group interest 22.5%.
44. Surat Basin - Petroleum exploration; Group interest 50% in one permit, varying interests from 19.25% to 23.3545% in four sub-areas of second permit.
53. Darling Basin - Petroleum exploration Group interest 50%.

International
45. Indonesia - Petroleum exploration offshore; Group interest 20%.

Lurgi congratulates BHP on its first 100 Years

For most of this time, Lurgi, one of Europe's largest process engineering contractors, has been contributing to the success of many of the world's leading steelmakers, through the development and application of technologies for the iron and steel industry (including):

- PELLETIZING
- SINTERING
- DIRECT REDUCTION
- COAL TECHNOLOGY
- FURNACE GAS RECOVERY
- GAS CLEANING
- WATER TREATMENT

For more than a quarter of a century, many of these technologies have formed a cornerstone in the development of BHP's steel division, with major projects in all of BHP's steel plants.

Lurgi looks forward to a continuing involvement in the Australian steel industry, and wishes BHP a second century as successful as the last.
Mitsui can show you what the world has to offer

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MITSUI & CO. (AUSTRALIA) LTD.
Royal Exchange Building, 60 The Strand, Sydney, NSW 2000

MITSUI & CO. LTD.

40. Townsville
Steelfabrication and soft drink plants

45. Jakarta
Steel drums and reinforcing wire plants

51. Auckland
Steel drums and water heater plants

61. Christchurch
Steel fabrication and hose plants

82. Taiwan
Carbon products

Engineering

1. Brisbane
Engineering, procurement and project management.

4. Sydney
Engineering, procurement and project management.

6. Port Kembla
Wollongong Engineering survey.

24. Perth
Engineering, procurement and project management.

Corporate research
2. Newcastle
Research laboratories.

9. Melbourne
Research laboratories.

24. Perth
Global Engine Co Pty Ltd.

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Australia
8. Gippsland Basin
Bass Strait Petroleum exploration and production; onshore processing and distribution facilities at Longford and Long Island Point; fabrication and servicing facilities at Barry Beach (refer to map on page 561). Group interest 50%.

9. Melbourne
Styrene monomer plant, Group interest 50%.

25. Exmouth Plateau and Carnarvon Basin
Petroleum exploration, Group interest 30%.

26. North West Shelf
Offshore petroleum exploration and the establishment of offshore production facilities. Overall group interest 30%.

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46. Papua New Guinea
   Petroleum exploration
   Group interest 25%

55. Denver
   Petroleum exploration
   and minor production
   Group interest 17%

56. Houston
   Petroleum exploration
   and minor production
   Group interest 20%

△ UTAH division

The Utah division, which is based in San Francisco, conducts mining operations, including exploration and new developments, throughout Utah International's and subsidiaries. Activities and interests, mainly acquired from General Electric under purchase agreements completed in April 1984, are in nine countries - Australia, the Bahamas, Brazil, Canada, Chile, Indonesia, New Zealand, South Africa and the United States.

1. Brisbane
   Australian head office
   (Utah Development)

27. Gregory
   Open cut coal mine
   (47% owned)

29. San Francisco
   Head office and
   management, Utah
   International Inc.

60. Hay Point
   Port and coalloaders
   35% owned

61. Kentucky
   Coal mines

62. West Virginia
   Coal mines and port

63. New Mexico
   Open cut coal mines
   Navajo, San Juan and
   (under development) La
   Plata.

64. Nevada
   Tungsten mine and
   chemical plant complex
   (20% owned, on care-
   and-maintenance basis.

65. Port Hardy
   Island Copper Mine
   (open pit)

66. Ocean Clay
   Offshore xenoliths
   production (30% owned)

67. Escanbella
   Open cut copper
   prospect (50% owned)

68. Germany
   Samarco iron ore mine
   (48% owned)

69. Kallimanta
   Energy coal prospect

70. Delmar
   Energy coal prospect
   (70% owned)

71. Waspbi
   Iron Sands dredging
   operation (75% owned)

72. Mt Goldsworthy
   Iron ore prospect
   (32.3% owned)

73. Goomalling
   Open cut coal mine
   (36% owned)

74. Peak Downs
   Open cut coal mine
   (36% owned)

75. Saraji
   Open cut coal mine
   (35% owned)

76. Norvich Park
   Open cut coal mine
   (35% owned)

77. Blackwater
   Open cut coal mining.

78. Harrow Creek
   Underground coal
   (35% owned)

79. Point Utha
   Pellet plant and port
   Samarco project (49% owned)

80. Orange Free State
   Gold Pilot (30% owned)

81. Wichita
   Head Office and
   Management Energy
   Reserves Group
   (Petroleum).

AUSTRALIA, YOU'RE IMPORTANT TO US!

And we don't mean just koalas!

Kobe Steel depends a lot on Australia.
Many of our products are made with the raw materials we purchase from you.

Literally, a part of Australia goes into almost every product we make.

And Australia benefits as well. Many Australian industries can use to their advantage the metals, machines and technology that Kobe Steel offers.

We're doing a lot for each other now - and the future looks even brighter. So let's find out more about how we can help each other.

KOBE STEEL, LTD.

 transcend has worked with B. H. P. for nearly 30 years. In fact they gave us our first big job at the A.I.S. Steelworks at Port Kembla - extensions to the Slab Mill....

Since then Transfield has built for B. H. P. and its associated companies virtually every type of iron and steel plant... No. 5 Blast Furnace at Port Kembla - the Southern Hemisphere's largest and its integrated B.O.S. Plant; Sintering Plants in Kwinana and Port Kembla; a Pelletising Plant and Walking Beam Furnace in Whyalla and a wide variety of Steel Mills.

Transfield has also been involved with Esso/B. H. P. in the construction of oil platforms, and is one of the most experienced companies in the reining and modernisation of blast furnaces.

The Transfield Group, which is also one of B. H. P.'s largest customers - purchasing some 35,000 tonnes of steel a year, salutes B. H. P. on the memorable occasion of it's 100 years of successful operation. They say of good companies that it takes one to know one.

No. 5 Blast Furnaces, Port Kembla, 1/1/59
AUSTRALIA, YOU'RE IMPORTANT TO US!

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- Australian Capital Television
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- CSR Limited
- Energy Resources
- M.L.M. Holdings
- Santos Limited
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On the Australian Options Market you can trade options on the stocks of many major Australian companies. These include:

- BHP Group of Companies
- SBSV
- CSIRO
- Elders
- Energy Resources of Australia Limited
- MLL Holdings Limited
- Sante Limited
- Westpac Banking Corporation
- WAP Mining Corporation Holdings Limited

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M. I'M. Holdings Limited
Santos Limited
Westpac Banking Corporation
Western Mining Corporation Holdings Limited

G. I. M. International DC347510
Corporate Card Division
394 La Trobe Street, Melbourne, Vic. 3000.

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DINERS CLUB CORPORATION CARD PROGRAM
Port Kembla: A great big smelting pot

From steel furnaces to Hans Heysen paintings, Port Kembla owes its success to the dedication of its migrant workers. Paddy Ginnane outlines the unique blend of races which has given the steel works a character all of its own.

Port Kembla steelworkers called him Bob because it's easier to say than Bronius Sredersas, his full name, and anyway it is working class tradition to Anglicise the unpronounceable, so familiarise the foreign. He didn't mind.

A Lithuanian, he had come up as an ordinary laborer, one of hundreds of displaced people from the Baltic countries who arrived in Australia after the war and were directed to work in heavy industry. Wollongong can never forget Bronius Sredersas because after years of labor, and before he died, he virtually gave the city an art gallery.

An art purchase committee had been raising funds for years, buying paintings, storing them at the town hall, and regularly pleading with council and the state government for the money to establish a Wollongong Gallery.

Bob Sredersas - he remains Bob to the Illawarra community - short circuited the whole process in July 1976 by arriving at the town hall with a priceless collection of 31 pieces of antique china and 75 paintings by top artists such as Hans Heyser, Ernie Buckmaster, Norman Lindsay, A.H. Fullwood and Will Ashton.

Each piece and each painting he selected to his own taste, and paid for with his earnings as a steelwork's laborer. Often he came off night shift, rode the train to Sydney studying the catalogues as it rolled up the coast, and rode home that night with a Sid Long or a Lindsey resting on his lap, wrapped in brown paper.

He never married and lived alone in an unpainted fibro house in Cringila, the city's "Little Europe", a dusty, noisy residential hill whose streets sloped down to the steelworks' fence, and where his neighbors kept chooks or grew grapes or, in their poorest and worst postwar years, kept the beds warm by sharing them one after the other as they came off successive shifts.

Bob Sredersas's story is probably the most gentle and beautiful of all the folklore that migrants have established in the steel town. He lived to see Premier Neville Wran in 1978 pen a Wollongong Gallery.

The Italian-born secretary of the Port Kembla branch of the Federated Ironworkers Association, Nando Lelli, had come as an ordinary laborer to Port Kembla and was unable to speak a word of English. He picked grapes in Mulgura and found casual jobs in Sydney before taking work three years later at Port Kembla, first as a rigger with FPT, an Italian-based company, and later with ALBS. "The first two years were the most frustrating of my life," he reflects. "I longed to speak to people but could not get the words out."

Lelli, who can now address mass meetings at Wollongong Showgrounds and represent the South Coast Labor Council on the ACTU's Workers' Migrant Committee, meticulously wrote down the sound of the words he heard at work, and insisted on doing his own sleeping.

He recalls forgetting the word for egg when shopping, and in desperation, as none were in sight, imitating the cackle of a hen to let the shopkeeper know what he needed. He never forgot the word "egg" again.

On-the-job communication was as crude. All the brickies' laborers were Italian, and although Lelli's English was limited, he acted as their interpreter. "The company's philosophy was that it was easier to keep together those able to communicate. But the real need was for an English language classes," he says.

On-the-job English classes are now available. Nando Lelli wants to see the system expanded. But at least the principle has been established. A Labor government has finally realized that the proportion of overseas-born was larger than in Newcastle or Sydney.

On-the-job English classes are now available. Nando Lelli wants to see the system expanded. But at least the principle has been established. A Labor government has finally realized that the proportion of overseas-born was larger than in Newcastle or Sydney.

In their way they created a social and cultural furnace which only now is being tapped, a human resource which even yet has had limited appreciation of its worth.

The most tragic victims of mass migration on this scale were, first of all, men without women, and later, women without scope, non-English-speaking workers, who accompanied their husbands or families to Wollongong and languished at home because there were no jobs for them, or no child-care centres they could afford, or few people "out there" who understood their predicament or recognized that they existed.

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The Italian-born secretary of the Port Kembla branch of the Federated Ironworkers Association, Nando Lelli, had come as an ordinary laborer to Port Kembla and was unable to speak a word of English. He picked grapes in Mulgura and found casual jobs in Sydney before taking work three years later at Port Kembla, first as a rigger with FPT, an Italian-based company, and later with ALBS. "The first two years were the most frustrating of my life," he reflects. "I longed to speak to people but could not get the words out."

Lelli, who can now address mass meetings at Wollongong Showgrounds and represent the South Coast Labor Council on the ACTU's Workers' Migrant Committee, meticulously wrote down the sound of the words he heard at work, and insisted on doing his own sleeping.

He recalls forgetting the word for egg when shopping, and in desperation, as none were in sight, imitating the cackle of a hen to let the shopkeeper know what he needed. He never forgot the word "egg" again.

On-the-job communication was as crude. All the brickies' laborers were Italian, and although Lelli's English was limited, he acted as their interpreter. "The company's philosophy was that it was easier to keep together those able to communicate. But the real need was for English language classes."

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Port Kembla: A great big smelting pot

From steel furnaces to Hans Heyser paintings, Port Kembla owes its success to the dedication of its migrant workers. Paddy Ginnane outlines the unique blend of races which has given the steel works a character all of its own.

Port Kembla steelworkers called him Bob because it's easier to say than Bronius Sredersas, his full name, and anyway it is working class tradition to Anglicise the unpronounceable, to familiarise the foreign. He didn't mind.

A Lithuanian, he had come as an ordinary laborer, one of hundreds of displaced people from the Baltic countries who arrived in Australia after the war and were directed to work in heavy industry. Wollongong can never forget Bronius Sredersas because after years of labor, and before he died, he virtually gave the city an art gallery.

An art purchase committee had been raising funds for years, buying paintings, storing them at the town hall, and regularly pleading with council and the state government for the money to establish a Wollongong Gallery. Bob Sredersas — he remains Bob to the Illawarra community — slept circuited the whole process in July 1976 by arriving at the town hall with a priceless collection of 31 pieces of antique china and 29 paintings by top artists such as Hans Heyser, Erna Bunkauski, Norman Lindsay, A.H. Fullwood and Wills Ashton.

Each piece and each painting he selected to his own taste, and paid for with his earnings as a steelworker's laborer. Often he came off night shift, rode the train to Sydney studying the catalogues as it rolled up the coast, and rode home that night with a Sid Long or a Lindsay resting on his lap, wrapped in brown paper. He never married and lived alone in an unpainted fibre house in Cringilla, the city's "Little Europe", a dusty, noisy residential hill whose streets slope down to the steelworks' fence, and where his neighbors kept chooks or grew grapes or, in their poorest and worst postwar years, kept the beds warm by sharing them one after the other as they came off successive shifts.

Bob Sredersas' story is probably the most gentle and beautiful of all the folklore that migrants have established in the steel town. He lived to see a Premier Neville Wran in 1978 open a Wollongong Municipal Gallery, which recognised his gift by naming a Bob Sredersas Gallery to house it.

Wollongong and neighboring Shellharbour, and to a lesser extent Kiama, have expanded with the steelworks, a civic growth inevitably changing industrial growth. The works could not have flourished as it did without a stream of newcomers, many of them non-English speakers, who poured into the city to toil around the mills and furnaces of Port Kembla. Wollongong was New South Wales in miniature. The difference was that the proportion of overseas-born was larger than in Newcastle or Sydney.

The Italian-born secretary of the Port Kembla Refining and Smelting Company, who accompanied the magnets that drew people. In the fifties and sixties there seemed to be almost always — but not quite always — more jobs than people to fill them.

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In their way they created a social and cultural furnace which only now is being tapped, a human resource which even yet has had limited appreciation of its worth.

The most tragic victims of mass migration on this scale were, first of all, men without women, and later, women without scope, non-English speakers, who accompanied their husbands or families to Wollongong and languished at home because there were no jobs for them, or no child care centres they could afford, or few people "out there" who understood their predicament or recognised that they existed.

The Italian-born secretary of the Port Kembla branch of the Federated Ironworkers Association, Nando Lelli, landed in Australia aged 25, unable to speak a word of English. He picked grapes in Mildura and found casual jobs in Sydney before taking work three years later at Port Kembla, first as a rigger with FPT, an Italian-based company, and later with ALBKS. "The first two years were the most frustrating of my life," he reflects. "I langued to speak to people but could not get the words out."

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"The company's philosophy was that it was far better to keep together those able to communicate. But the real need was for English language classes." On-the-job English classes are now available. Nando Lelli wants to see the system expanded. But at least the principle has been established. A Labor Council Ethnic Liaison Project, financed for one year by a Commonwealth grant, identified lack of English language instruction as great a need for migrants in 1983 as it was 20 years ago. It obtained a watershed decision by winning on-the-job English classes for outworkers — women who work at home for the clothing trade — as an award right.

The decision of federal and state governments in the early 1970s to switch from assimilation or integration to a multi-cultural Australia is having a profound effect for non-English speakers entering school.

Ken Jones, who oversees migrant education in Illawarra, says the new approach allows students to continue in their own culture and language. In Illawarra this has meant employing specialists in teaching English as a second language, hiring bilingual teachers who instruct in English and in the students' mother tongue, and establishing a Saturday school offering instruction in 30 languages for those preparing for the School and Higher School Certificate.

The education department employs ethnic aides to improve communication between schools and parents, and it uses up to 20 languages in messages sent home with the pupils so that everyone knows what is happening.

"We have one primary school in which 94 percent of pupils are from non-English speaking backgrounds," Ken Jones says. He estimates that half the schoolchildren in Illawarra come from non-English speaking backgrounds, but he notes: "We have had little overt racism in the schools. In fact the good
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A thing is that it has broadened Australian attitudes, too, Jones says.

Yugoslavs now make up Illawarra's single biggest ethnic group, and their numerical strength is reflected in the A1&S workforce. Of slightly more than 13,000 employees late last year, 6562 were born overseas. Of those 2459 were from Yugoslavia. In contrast about 30 percent of BHP's total professional and managerial staff are overseas born.

At A1&S the next largest single group are British born (1099). Then follows Italian (671), Portuguese (333), and Spanish (242). The other main groups are German (219), Greek (211), Turkish (189), Ukrainian (135), Maltese (148), Polish (143) and Chileans (131). There are 53 other national groups.

Little wonder that Wollongong City Library's community file lists more than 100 national associations, clubs and church groups; little wonder that English is just another language in Crown Street, the city's main thoroughfare, or that hardly a week passes without some national festivity being observed.

The cuisine and custom of Europe and Asia are rubbing off on Wollongong, and those who imagine a steelworks town as a dull place, obscured by smoke or populated by workers dressed in hard hats and blue singlets, should rearrange their attitudes at the elegant Northbeach International overlooking a splendid view of the northern Illawarra coastline. Its owners are a Lebanese business family.

"The long-settled Italian community has its own club, as have the Germans, Ukrainians, Spanish, Portuguese and Dutch. A dozen restaurants offer national fare, from Mexican to Vietnamese. Like Villahfila, another coastal settlement with strong Italian links, Wollongong has a Blessing of the Fleet each January. But it is more than an Italian festival; it has become an international day of folk dancing and singing, with migrant field kitchens set up on Flagstaff Hill, overlooking the convict-built harbor, pouring out delicacies.

Christmas, Easter — 'Christian Orthodox' — the Epiphany or Feast of John the Baptist, each is remembered by overseas communities who brought with them religious beliefs and old customs. In Wollongong the bells toll and the ceremonies often spill out on the street, as they would in Seville or Rome. Among the more colorful is the Epiphany tradition which comes from Yugoslavia. In that country a cross is cut from ice from a frozen lake or river, and tossed into the freezing water to be retrieved by the young men of the village or town.

"It is a pagan tradition which has been christianised to signify the turning of the year towards spring," says Rudi Derelin, who has seen it observed in his homeland and in the more pleasant January weather of Australia. Here a wooden cross is carried through the streets to Wollongong harbor, thrown in the sea by the priest, and retrieved by young men from his congregation.

Even more colorful is the Slovenian Wedding ceremony in which the couple is driven through the streets in a horse-drawn coach, the bride kidnapped and ransom paid before being married at the town hall.

Rudi Derelin, who once presided at a joint ceremony for three couples, had to conduct it in seven languages, Italian, German and Spanish for the bridegrooms, Serbian, Macedonian and Croatian for the bride, and English for the big audience of all.

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At AIS the next largest single group are British born (131). Then follows Italian (67), Portuguese (33) and Spanish (32). The other main groups are German (219), Greek (104), Turkish (98), Yoruba (38), Maltese (24), Polish (15) and Chineses (13). There are 33 other national groups.

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CONGRATULATIONS BHP! Your centenary is indeed a significant landmark for Australia. As it is for Japan.

Over the years, you have played an important role in providing much of the energy needed to fuel the growing Japanese economy.

To the Mitsui Liquefied Gas Co. Ltd. (MLGC), your Bass Strait oil and gas fields have been a major source of Liquefied Petroleum Gas (LPG). This gas plays a vital role in Japan today.

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MLGC has been buying LPG from BHP for 15 years now—a remarkably long time in today's competitive energy markets. Our successful association with you has contributed significantly to the security of Japan's energy supply.

May we continue to enjoy our mutually successful association. And may your next 100 years be as successful as your first 100 years.
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In search of management excellence

As BHP gears up for an exciting era of overseas expansion, subtle changes are being introduced to cope with the moves. Noel Bushnell goes behind the scenes and explains the new management structure designed to take the company into the 21st century.

Deep in the body of BHP changes are going on which, in a year or two, will fundamentally alter the nature of the company that used to be called the Big Australian. Four working parties are planning where the nuts and bolts go in a group reorganisation that the board is determined to make happen after more than a year of study.

Managing director Brian Loton made the future official early in May with a detailed explanation of what was intended and how that intention had come about. The change stems from some basic rethinking within the top echelon of BHP. The result can be boiled down to two realisations: first, that BHP was a resources company; second, that it needed to break out of Australia. While these might seem a couple of simple conclusions unworthy of the brainpower involved, nevertheless BHP had one way or another worked itself into a position of not being totally clear what it was about.

Many forces have influenced what has happened since, but surely the most powerful catalyst in getting BHP's own bureaucracy even to think about change was the steel crisis. Steel to BHP was like horses to cavalry. It was unthinkable that one could go on without the other. But with oil profits pouring in and steel plants costing more and more to maintain, the truth became apparent: BHP could shed steel and, far from drastically weakening the body, could actually strengthen it.

Almost simultaneously came the opportunity to acquire Utah International, and this quickly crystallised the notion of going international. If steel had forced BHP to think about change, Utah made it inevitable.

In one bound BHP was an international force in coal, iron ore and copper. It took no great feat of imagination after that to conclude that it also needed to be international in oil, a thought that led to buying Energy Reserves Group of the United States. BHP's eyes are now irretrievably turned outward.

Underlying this wave of history approach are a couple of personalities, those of Loton and the man who would be BHP's nemesis, Robert Holmes a Court.

Loton, on the retirement of Sir James McNeill as chairman, found himself as the first chief executive without someone in the chair above him. More bucks stopped on his desk. If only because even he could not work around the clock, some kind of power devolution became necessary.

Holmes a Court, with his audacious takeover offers, is given the credit in many quarters of being the flea that stirred the elephant. The implication is that without the threat of takeover BHP would have carried on pretty much the way it had for Ion years.

On the penthouse floors of the big steel and glass tower that houses BHP's headquarters, it is acknowledged that Holmes a Court did divert attention to matters never before considered with much sense of priority: the share price, the share register and shareholder needs.

But more than any other, it is the share price that has forced BHP to think. A share price which Holmes a Court would have thought, if only because he was so obviously in favor of it, made it inevitable.
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of the more fundamental changes that have been set in train since a need to
to keep the West Australian at bay.

Brian Lotein said in announcing the structural changes that they were the
culmination of a process started early in 1985 and first given direction by a senior
management seminar which reviewed research data and set strategic goals.

Working parties and management review committees worked in parallel streams until their thoughts were pulled
by a meeting of management and directors late in 1984.

'Along the way, the process was influenced by the acquisitions of Utah and Energy Resources Group and some ex-
ternal factors,' Lotein said, underscoring just a mite the background to these epoch-making manoeuvres.

The changes reorganise BHP into four basic groups—steel, oil, minerals and Utah — under a headquarters group,
dubbed the corporate centre. It is planned to refine this further by merging the minerals division and Utah.

The new steel division, called BHP Steel International, will group together all the disparate elements of the steel
operation, including John Lyons. BHP Petroleum International will leave the current oil division virtually as is but,
with the question to be answered about what to do with ERIQ, which at present is part of Utah.

The top of the group structure is announced has at the centre Brian Lotein
with executive general manager finance Geoff Heeley and EGM corporate
affairs David Adam.

In a new post as EGM assisting Lotein is the former minerals division chief,
Russell Burge, whose task is to oversee the reorganisation as well as BHP
engineering, BHP transport, research, information systems and special pro-
jects. David Rice, in an expansion of his previous role, is EGM and chief execu-
tive officer of BHP Steel International. Bud Wilson remains Utah chief execu-
tive officer and Rod Harden has been

promoted to general manager of the minerals division. Russell Pirie is EGM of the oil division. All four report
to Lotein.

Each business group will be expected to perform as a separate profit centre.
Each will have its own budget, and chief executives will have much higher dis-
cretionary capital spending limits. The aim is to capture the benefits of shorter
lines of command — quicker decisions, less bureaucracy — and an entrepreneur-
ial (that is, profit-conscious) spirit engendered by the greater responsibility.

New activities, developed internally or acquired, can be added more easily to
the new structure. Not mentioned, but equally possible, is the ease with which
parts can be dropped.

Working parties have been formed to implement the changes in four streams:
the consolidation of BHP Petroleum worldwide and rationalising Utah and
BHP Minerals.

The corporate centre and petroleum appear to be relatively straightforward
exercises and steel, while a large task, is also without a great deal of comp-
lication. Steel plans, in fact, appear to be fairly well developed.

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finance through and through. If you have questions, LTCB can find the answers.
of the more fundamental changes that have been set in train stems from a need to keep the West Australian at bay. Brian Lotein said in announcing the structural changes that they were the culmination of a process started early in 1981 and first given direction by a seminar management seminar which reviewed research data and set strategic goals. Working parties and management review committees worked in parallel streams until their thoughts were pulled together by a meeting of management directors late in 1984. "Along the way, the process was influenced by the acquisitions of Utah and Energy Resources Group and some external factors," Lotein said, underlining just a little the background to these epoch-making manoeuvres.

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TEAMWORK

Since its inception in 1974 the Metal Products Division of Monier has grown dramatically in both Australia and the United States of America. Its 16 branches produce a comprehensive range of components and systems for industrial and domestic buildings, all high quality steel products. They include purlins, roofing, walling and rainwater products such as the Australian Design Award winners, “Sundeck” roofing and “Leafless” guttering.

The Division’s growth can be attributed, among other things, to teamwork. Expert people in product development, manufacturing and marketing, working together to provide superior products and customer service, is a hard combination to beat.

But, not every member of the team is under the same steel roof. One other which has contributed is BHP, our Australian supplier of high quality, coated and pre-painted steel.

Monier is proud to be associated with one of Australia’s greatest companies, to applaud its achievements and to participate in this celebration of its centenary year.

Monier Limited

Divisonal structure has been put in place under David Rice. The man in charge of the consolidation is Peter Laver, former operations general manager. Also reporting to Rice is general manager Brian Cunliffe. Operations are in seven groups — californiA (general manager Rob Cheney), slab and plate products (Jerry Ellis), coated products (John Lynam), rod and bar products (John Rice), wire products (Alan Mewing), long products (Ron McNelly) and trading services (Bill Parramut).

Three of those general managers are of interest: McNelly, Ellis and Cheney are widely seen as markers for higher things, and Cheney is only 38 years old.

The appointment last year of McNelly, 41, as general manager Whyalla steel works was treated as a move of great significance. Not only was he young but he came to the job out of marketing, rather than operations.

Ellis, 47, had a long career through Australian Wire Industries before going into corporate planning. As general manager for flat products he takes over the giant Port Kembla works.

Chenery has already had four years as assistant general manager of Newcastle steel works. His new job puts him in charge of the coal mines feeding the steel works, the Koongaggh coal loading in Newcastle and the Saxonvale steaming coal mine, which has been transferred from the minerals division. So the steel reorganisation looks merely a matter of going ahead on the established lines. Merging minerals and Utah is another thing altogether.

McNelly (minerals) and Ellis (Utah) are leading a task force to report to Lotton on things as basic as what needs to be done and how it might be done. Everything about this exercise is in the realm of speculation at present. High-placed people at BHP are talking in terms of “if” rather than “when” even though they do say they would be surprised if it does not come off.

Not the least of the problems to be faced is that of melding two quite disparate social and corporate cultures, one American and the other Australian, across a wide geographical spread. However, there has been a small test run in the amalgamation early on of exploration and, whatever happens with the wider merger, it is certain that Utah will take over the minerals division’s marketing efforts.

Utah has a fully developed international marketing network, whereas BHP’s minerals division has tended to work through agents.

Utah has a fully developed international marketing network, whereas BHP’s minerals division has tended to work through agents. More than that, Utah has a high-powered collection of American executives which it would be foolish to waste by insisting that the combined division be controlled from Melbourne. Utah also has, uniquely among the BHP divisions, a board of its own, comprising some equally high-powered individuals.

With the caveat that anything can happen (including not happen at all) in this proposal, it seems obvious at least that Utah/minerals will be San Francisco-based. That will indeed be a memorable day in the history of BHP.

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The Division’s growth can be attributed, among other things, to teamwork. Expert people in product development, manufacturing and marketing, working together to provide superior products and customer service, is a hard combination to beat.

But, not every member of the team is under the same steel roof. One other which has contributed is BHP, our Australian supplier of high quality, coated and pre-painted steel.

Monier is proud to be associated with one of Australia’s greatest companies, to applaud its achievements and to participate in this celebration of its centenary year.

100 YEARS OF TAFE & BHP

Becken Hill 1888 - before Tech came to town

Technical education furthers industry, productivity and develops people.

Broken Hill Technical College - 1901

Congratuations on 100 years of achievement.

WE'RE PROUD TO BE ASSOCIATED WITH BHP.

Potter Partners

Divisional structure has been put in place under David Rice. The man in charge of the consolidation is Peter Laver, former operations general manager. Also reporting to Rice is general manager Francis Casdemar.

Operations are in seven groups—
calories (general manager Rob Cherry), slab and plate products (Jerry Ellis), coated products (John Lyson), red and bar products (John Risby), wire products (Alan Mewing), long products (Ron McNally) and trading services (Bill Farrands).

Three of those general managers are of interest: McNally and Ellis are widely seen as market for higher things, and Cherry is only 39 years old.

The appointment last year of McNally, 41, as general manager Whyalla steel works was treated as a move of great significance. Not only was he young but he came to the job out of marketing, rather than operations. Ellis, 47, had a long career through Australian Wire Industries before going into corporate planning. As general manager for flat products he takes over the giant Port Kembla works.

Chenery has already had four years as assistant general manager of Newcastle steel works. His new job puts him in charge of the coal mines feeding the steel works, the wooden coal loader in Newcastle and the Saxonvale steamng coal mine, which has been transferred from the minerals division. So the steel reorganisation looks merely a matter of going ahead on the established lines. Merging minerals and Utah is another thing altogether.

Hardie (minerals) and Wilson (Utah) are heading a task force to report to Loton on things as basic as what needs to be done and how it might be done. Everything about this exercise is in the realm of speculation at present. High placed people at BHP are talking in terms of “if” rather than “when” even though they do say they would be surprised if it does not come off.

Not the least of the problems to be faced is that of melding two quite disparate social and corporate cultures. One American and the other Australian, across a wide geographical spread. However, there has been a small test run in the amalgamation early on in exploration efforts. and, whatever happens with the wider merger, it is certain that Utah will take over the minerals division’s marketing efforts.

Utah has a fully developed international marketing network, whereas BHP’s minerals division has tended to work through agents.

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Utah International Inc.
Assistance in realising the largest acquisition in Australia's commercial history ($US2.4 billion)

Woodside Petroleum Limited
Financial adviser on joint takeover with Shell Australia ($A295 million)

Thiess Dampier Mitsui Coal Pty. Limited
Leverage lease finance for coal plant and equipment ($A84 million)

Kooragang Coal Loader Limited
Project finance adviser for Kooragang Island coal loader ($A350 million)

Blue Circle Southern Cement Limited
Project finance adviser for expansion of Berrima cement works ($A72 million)

John Lysaght (Australia) Limited
Procured finance for Westport Cold Strip Plant ($US60 million)

MACQUARIE HILL SAMUEL CORPORATE SERVICES, A DIVISION OF
MACQUARIE BANK

Citibank's Technology Supports the Spirit of Enterprise.

B.H.P.'s US$2.4 billion acquisition of Utah involved a major marshalling of international funds by the Australian Company.

To achieve this, it sought assistance from Citibank, and in particular from Citibank's highly sophisticated electronic banking division.

In February 1984, B.H.P. opened accounts with Citibank, Singapore, for US dollars acquired through the foreign exchange markets. These funds were re-invested with a number of banks and upon maturity paid back to B.H.P.'s Citibank accounts.

B.H.P. was then able to transfer the aggregate amount to New York for settling the acquisition.

On a simple instruction from a micro computer in the B.H.P. Treasury, connected to Citibank's global computer network, funds were transferred to banks around the world to earn better yields and prompt confirmation was given for all transactions.

This gave B.H.P. ease of reconciliation, and a 45 day history on the source of its funds at call and the ability to initiate rapid and secure funds transfer instructions.

According to B.H.P. Treasurer Graeme McGregor, use of the Citibank Electronic Banking network "provided secure access to information and rapid transfers to ensure maximum benefit from having funds offshore."

"It was a difficult job, well done and made easy on short notice."

For Citibankers, it was an example of how the global bank that's local helped an important Australian to expand as a global corporate force: part of the service that Citibank is bringing to Australians at the individual and corporate level.

Citibank congratulates B.H.P. on reaching its Centenary – an achievement that reflects the spirit of enterprise that will undoubtedly see B.H.P. become an even more significant international Australian during its next hundred years.

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WE'RE BANKING ON TECHNOLOGY.
We like to give B.H.P. a hand with the shopping.

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WE'RE BANKING ON TECHNOLOGY.
The far flung soul of a corporate empire

Far from the steel and glass corporate headquarters, the mining towns are the soul of BHP. Terence Maher visited the isolated iron ore town of Newman in Western Australia to examine life at the work face.

Newman, the iron town of 6000 souls, sits just north of the Tropic of Capricorn where the East Hamersley ranges launch their backs against the Gibson Desert. It is now the biggest town in the State of East Pilbara, which stretches from the Indian Ocean to the Northern Territory border and could easily encompass the British Isles or Victoria within its borders.

It is closer to Jakarta than to Canberra, and the shire capital of Marble Bar, "just up the road" from Newman, has the dubious distinction of being Australia's hottest town. It well earned this reputation by turning on 100 sweetering summer of 1923-24. When it rains Hughie really sends it down in the cyclonic months of December, January and February.

Why then would anyone want to build a town here, miles from anywhere? Stan Hilditch gave Newman its raison d'etre in 1952 when he discovered a massive iron ore deposit in the middle of a big red hill which he called Mt Whaleback because it looked like a hangulated whale.

A fat lot of good it did him. Hilditch and his partner had to wait until 1960 to stake their claim. The Federal Government, banned the export of iron ore for the 30 years leading up to 1960.

BHP became intimately involved with Newman in 1961 when its subsidiary, Mt Newman Mining, was given management of the project by the international joint venture that brought Hilditch's dream to reality.

By April 1, 1969, the company had commenced at the beginning of the 30 years leading up to 1960. BHP became intimately involved with Newman in 1962 when its subsidiary, Mt Newman Mining, was given management of the project by the international joint venture that brought Hilditch's dream to reality.

But what sort of town did BHP establish and what's it like to live in? There...
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Images of a company town with barracks and huts for at least another 100 years.

The reason for Newman's existence is the massive iron ore deposit with enough reserves to keep the company in business for at least another 100 years.
IN THIS CENTENNIAL YEAR . . .

which is also the 100th Anniversary of Honeywell,

Australian employees of Honeywell Pty Limited
continue in the tradition of working together with

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Honeywell serves customers’ needs for Automation and

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Together, we can find the answers.

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100

1885 1985

100 years of industrial achievements

When two industry-related companies both hold the distinction
of achieving 100 years’ service in their respective fields, you’d expect
them to take advantage of each other’s experience.

So it’s not surprising that the names BHP and Linde are inextricably
linked in a working partnership that has existed since 1951.

Although the name Linde is generally associated with the supply
of industrial gas in Australia through Linde Gas, its sister company Linde
Australia is recognised as a specialist in the design and construction of
process engineering plants.

Linde’s world renowned industrial
skills were called on to design,
construct and commission every BHP
oxygen plant in Australia bearing
testament to Linde’s technically
advanced engineering expertise.

Congratulations BHP on reaching
your century! From one centenarian
to another, may your next 100 be as
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Although the name Linde is generally associated with the supply of industrial gas in Australia through Linde Gas, its sister company Linde Australia is recognised as a specialist in the design and construction of process engineering plants. Linde's world renowned industrial skills were called on to design, construct and commission every BHP oxygen plant in Australia — bearing testament to Linde's technically advanced engineering expertise.

Congratulations BHP on reaching your century! From one centenarian to another, may your next 100 be as significant as your first.

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Prime inner city location with views, swimming pool and tennis court.

B.H.P. have chosen four floors within The Forrest Centre, situated at the hub of the major commercial district of Perth.

Breathtaking views of the Swan River plus the exceptional quality construction and finish, makes The Forrest Centre Perth's most outstanding office development.

The old maxim of a healthy body and healthy mind is never more appropriate than when applied to The Forrest Centre. Tenants can take advantage of a 30 metre swimming pool, spa and tennis court which have been fully incorporated into the design.

The Forrest Centre incorporates an abundance of car parking space for both tenants and their clients. The complex provides for secure, underground parking unsurpassed in Perth, for 355 vehicles on three different levels.

The building's innovative design created by Robert Cann & Associates, Architects, will become a Perth landmark. In addition to dramatic shape, the building design encompasses the latest in office accommodation high technology.

In association with Engineers, Ove Arup & Partners, the Architects developed a system of 3 storey high box columns filled with concrete enabling rapid erection and floor finishing. This is a world first for column design for this height and shows another innovative use of B.H.P. steel and B.H.P. technology.

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Another important despatch from TNT.

In search of progress

To maintain its competitive edge BHP must stay at the forefront of new technology. John Kavanagh talks to the research department which has made BHP a world leader in steel making and mining technology.

Bob Ward is taking the tools of the post industrial revolution to update those most industrial of occupations: steel making and mining. Ward is the king of Australia's research and development managers, performing a $37 million balancing act between the demands of BHP for improved steel making and mining techniques and the abstract inclinations of his scientists and engineers.

BHP revealed its research and development budget in its annual report for the first time last year. The $30 million it spent (up to $70 million this year) is in keeping with the company's image - it is certainly the country's biggest research and development budget. But a study of the spending reveals that under Ward's stewardship BHP is a cautious and thrifty spender, a little unsure of the future, determined not to stray from its traditional markets but committed to keeping processes in those markets up to the mark.

BHP was hit hard by the recession of the early 1980s and was shown to have allowed its once highly efficient steel-making operation to become antiquated. Now in the era of the steel plan, the company is committed to improving its productivity, and Ward's research and development initiatives will play a big part in that work.

In his speech to the company's annual general meeting in September last year, BHP chairman Sir James Balderstone told shareholders that BHP's long-term investments in industry would have to be supported by significant cuts in labor costs. BHP has spent between 0.5 percent and 0.6 percent of sales on research and development during the past 10 years. In 1975/76 it spent $16.7 million (0.58 percent of group sales). That figure rose steadily throughout the 1980s, and in the past four years has remained just under 0.6 percent. BHP does not need to feel ashamed when the finger is pointed at the company's image - it is certainly the country's biggest research and development budget in its annual report for the first time last year. The $30 million it spent (up to $70 million this year) is in keeping with the company's image - it is certainly the country's biggest research and development budget.

BHP's research and development budget includes such projects as the development of a casting head-hardening technique at Whyalla that toughens the heads of railway tracks where they come in contact with train wheels. This technique at Whyalla that toughens the heads of railway tracks where they come in contact with train wheels. This technique has proved so successful that the Whyalla plant has doubled its capacity.

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The bulk of the money (about 70 percent of group sales) is devoted to tactical research, aimed at reducing costs and improving productivity. BHP has successfully developed microprocessor-based equipment and systems for its mining operations. Improved the yield of its coal washeries and made savings in steel processing by innovations such as direct charging of hot-rolled slabs in reheating furnace and by recovering gases which had been flared. Mt Newman Mining has become a leader in low maintenance, heavy-haul rail operations.

These pragmatic applications of technology echo the company's earliest breakthroughs — the development of the flotation process in Broken Hill. At the turn of the century Delprat invented a means of putting all the unused zinc to use. His flotation process — where bubbles blown into a vat attract the mineral to be extracted, leaving an easily removed sludge — still in use for mineral extraction world over.

The company's most recent breakthrough is the development of a casting technique at Whyalla that toughens the heads of railway tracks where they come in contact with train wheels. This head-hardening technique has proved so successful that the Whyalla plant has doubled its capacity.

Thirty percent of the budget is reserved for what the company calls strategic research and development. This money goes into potential business opportunities that should pay off some time later.

One such project is the conversion of natural gas to liquid fuel. Ward says: "Everybody says we are going to have plenty of liquid fuel in the future. We don't believe that. But Australia is going to have natural gas coming out its ears — BHP certainly is — so we are looking at ways of producing a bulk product."

Another important strategic development is the investigation of new smelting processes using plasmas (very hot gases) as the source of energy. "We are hoping to replace electric arcs as a
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result of this project," says Ward. "It is the most forward-looking project we have in steel making. We want to replace the conventional graphite electrodes with plasma torches. If we can do it we will have made a major impact on the economics of that operation."

Ward believes that BHP is meeting the challenges to its markets. "Some people seem to have got the wrong idea because we don't go around publicising our work or going into new and exotic areas. We find that we have enough to do to keep up in our markets."

BHP is confident that it has the steps mapped out for taking steel production to 350 tonnes per man per year. Port Kembla is going on to nearly 100 percent continuous slab casting, following an installation worth $146 million. Plans are under consideration for continuous casting at the Newcastle plant.

"We are putting money on the line in the steel division. Our control has improved and we are doing a better job there," says Ward. He does not believe that BHP will be a victim of the push by plastics makers into the car industry; BHP will produce a cheaper product for the industry. "Plastic is changing fast."

Ward acknowledges that BHP has been cast as slow and unimaginative in its thinking but he believes this perception is a result of irrelevant comparisons with companies such as CRA which are investigating completely new markets.

"At the moment we see ourselves very much as experts in mineral processing. We have looked at some of these side issues and always rejected them. It doesn't mean we will always do that but it has to fit in with our corporate development plans. This is a country of great mineral wealth, so we made up our minds to be the best in mineral processing. We are not ignoring new business, but we have plenty on our hands and we think we should stay where we are.

Don't forget that we have made a big commitment to strategic planning in our markets.

BHP has maintained its involvement with Perth inventor Ralph Sarich. BHP has a 50 percent stake in the Orbital Engine Company and since 1972 has put more than $10 million into the development of Sarich's orbital engine, orbital fuel injection system and orbital combustion process. Several American companies have expressed interest in the Sarich products.

Ward believes the prizes will go to those who use new technology to make industries "really burn", and this is why BHP's effort goes into upgrading the performance of its existing capital equipment. It has undertaken major developments in computer software for image processing in mineral exploration, satellite surveying, coal seam analysis, driller performance and furnace monitoring. Last year the Chicago Museum of Science and Industry gave BHP its prestigious IR-100 award for a software product that measures the infra-red characteristics of materials and is used for correlating ore samples.

Congratulations BHP

We look forward to your continued company on the journey into the next 100 years.
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How BHP took on the Japanese and won

After nearly 12 years of observing the Japanese steel industry as a correspondent stationed in Tokyo, it was an intriguing experience in October 1966, to be assigned to take a long look at the management of Australia's steel industry. BHP, in other words.

By the end of 1964 I had worked outside Australia for almost 2 years, mostly in Japan. In terms of direct experience, I had missed the post-war period of trauma which haunted Australia's economic recovery. I had spent a good deal of time covering what can now be seen as one of the most significant economic stories in history; that post-war Japan from total devastation to economic dominance.

Now I had come back to Australia just as the fallout from Japanese growth was beginning to pervade Australian perceptions.

The years 1945-66 were among the most significant in BHP's history. In many respects, the similarities between BHP and what were then the two leading Japanese steel companies, Nippon and Fuji, were actually much more obvious than their differences.

BHP was full of optimism. In 1965 it embarked upon its biggest expansion program. Big extensions at Port Kembla were put in train, particularly in the flat products area. "The ramifications of this expansion of flat products capacity will have an effect throughout the flat products area," the announcement said.

A big expansion of Whyalla's shipbuilding capacity was announced. The partnership with Esso for Bass Strait oil and gas exploration quickly moved to the operational stage and to the first discovery.

I found that BHP - like the Japanese companies - was heavily oriented toward technology, obsessed with getting the latest equipment, expanding production, fighting off threats to the market for steel products. Like the Japanese companies, too, it lacked a flamboyant profile.

The BHP of 1966 dominated the Australian scene then, as it does now, but it still clung to the values of a gentlemanly, reserved way in which management were facing significant changes.

One executive who did not need to be told the necessity of communication was the chief general manager, Sir Ian McMillan. He was a BHP man through and through, an engineer who had joined BHP in 1933 and spent his entire career with the company.

Sir Ian talked in blunt and no-nonsense terms, but many of the company's other executives were much less accessible. That was also true at BHP. Australia's largest non-government employer of labor, did not have a separate personnel department, when its marketing division had remained weak after decades of insatiable demand for steel and when its whole orientation was toward technical excellence. (When BHP decided in 1966 to install a 200-ton oxygen converter in Newcastle there was no vessel of that size in operation anywhere).

My conclusion at the time was: "It is hardly surprising, in view of the long transitional period during which Mr Essington Lewis controlled BHP, but gradually relinquished the reins of power that the tradition of highly centralised, one-man control has struck deep roots in the company.

"Because of this and because of the gentlemanly, reserved way in which BHP conducts its business, nothing so crude as a 'struggle for power' can be discerned behind the modest facade of Essington Lewis House.

"Yet it is a fact that unless some radi-
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How BHP took on the Japanese and won

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Until the end of 1964 I had worked outside Australia for almost 20 years, mostly in Japan. In terms of direct experience, I had missed the post-war period of trauma which haunted Australia's economic recovery. I had spent a good deal of time covering what can now be seen as one of the most significant economic stories in history: the post-war recovery of Japan from total devastation to economic dominance.

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The years 1945-46 were among the most significant in BHP's history. In many respects, the similarities between BHP and what were then the two leading Japanese steel companies, Yawata and Fuji, were actually much more obvious than their differences.

BHP was full of optimism. In 1965 it embarked upon its biggest expansion program. Big extensions at Port Kembla were put in train, particularly in the flat products area. "The ramifications of this expansion of flat products capacity will have an effect throughout many fields of Australian secondary industry," an announcement said.

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The BHP of 1966 dominated the Australian company scene then, as it does now, but it still clung to the values of leaness and simplicity and was a bit ambivalent about the way it communicated with the public. Perhaps this was partly due to the activities of Albert Shepherd, the company's biggest individual shareholder and a very public crusader for a better deal for people holding BHP scrip.

BHP could never have been attacked as a company which forgot its national responsibilities, even though its relationships with government were fairly stand-offish. Many shareholders, Albert Shepherd among them, argued that its concern for its own perception of national responsibilities had been carried to excessive lengths.

This ambivalence was becoming very apparent in 1946-46 because both the scope of the company's activities and its management were facing significant changes.

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Yet it is a fact that unless some radi-
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Frank Conroy,
Westpac's General Manager, Corporate Banking

"These days, most companies expect more from a bank than just transferring money. They need a relationship with a bank that works with a company in achieving its goals.

At Westpac, relationship management is our way of doing banking. Our Westpac Relationship Managers take a long-term view of your business.

It is a Relationship Managers' job to seek out, anticipate and meet your needs. And he's the only person you have to deal with - one person who can fast-track all your business through the bank.

He'll fast-track your project finance, trade finance or foreign exchange.

Give us a call and let us see what we can do for your business. It could be the start of a relationship your company can bank on for a long time."
The only thing your company should bank on is a long-term relationship.

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- We can explain all the options available to you.

We'll fast-track your business through the bank.
Being a Big Australian in the Small State has genuine rewards.

"In 1962 the Big Australian BHP established its major ferro-alloy plant in Tasmania. Now in its centenary year BHP has started a second major expansion at Bell Bay investing $60 million following hard nosed evaluation of the advantages of a Tasmanian location.

Not that BHP is going it alone. Many major Australian companies have operations in Tasmania — companies like Aberfoyle, APPM, ANM, Comalco, EZ and Renison Gold Fields. Like The Big Australian they too appreciate the benefits of being in Tasmania and are increasing their investment as a result.

Private sector capital investment is at record levels and the highest per capita of any state. Many major companies along with a myriad of smaller investors find that Tasmania is a natural for their operations.

Abundant resources, genuine decentralisation and excellent transport are a few of the advantages. So too are willing workers or, as BHP Chairman Sir James Balderstone describes the Bell Bay experience: A stable workforce and a largely dispute-free relationship with responsible employee unions.

Tasmania has an unashamedly private enterprise government committed to creating the best business environment in the nation.

Tasmania is the Free Enterprise State. If your company is not performing as it should, maybe it's because you haven't yet considered Tasmania. If you are the big league or aspiring to join, isn't it time you checked out Tasmania?"

Robin Gray, Premier and Minister for State Development.

TASMANIAN DEVELOPMENT AUTHORITY

The Tasmanian Development Authority, GPO Box 646G, Hobart, Tasmania 7001 Australia. Telex AA55102, Fax. No. 2355320, Phone toll free (008) 0309866.

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SMG Schloermann-Siemag AG
Federal Republic of Germany

SMS Schloermann-Siemag are an internationally leading West German company in the construction of turnkey plants, continuous casters and rolling mills. Current important plant contracts for BHP's AIS Port Kembla works illustrate that this valuable tradition of close Australian-German cooperation also continues today.

For further information please contact:
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