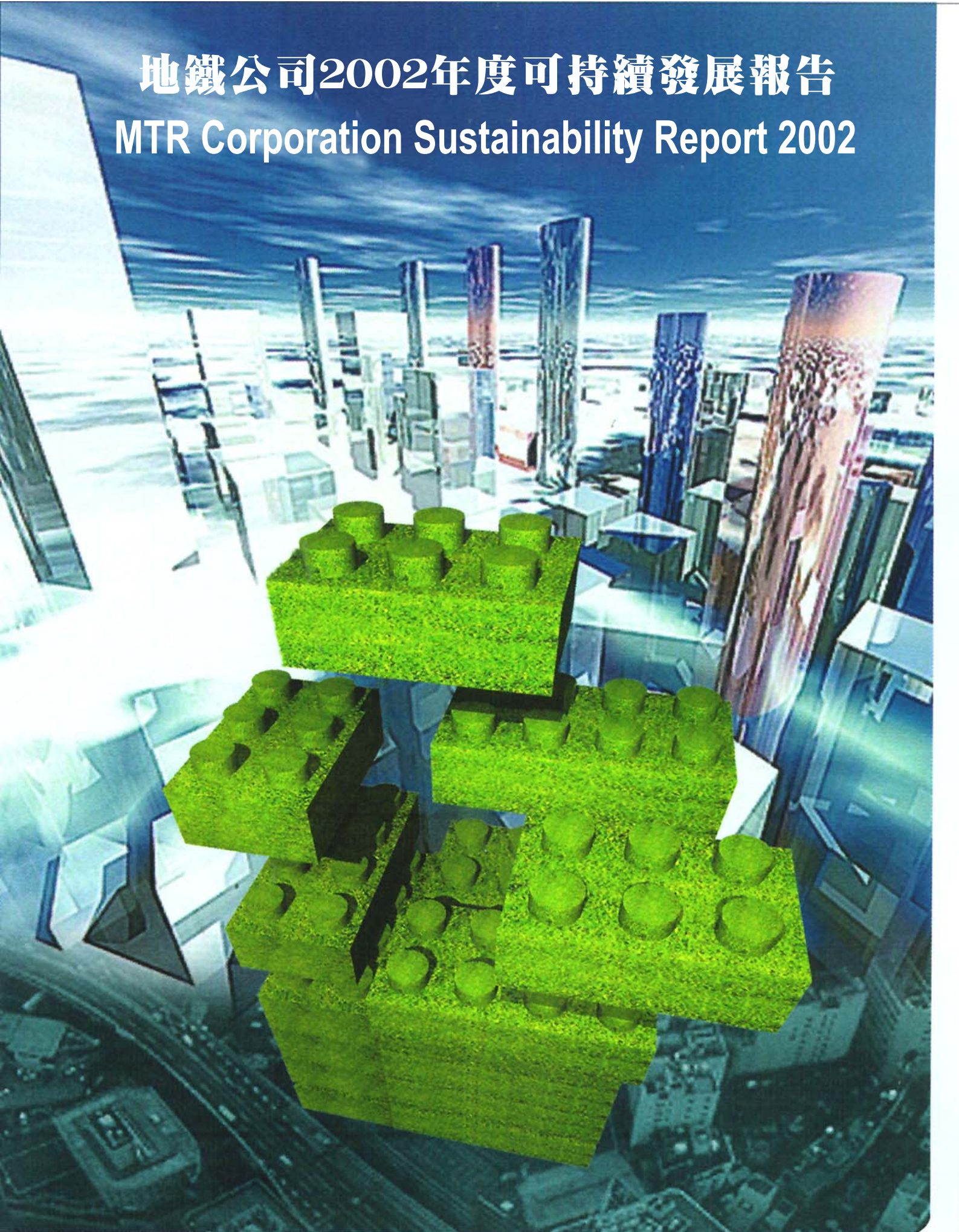


地鐵公司2002年度可持續發展報告

MTR Corporation Sustainability Report 2002



CONTENTS

1	<i>CHAIRMAN'S MESSAGE</i>	1
2	<i>INTRODUCTION</i>	3
3	<i>ABOUT MTR</i>	4
4	<i>CORPORATE SUSTAINABILITY</i>	7
4.1	<i>INTRODUCTION</i>	7
4.2	<i>MTR'S VISION</i>	7
4.3	<i>OUR MISSION IN ACHIEVING THE VISION TODAY</i>	7
4.4	<i>BUSINESS BENEFITS</i>	8
4.5	<i>LEADING THE WAY</i>	8
4.6	<i>RISK MANAGEMENT</i>	10
4.7	<i>PRIORITY BUSINESS RISKS</i>	13
5	<i>PEOPLE</i>	15
5.1	<i>INTRODUCTION</i>	15
5.2	<i>CODE OF CONDUCT</i>	15
5.3	<i>CORE VALUES</i>	16
5.4	<i>CUSTOMERS</i>	17
5.5	<i>SHAREHOLDERS</i>	23
5.6	<i>STAFF</i>	23
5.7	<i>HUMAN RIGHTS</i>	29
5.8	<i>COMMUNITY</i>	29
5.9	<i>GOVERNMENT</i>	30
5.10	<i>PROGRESS AGAINST 2002 TARGETS</i>	30
6	<i>ENVIRONMENT</i>	32
6.1	<i>INTRODUCTION</i>	32
6.2	<i>ENVIRONMENTAL MANAGEMENT</i>	32
6.3	<i>ENVIRONMENTAL PERFORMANCE</i>	33
6.4	<i>PROGRESS AGAINST 2002 TARGETS</i>	33
6.5	<i>ENVIRONMENT TARGETS FOR 2003</i>	34
6.6	<i>GREEN HOUSE GAS EMISSIONS</i>	35
6.7	<i>WASTE</i>	37
6.8	<i>NOISE</i>	38
6.9	<i>LOCAL AIR QUALITY</i>	38
6.10	<i>WATER CONSUMPTION</i>	39
6.11	<i>INDOOR AIR QUALITY</i>	40
6.12	<i>DUST</i>	40
6.13	<i>OZONE DEPLETING SUBSTANCES</i>	40
6.14	<i>DISCHARGES TO WATER</i>	40
6.15	<i>ENVIRONMENT TARGETS 2002 - SUMMARY OF INCOMPLETE TARGETS</i>	40

7	<i>ECONOMIC</i>	43
7.1	<i>INTRODUCTION</i>	43
7.2	<i>FINANCIAL PERFORMANCE</i>	43
7.3	<i>CORPORATE GOVERNANCE</i>	44
7.4	<i>FARES</i>	45
7.5	<i>INTERACTION WITH HONG KONG, ASIAN AND GLOBAL ECONOMIES</i>	46
7.6	<i>ROLE IN PROMOTING HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE</i>	46
7.7	<i>MEASURES OF MTR'S ECONOMIC CONTRIBUTION</i>	47
8	<i>SUSTAINABILITY TARGETS FOR 2003</i>	48

ANNEX A GLOBAL REPORTING INITIATIVE INDICATORS

ANNEX B MTR CORPORATE SUSTAINABILITY POLICY

ANNEX C VERIFICATION STATEMENT

I am very pleased to present the MTR's second Corporate Sustainability Report for the year 2002.

Our stakeholders in Hong Kong and worldwide expect us to maintain the best practices and highest standards that we have set for ourselves. In our sustainability reporting we can detail our economic, environmental and social contributions towards maintaining MTR's vision as Hong Kong's Fast Track to a World Class City. For the second year running, MTR's sustainability reporting follows the international best practice guidelines prepared by the Global Reporting Initiative.

Last year we demonstrated how the relationship between MTR's stakeholders and Core Values of Respect, Value and Service embedded the concept of sustainability in the Corporation. This year we are reporting on how sustainability is implemented through our risk management techniques. The Corporation must seek new avenues for continued growth through diversification into international consultancy and tourist projects in Hong Kong. Risk management is an important tool supporting that growth.

We set ambitious sustainability targets last year, and I am pleased to report we have met the challenges. We have posted our Code of Conduct on the Internet and have delivered training to staff on its implementation. We have also achieved ISO14001-certification for the Environmental Management System covering our railway operation and construction activities.

This year MTR has implemented a Corporate Sustainability Policy, established a Corporate Sustainability Co-ordinating Committee and appointed a Sustainability Development Manger.

We could not have achieved these results without the dedication and commitment of our employees. Each one's commitment to excellence in sustaining MTR's Core Values is critical to the growth of the Corporation. Our main sustainability efforts next year will be targeted on applying sustainability principles to the Tung Chung to Ngong Ping Cable Car Project and continuing to seek economic benefits from ISO14001 certification.

Our efforts have been rewarded locally and globally. The Hong Kong Association of Chartered Certified Accountants awarded MTR their first Environmental Reporting Award. As a consequence of our sustainability reporting, MTR is now included in both the Dow Jones Sustainability Index and the FTSE4Good Global Index. MTR is the only Hong Kong listed Company to have achieved this distinction.

In addition, MTR has signed and is participating in the World Economic Forum Corporate Citizenship Initiative. We have also been instrumental in launching the Charter for Sustainable Development, an initiative of the Union

of International Transport Providers, which will influence transport companies in 80 countries.

This sustainability report represents our latest contribution to the continual dialogue with you and the other members of our society whose lives we touch. We welcome your thoughts and ideas on how MTR can continue to provide Hong Kong's Fast Track to a World Class City.

A handwritten signature in black ink, consisting of several vertical strokes followed by a more fluid, cursive-like flourish.

Jack CK So, Chairman
Hong Kong, April 2003

This report provides an overview of MTR Corporation Limited's (MTR) approach to corporate sustainability and details its people, environment and economic contributions during 2002. The report also describes MTR's progress towards achieving its 2002 sustainability targets and presents a set of challenging targets for MTR for 2003.

Guidelines produced by the Global Reporting Initiative (GRI) were used to develop the structure and content of this report. We present those GRI indicators included in this year's report in *Annex A*. This report has been designed principally with online use in mind and the web version is supplemented by additional materials on a wide range of topics. For those who need a permanent record, a downloadable version in English has been prepared and one in Chinese will be prepared.

This report is supplemented by MTR's newly approved Sustainability Policy (*Annex B*) and has been verified by an independent consultancy (*Annex C*).

As MTR's second Corporate Sustainability Report, we would very much like to receive your views by emailing the Sustainability Development Manager, sdmng@mtr.com.hk.

Case Study: Preparation of MTR Corporate Sustainability Report 2002

The early stages of the reporting cycle included a review of opinions and comments on the 2001 Sustainability Report including those made by global sustainability indexes (eg: DJSI & FTSE4Good), the Opinion Statement and Verification providers and Socially Responsible Investors. In addition, the 2001 Report was assessed against the *Global Reporting Initiative Guidelines* (June 2002) and *Trust Us* (SustainAbility 2002). Given the availability of such feedback on last year's report, we have decided not to include a stand alone Opinion Statement in this year's report.

The review of feedback described above identified five key areas where the report could be improved: (a) Case studies on the business benefits of corporate sustainability for MTR (b) Improved presentation of key messages (c) Greater emphasis on Green House Gas Emissions (d) Extended discussion on MTR's environmental performance (e) Risk management and the links with sustainability. We have endeavoured to address these in this year's report.

Despite a feedback form and roving displays across the MTR network, there was little comment from the general public on last year's report. This year, we will be developing a short, hard-copy Sustainability brochure to address this.

The MTR Corporation Limited (MTR) came into existence on 30 June 2000, succeeding the Mass Transit Railway Corporation which had been established in 1975 as a Government owned statutory Corporation. With a daily patronage of over 2.3 million passengers, the MTR is one of the most intensively utilised mass transit railway systems in the world, transporting 1 in 3 of Hong Kong's population every day. Despite continued economic weakness and severe competition from buses, total patronage increased by 2.5% to 786 million in 2002 with the opening of the Tseung Kwan O Line. MTR's daily patronage reached a record 3.1 million on Christmas Eve 2002.

Through effective and efficient management in planning, design, operations, and maintenance of its railway services, MTR has been confirmed by recent benchmarking studies as one of the world's finest railways for reliability, customer service and cost-efficiency ⁽¹⁾. MTR currently operates 87.7 km of railway, comprising 6 railway lines with 49 stations, of which 14 are interchanges to provide convenient transfer between the different lines (Figure 3.1).

Figure 3.1 MTR Railway Network



In addition to railway operation, development and associated businesses, MTR engages in the development, sale and management of residential and commercial properties above and adjacent to its stations and depots in

(1) Benchmarking exercise conducted annually by the Civil Engineering Department of Imperial College, London.

partnership with property developers. MTR has also retained a number of shopping centres as long-term investments and provides property management services.

MTR's subsidiary, Octopus, operates the Octopus smart card system, which MTR and other major transport operators use to collect the majority of their fares. Octopus has expanded into the non-transport sector, with the number of Octopus cards in circulation increasing to 9.3 million.

In 2002, our external consulting business experienced another year of strong growth in revenues and scope, particularly in Mainland China, where we undertook assignments in Tianjin, Shanghai, Nanjing and Shenzhen.

In telecommunications, increased mobile phone usage generated higher revenue and we established a new subsidiary, TraxComm Limited, to exploit the opportunities expected to arise from the recent liberalization of the Hong Kong fixed line telephone market.

Figures 3.2, 3.3 and 3.4 illustrate MTR's turnover, profit and staff numbers since 1999.

Figure 3.2 MTR Turnover (1999-2002)

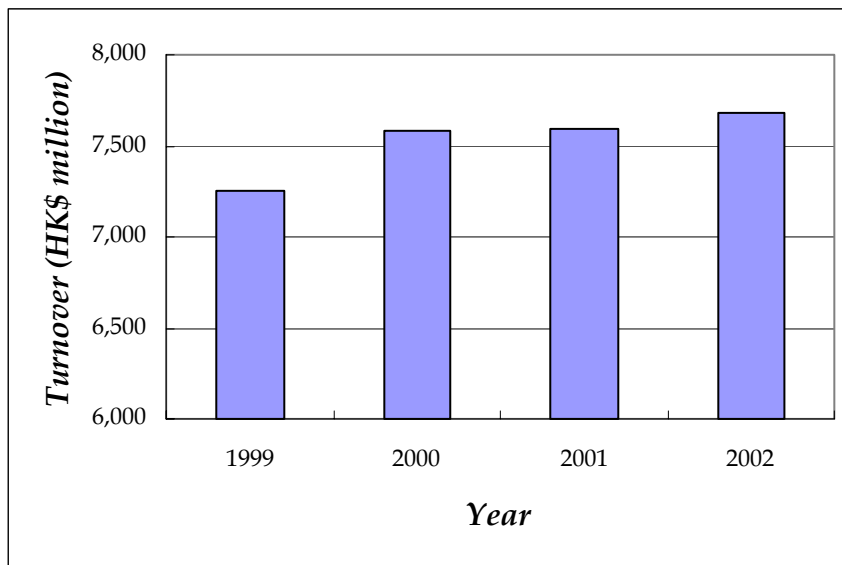


Figure 3.3 MTR Profit (1999-2002)

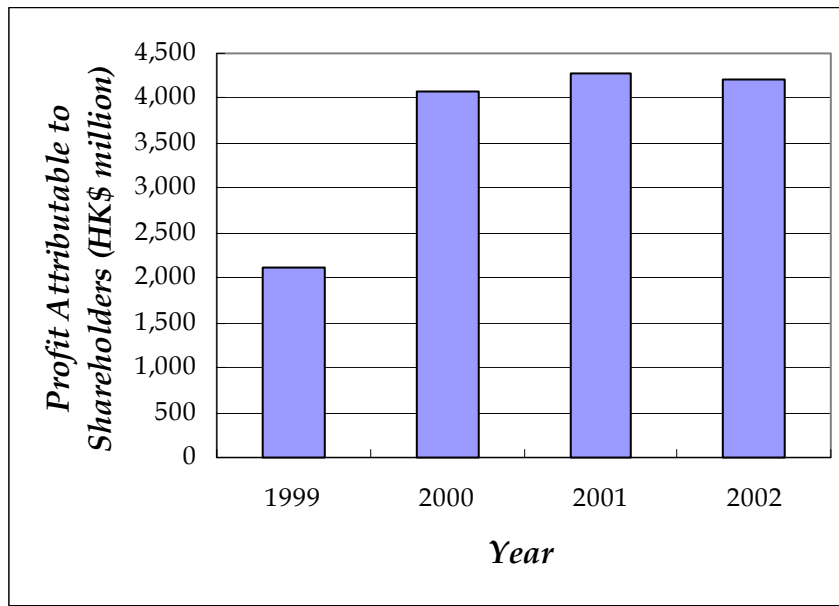
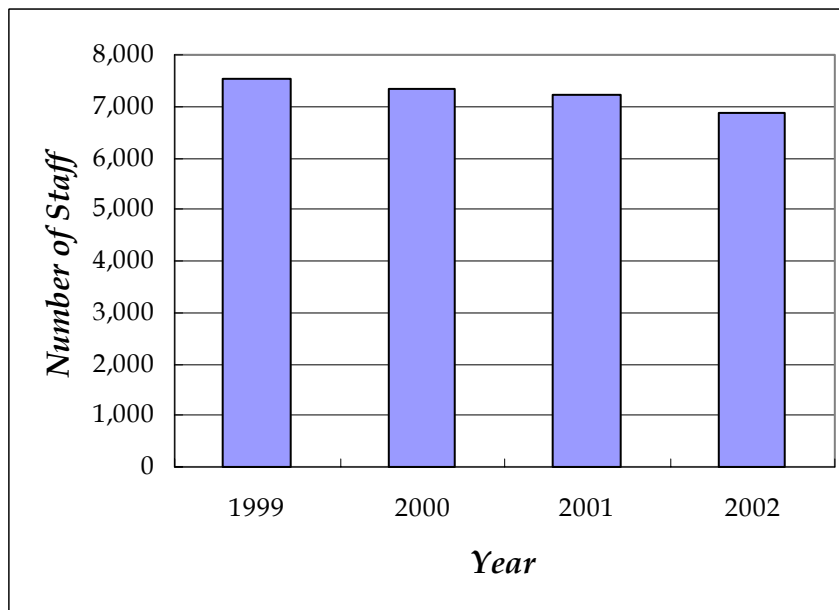


Figure 3.4 MTR Staff Numbers (1999-2002)

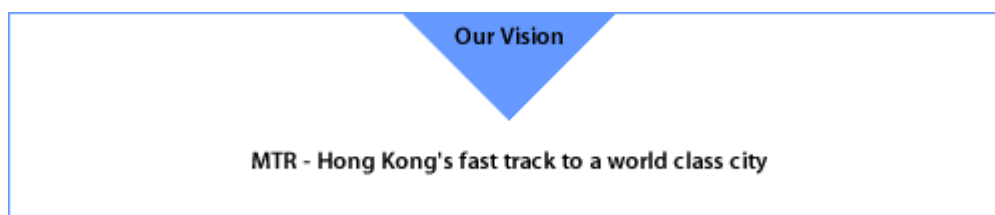


4 CORPORATE SUSTAINABILITY

4.1 INTRODUCTION

By making a major contribution to the prosperity and well-being of Hong Kong and by raising the standards of corporate responsibility and risk management amongst listed companies, MTR is a leader in shaping and delivering a more sustainable society.

4.2 MTR'S VISION



The quality of life for many millions of people in Hong Kong is greatly influenced by planning and development. With the right approach, Hong Kong can grow from its current densely populated and cramped urban environment to become a world class city - a quiet, safe, clean and at the same time vibrant and stimulating place to live. For this to happen, government, business and society need to work together towards agreed goals, with full transparency and accountability.

4.3 OUR MISSION IN ACHIEVING THE VISION TODAY



MTR is helping deliver this vision today by providing equitable access to affordable, safe, useful, highly energy efficient and reliable transportation. Moreover, as the operator of a railway system in a densely populated city, MTR plays a significant role in reducing the environmental impacts of moving over two million people every day.

At the same time, MTR, in partnership with Hong Kong's most innovative property developers, establishes new communities along the routes of its railway through the development of substantial properties at the sites of its stations. These properties are centred on rail access and are designed, developed and managed in accordance with Hong Kong best practice with regard to planning, building and environmental issues. In this way, MTR

aims to maximise the beneficial use of Hong Kong's scarce land resources and provide quality lifestyles for residents via easy rail access to work, education, family and friends, shopping and other recreational pursuits. This has led to more effective integration between its railway and property developments, increased catchment and passenger flows for the railway, and enhanced investment returns.

In property developments, MTR enters into partnerships with reputable developers who bear all development costs, including land premium and construction costs, and therefore all development risks. MTR takes the lead in development planning and supervising construction and shares part of the profits upon completion and sale.

MTR also continues to raise the standard of corporate responsibility in the way it communicates and engages its internal and external stakeholders. MTR delivers optimised and consistent returns, provides staff with fair and competitive rewards and training opportunities, supports community initiatives aligned with its core skills and seeks continually to improve its environmental performance.

4.4 BUSINESS BENEFITS

MTR's commitment to corporate responsibility is based on a number of compelling business drivers:

- Maintaining an efficient use of traction energy to power trains, limiting resource use and minimizing waste disposal costs.
- Reducing risks to the safety of our customers and staff and to the environment at large reduces staff lost time and prevents possible claims that could impact net revenues.
- Encouraging staff to develop their skills and implementing international best practices to improve productivity.
- Ensuring construction projects proceed with minimal delays.
- Demonstrating good corporate governance and transparency which is increasingly important in attracting investors, particularly those in the international debt markets.

4.5 LEADING THE WAY

In 2002, MTR achieved a number of significant milestones in corporate responsibility:

- Publication and dissemination of the MTR Code of Conduct. This sets out the policies and practices that MTR has developed to deal responsibly with its internal and external stakeholders.

- Certification of MTR's Project and Operations Divisions to ISO14001, the international standard for environmental management systems, and the launch of quantitative targets to encourage focused and continual improvement in environmental performance.
- Implementation of the recommendations made in the 4th Staff Attitude Survey to encourage staff development at the middle management level.
- Becoming a signatory to the World Economic Forum Corporate Citizenship Initiative, placing corporate governance and social issues at the highest levels of management.
- Inclusion in the two leading global sustainability indexes, the Dow Jones Sustainability Index and FTSE4Good, following publication of the MTR Corporate Sustainability Report 2001 - a first for Hong Kong and China.
- Publication of MTR's Sustainability Policy, establishment of the Corporate Sustainability Co-ordinating Committee and the appointment of a Sustainability Development Manager.

Case Study: UITP Sustainable Development Charter

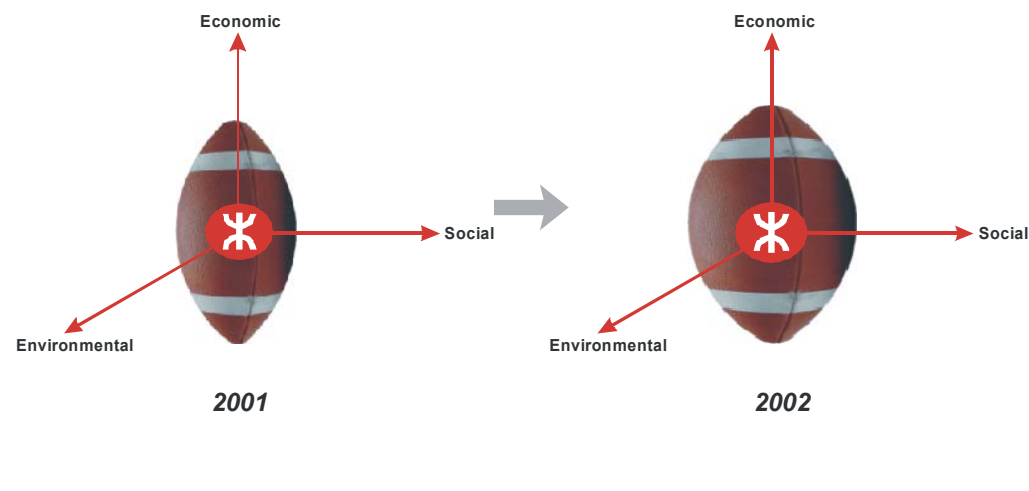
MTR has played a leading role in developing the UITP (Union of International Transport Providers) Charter on Sustainable Development which will be officially launched at the UITP's World Congress in Madrid in May 2003. Signatories to the Charter will commit to the following.

1. Foster leadership on sustainable development through dialogue and exchange of best practice with all stakeholders.
2. Facilitate training and mentoring through activities and forums focused on sustainable development practices.
3. Influence international and national government policy to develop a responsible balance between social, environmental and economic considerations.
4. Adhere to a set of world-wide indicators for regular reporting on sustainable development.

More details at www.uitp.com.

Case Study: Corporate Evolution Towards Sustainability

In last year's report, we introduced the rugby ball as a visual representation of corporate sustainability. We consider that MTR's achievements during 2002 have led to a further expansion of the rugby ball in the economic, social and environmental directions as described in the remainder of this Report.



4.6

RISK MANAGEMENT

As a responsible corporation, MTR seeks to identify and manage risks which may materially affect its business and by implication, the interests of our shareholders, customers and staff. Risk management is not analogous to sustainability but by likening risk management to sustainability, MTR gains greater insights into the creation of long-term shareholder value.

MTR has a four-stage approach for managing business risk (*Figure 4.1*).

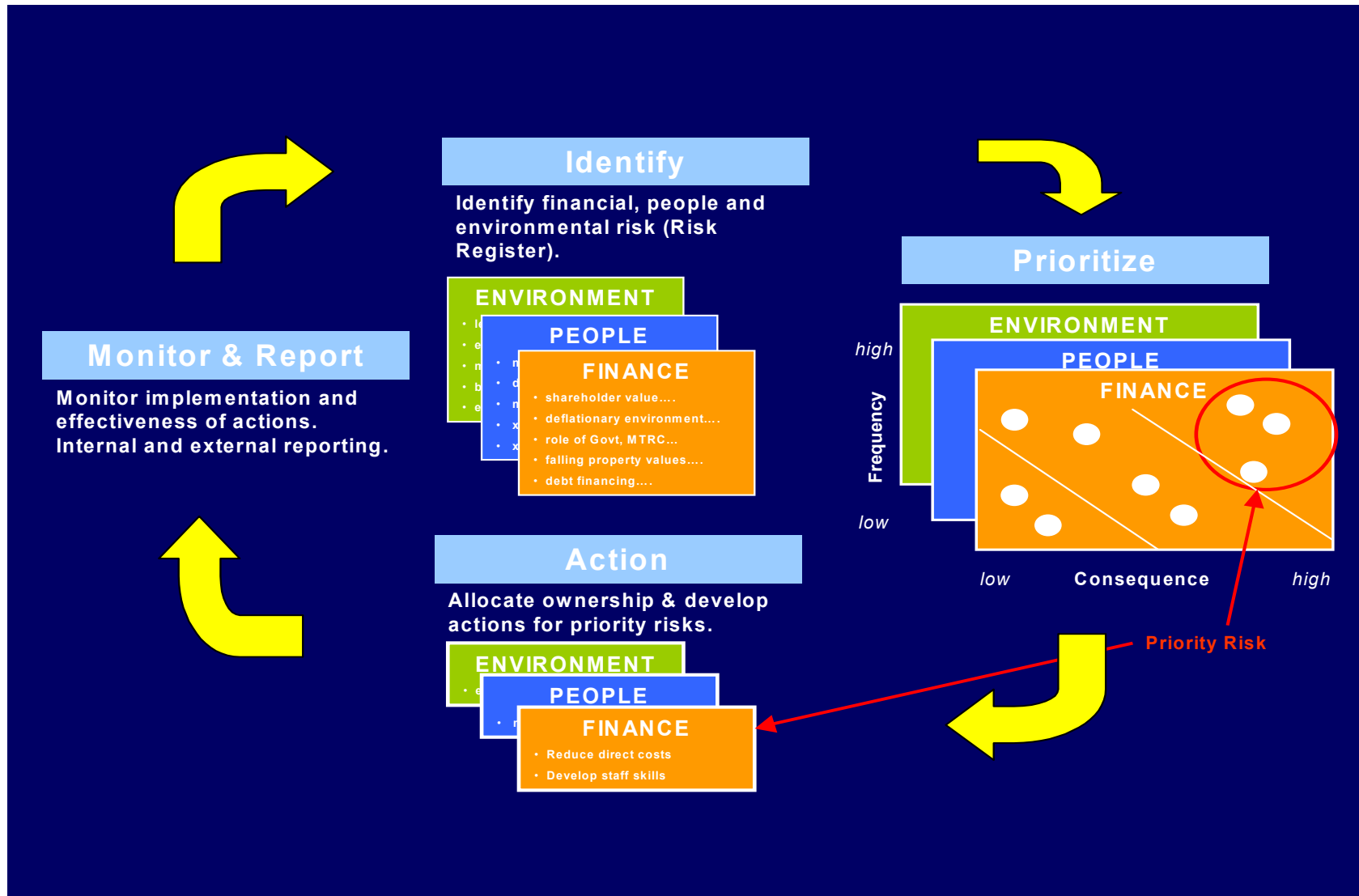
Identification: By considering the three elements of sustainability (finance, people and environment), a long list of possible risks to the business is compiled. At this stage, the emphasis is on generating a wide range of risks (risk register) with no attempt to assess their importance.

Prioritization: Each of the identified risks is assessed in terms of severity of consequence and frequency of occurrence. The prioritization of risks is undertaken separately for the three elements of sustainability as their severities are not necessarily directly comparable. Risks with a high consequence – likelihood score are identified as priority business risks and are taken forward to the next stage for senior management attention. To ensure their status remains up-to-date, business risks are reviewed periodically and as events take place.

Action: For each priority risk, ownership is agreed and actions identified. Whilst risks are identified and prioritized by the Executive, actions are identified within the relevant Division(s).

Monitor & Report: The implementation and effectiveness of the actions are monitored on an ongoing basis using key performance indicators wherever possible. Senior management is informed of risk and action status through regular reporting and key results are presented in MTR's *Annual Report* and *Corporate Sustainability Report*.

Figure 4.1 MTR's Risk Management Process



As discussed above, ownership is assigned and actions developed for priority business risks. *Table 4.1* presents a non-exhaustive selection of MTR's priority risks. The *Annual Report and Corporate Sustainability Report* presents further information on selected actions.

Table 4.1 *Selected Priority Business Risk, Ownership and Actions*

Priority Business Risk	Ownership	Action
Finance		
Maintaining business in deflationary economy	Operations Property Project	Reduction of direct costs
	Human Resources	Development of staff skills
Growth of shareholder value in developed market	MTR Executive	Diversification within Hong Kong into other businesses, acquisitions and mergers
	Operations	Provision of consultancy services internationally
	Property	Improved property and shopping center management
	Project	Alternative sources of project funding
Clarity of roles between Government, regulator and central provider.	MTR Executive	Review of Operating Agreement between MTR and Government Maintenance of fare levels
Ensure continued impartiality of the Board	Board	Corporate Governance
People		
Maintaining passenger numbers	Operations	Meeting Customer Service Pledge
Developing and retaining motivated and skilled staff	Human Resources	Code of Conduct, Core Values, Understanding staff concerns, Skills development, Re-training and redeployment, Rewards and benefits
Ensuring the health and safety of passengers, staff and contractors	MTR Executive	MTR annual corporate safety plans and improvement targets
Environment		
Breaches of Statutory Environmental Requirements	Operations Project	ISO14001-certified environmental management system
	Property	Environmental Management Guidelines

Priority Business Risk	Ownership	Action
Long-term energy supply without renewables	Operations	Ongoing program to enhance energy efficiency, Green House Gas Emissions Reporting, Watching brief on Scheme of Control
Management of Assets	Operations Legal & Procurement	Supply chain management initiatives

5.1 INTRODUCTION

MTR delivers a world-class railway service in Hong Kong and in doing so provides people with more time for life. In addition, MTR plays a pivotal role in establishing new communities in Hong Kong centered on rail access through its property development activities.

In terms of how MTR delivers these services, we are committed to the long-term development and retention of our staff, maintaining excellent relations with all our stakeholders, playing our part as a corporate citizen in the community and adhering to the highest safety standards. The process for managing these and other priority business risks were identified in *Chapter 4* and are presented in *Table 5.1*.

Table 5.1 *Selected Priority People Risk and Actions*

Priority People Risk	Ownership	Actions
Maintaining Passenger Numbers	Operations	Meeting Customer Service Pledge
Developing and Retaining Motivated and Skilled Staff	Human Resources	Code of Conduct
		Core Values
		Understanding Staff Concerns
		Skills Development
		Re-training and Redeployment
Ensuring the health and safety of passengers, staff and contractors	MTR Executive	Rewards and Benefits MTR annual corporate safety plans and improvement targets

5.2 CODE OF CONDUCT

The MTR Code of Conduct sets out the policies and practices that the Company has developed to deal responsibly with its internal and external stakeholders. It explains MTR's business philosophy and values governing staff conduct in achieving business goals. The aim of the Code is to sustain a high level of integrity in all aspects of the Corporations operations.

Following the publication of Code of Conduct in 2002, MTR has carried out extensive training and a communication campaign to ensure all levels of staff understand the content of the Code and the philosophy of an ethical working

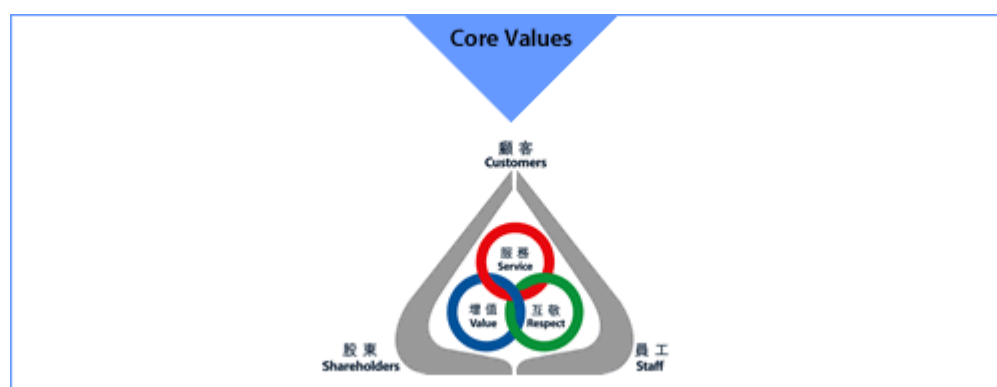
culture. All staff were issued a personal copy of the Code of Conduct. Each manager was also issued a Corporate Guidebook for Managers with particular examples for better illustration and communication with staff.

To promote similar practices with contractors and to make it available for interested shareholders, customers and interested parties, the Company has placed the Code of Conduct on the MTR website for public access.

The Code of Conduct focuses on the following areas: Ethics in management; Bribery, illegal gifts, entertainment and commissions; Conflict of interests; Relationship with suppliers, contractors, consultants and interfacing parties; Responsibilities to shareholders and the financial community; Relationship with customers; Relationship with employees; Health and safety; Responsibilities to the community; and Monitoring of compliance & the means of enforcement.

5.3

CORE VALUES



In 2001, MTR officially launched its Core Values of Service, Value and Respect towards Customers, Staff and Shareholders. During 2002, these continued to foster a strong culture of continuous improvement and sustain our business objectives.

- **Core Values for Customers** We respect our customers, listen and respond to them and provide safe, reliable and value for money services to them.
- **Core Values for Staff** We care for our staff, communicate with them, reward them fairly and provide them with development opportunities.
- **Core Values for Shareholders** We conduct our business with high integrity, explore all opportunities to achieve growth and deliver satisfactory returns to our shareholders.

Figure 5.1 presents how MTR staff understand the link between the core values and stakeholders.

Figure 5.1 MTR's Core Values Matrix

		STAKEHOLDERS		
		Customers	Staff	Shareholders
CORE VALUES	Service	Safe, reliable and environmental friendly service Efficient service delivery Continuous improvement	Safe and healthy working environment Open communication Efficient & value added internal customer service	Optimise utilisation of assets Open and transparent Effective management
	Respect	Listen and be responsive to our customers Deliver what we promise Build long term relationship	Mutual trust and respect Share fruit of success Fairness	Care for the interest of shareholders Business Ethics and integrity Continuously improve corporation image
	Value	Provide value for money service Add value to life style of customers Extend network to improve accessibility	Career development Personal growth Job satisfaction	Satisfactory return to shareholders Healthy growth Business diversification

5.4 CUSTOMERS

The MTR network is designed to meet our customers' needs. For our rail operations, this means the provision of equitable access to affordable, safe, useful and reliable transportation, while continually reducing our consumption of non-renewable resources, the noise we generate and our emissions to air and water.

5.4.1 MTR's Service Pledge

The MTR Customer Service Pledge is agreed with the SAR Government on an annual basis and sets demanding quantitative targets across 12 areas of performance including train punctuality, reliability and cleanliness. Over the course of 2000, 2001 and 2002, we achieved all our service pledges including MTR train punctuality of 99.3% in 2002.

The reliability and punctuality of MTR trains is unaffected by road traffic or weather conditions. Our trains run 19 hours a day, 7 days a week, from

06h00 to 01h00. During rush hours, trains can become crowded and passengers may wait to board the next train. The high frequency of our trains means that passengers need to wait two to three minutes during peak hours on the Tsuen Wan Line, Kwun Tong Line, Island Line, and Tseung Kwan O Line and an average of four minutes on the Tung Chung Line. The Airport Express runs at 10 minutes interval for the whole day.

Case Study: Property Management - Total Quality Service Regime



To establish a leading quality service edge in the industry, MTR has pioneered a “Total Quality Service Regime” (TQSR) across its shopping centres in early 2002. TQSR is a full-scale programme dedicated to the attainment of excellent quality service at MTR-managed shopping centres.

The programme includes Service Foundation Training, Mystery Shopper Survey, Official Audits and Service Ambassador Visits to provide full-support to participating tenants. A TQSR Reward Scheme has also been established to further motivate tenants to deliver a “total quality service culture.”

5.4.2

Safety

MTR is committed to ensuring the health and safety of staff, customers, contractors and the public on its premises. We take care to ensure a climate of safety awareness in all areas and strive for continuous improvement in safety performance. Our efforts during 2001 once again resulted in safety records for all groups that are among the best in the world for our type of operations.

Over the years, MTR has spared no effort in taking vigorous measures to sustain a high level of safety performance. This was further demonstrated by our success in obtaining the Hong Kong Railway Inspectorate’s approval to commence the Tseung Kwan O Line passenger service 4 months ahead of program. Other notable initiatives and achievements in 2002 included:

- Implementing a behavioral safety program in the Airport Railway operations, Infrastructure Maintenance Department and selected contractors to reduce staff accidents;
- Retrofitting platform screen doors and installing platform gap fillers to provide an even safer traveling environment to passengers;
- Installing “ride-through” facilities on the escalators on Airport railway and Urban Lines to mitigate the impact of loss of supply from the power companies; and
- Rolling out the Contractor Safety Ambassador Program to further reinforce the safety performance of both contractors and sub-contractors.

However, our safety record was marred by 2 fatalities, which occurred on the Operating Railway, one to a member of MTR staff and one to a contractor staff member. Special task forces were formed to carry out thorough and comprehensive accident investigation and safety checks to determine corrective actions as well as preventative measures for the future. Relevant follow-up actions to address the investigation findings, including procedures upgrade, safe systems of work enhancement and equipment modification, were carried out to prevent recurrence.

MTR is committed to building a safe working and traveling environment for our staff, passengers and contractors. By enforcing stringent safety requirements for meeting our very high standards, launching various awareness enhancement campaigns, implementing effective award systems and offering comprehensive safety training to both our contractors and staff, we have successfully nurtured a safety culture and sustained safety excellence in all aspects of our operations.

MTR has ongoing programmes to raise safety awareness amongst our passengers, staff and contractors, which has led to improvements in our overall safety performance (*Figure 5.2 and 5.3*). Of the 690 incidents in 2002 (*Figure 5.2*), 20 accidents regarding the opening of the Tseung Kwan O Line were recorded. Greater emphasis was placed on promoting safety messages relating to train doors and platform gaps as statistics from recent years indicated that these were areas of higher risk.

Figure 5.2 Number of MTR Incidents* (1992-2002)

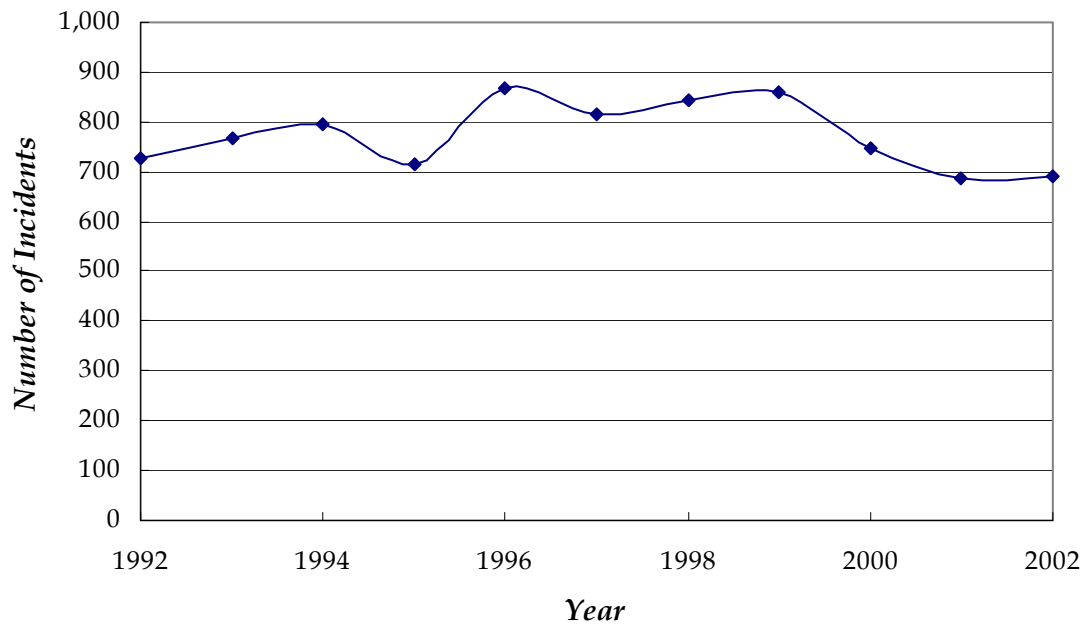
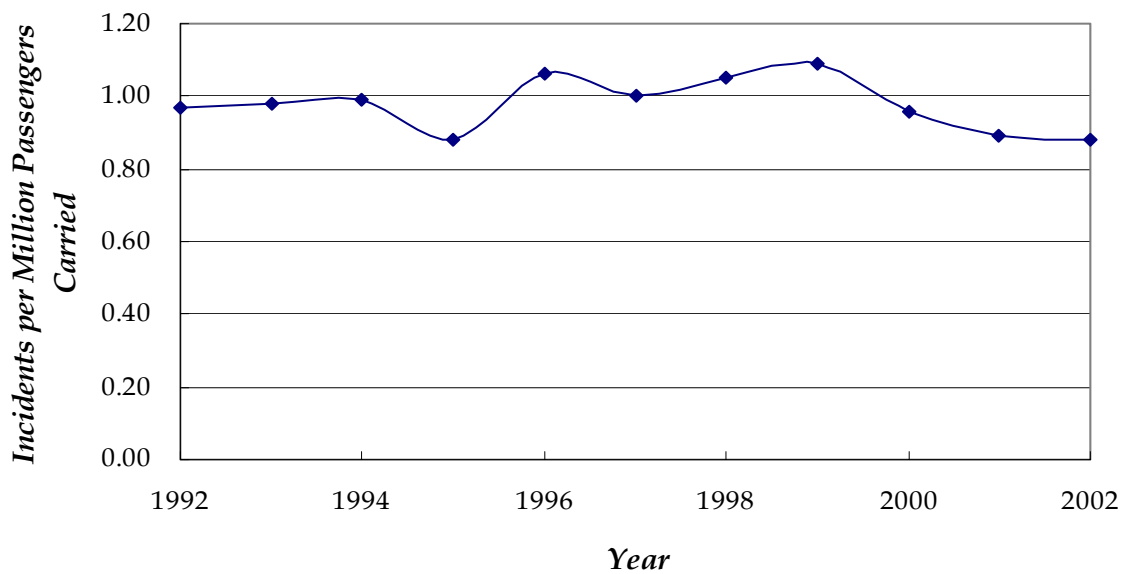


Figure 5.3 Incidents* per Million Journeys Carried (1992-2002)



* The term 'Incident' refers to accidents such as injuries to passengers, staff and contractors or incidents such as derailment which are defined as reportable incidents under the Mass Transit Railway Ordinance.

MTR Safety Month

Since 1995, every November has been designated as MTR Safety Month. In 2001 and 2002, the campaign was supported by ATV's "Who Wants to be A Millionaire" programme to provide passengers opportunities to learn more about safety messages through participating in the television game show.

MTR Escalator Safety Campaign

A one-month long campaign is launched annually to emphasise the safe use of escalators with over 40 Escalator Safety Ambassadors being assigned to remind passengers of escalator safety throughout the MTR. Safety messages on the proper use of escalators, lifts and travellers are promoted through various media, including station posters, banners and messages on info panels in trains.

In 2002, MTR commissioned the well-loved *Powerpuff Girls* as its Escalator Safety ambassadors to remind passengers of the safe and proper use of escalators. The *Powerpuff Girls* campaign was launched at a ceremony held in Hong Kong Station where the audience was able to meet the three newly appointed ambassadors - Blossom, Buttercup and Bubbles. During the one-month campaign, they appeared in a wide range of promotional materials in MTR stations. Through them, four key messages were highlighted.

- Always hold the handrail.
- Always stand clear of the edges.
- Always take care of children.
- Always take extra care of the elderly.

Due to the popularity of the *Powerpuff Girls* campaign, MTR decided to use the same cartoon characters for year-round publicity on safety and courtesy.

Children

Since 2000, MTR has organized regular public talks to promote safety awareness amongst passengers who are at greater risk. On average about two school talks are held each month at schools near MTR stations. In 2002, MTR gave 30 school talks.

The Elderly

An elderly programme is jointly organized by MTR and RTHK Radio 5 in October every year to remind senior citizens of safety. In addition, MTR gave 16 talks to the elderly in 2002.

Two International Finance Centre (Two IFC)



Hong Kong Station Development is a comprehensive commercial complex in the central business district of Hong Kong occupying a 5.7ha site and strategically located adjacent to the panoramic Victoria Harbour. The Development comprises two sites, the Northern Site and the Southern Site, which are connected by two air-conditioned retail walkways at podium level.

The construction of the Southern Site has been completed with the opening of the office tower, namely One International Finance Centre (One IFC), and the shopping mall, namely IFC Mall in late 1998. 'Green building features include: : direct seawater cooled chiller plant; variable air volume air conditioning system; high efficiency electronic ballast for office lighting (achieving 20% less energy consumption than traditional lighting); and double glazing with low 'e' coating providing an OTTV of approximately 24W/m².

Construction of Two IFC, an 88 storey A-grade office tower with gross floor areas of over 180,000m², is scheduled for completion in 2003. In the light of recent events, a security review of the development was undertaken and the results found to be satisfactory.

5.4.3

Accessibility

MTR are striving to make our railways accessible to all our passengers – including the disabled, the elderly and people travelling with babies or small children. MTR have installed a range of facilities including tactile guide paths, audio induction loops, lifts and ramps (by which 70% of our platforms can now be reached), Braille route maps and bi-directional wide ticket gates. Details on special facilities for disabled passengers can be found at the MTR Internet site.

Customer Satisfaction

MTR has an effective system to facilitate communication with members of the general public. MTR pledges to respond to written complaints, concerns and enquiries within three working days of receipt. In 2002, 567 written complaints and suggestions were submitted to MTR. We achieved 99.8% compliance with our response time target.

Case Study: MTR Hotline

The MTR hotline answers calls from the public. The hotline is especially busy when there are delays to trains. The main concerns from passengers are focused on the reliability of the trains. In 2002, almost 400,000 enquiries and suggestions were made to the MTR hotline.

The enquiries that are received are subsequently directed to relevant departments. These along with other suggestions from the public are used to make improvements. For instance, platform seats were added to stations for passengers as a result of suggestions raised.

5.5

SHAREHOLDERS

With nearly two decades' experience in the international capital markets, MTR has a wide base of investors both in the equity and debt capital markets. We are committed to cultivating high standards of investor relations through regular and open communications. With our long history of disclosure, we are widely recognized as a leader in investor relations in Asia.

During 2002, our senior management was involved in more than 160 meetings with research analysts and institutional investors. Compared to 2001, there has been a significant decrease in the number of such meetings probably due to falling interest in equity and transport stocks caused by political and economic uncertainties worldwide.

As at 31 December 2002 the Company's retail shareholders numbered over 440,000, the largest shareholder base of any company in Hong Kong. To meet their particular needs, we ensure the timely dissemination of information in a user-friendly format and operate a dedicated hotline within our Corporate Relations Department for individual shareholder's enquiries. In 2002, we responded to over 23,000 such telephone calls.

5.6

STAFF

MTR's ability to deliver on its Customer Service Pledges is a direct reflection of the high levels of skill, motivation and professionalism amongst our staff. Our philosophy and culture enable us to attract, retain and develop high calibre people at all levels, through offering well-structured remuneration, training and career paths and a stimulating, caring working environment with open staff communication for employees, consultants and contractors.

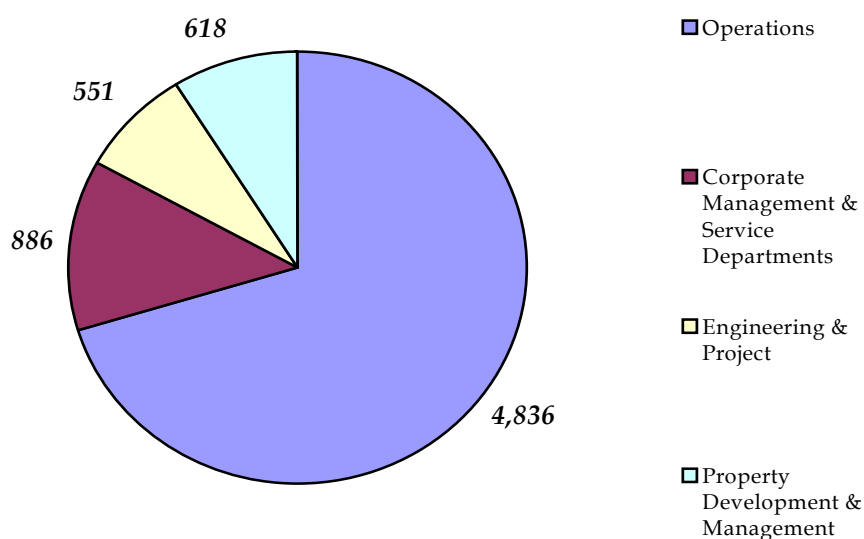
5.6.1

Staff Productivity

With continued efforts to enhance productivity, MTR's total workforce has fallen continuously since 1998 from 8,786 to 7,231 in 2001 and to 6,891 in 2002 (*Figure 5.3*). The manpower reduction in 2002 was mainly due to completion of the Tseung Kwan O Line (TKL) and natural staff turnover.

Over the years, increases in productivity have been achieved by organisational restructuring and streamlining, balanced by staff redeployment and the steady development of a multi-skilled workforce.

Figure 5.3 *MTR Staff Numbers by Division*



Case Study: Redeployment in MTR

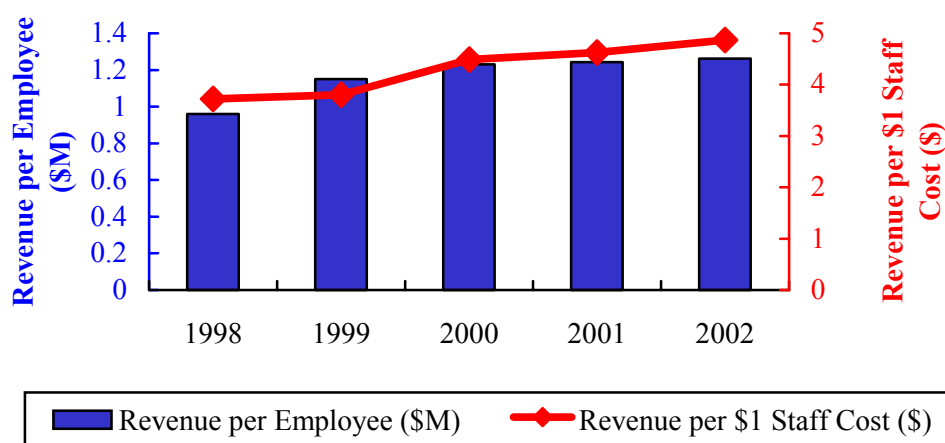
To enhance productivity without increasing staff headcount, MTR has made extensive efforts in transferring and redeploying staff in 2002 to sustain its business growth. With the development of a multi-skilled workforce through training support, over 820 staff have been transferred or redeployed in the last year.

The above achievement was partly attributed to the Corporate Staff Redeployment Programme launched in February 2002 that successfully enabled staff at different levels to be voluntarily redeployed across disciplines and departments. Extensive training was provided to help redeployed staff settle in their new jobs.

Moreover, despite the short time frame involved, the staffing requirement of the Tseung Kwan O Line (TKL) of over 230 staff was met entirely via redeployment without any external intake. Further staff redeployment has also been arranged to support the expansion of Property Management and other business initiatives.

Enhancing the value of our human assets without increasing the number of staff has been at the core of staff productivity gains in recent years (*Figure 5.4*). Productivity was further enhanced by implementation of phase two of MTR’s comprehensive Human Resource Management System. By providing timely employee information and self-service functions to managers and staff, the System has improved overall efficiency and led to benefits in every aspect of human resource management and development.

Figure 5.4 MTR Staff Productivity (1998-2002)



5.6.2 Promotion and Progression

Despite vigorous cost containment and productivity enhancement in recent years, MTR offered promotion opportunities to motivate high calibre staff. Between 2000 and 2002, there have been a total of over 1,800 promotions and progressions ⁽¹⁾. As such, more than a quarter of MTR staff have achieved a promotion or progression in the last 3 years (Table 5.2).

Table 5.2 Promotions and Progressions within MTR (2000 to 2002)

	General Staff	Managers	Total
Promotion	679	63	742
Progression	1,082	-	1,082
Total	1,761	63	1,824

Trainees in the Corporation have promising career opportunities. Apart from the structured training programmes, trainees who demonstrate outstanding performance and capabilities are given the opportunity to join the Professional Development Programme (PDP). PDP members enter a fast-track programme that prepares them for future managerial positions. As a continuum, the Corporation also runs Accelerated Development Programmes for its managers to enhance their business, managerial and leadership skills.

5.6.3 Training and Development

We are committed to maintaining our excellent service delivery record through ongoing training and development of our staff. Staff competency in running a safe and efficient railway is ensured through: proactive and high quality training technologies, such as sophisticated railway training facilities and accelerated development schemes for high potential staff at management and professional levels. In the previous 4 consecutive years, through its ISO

⁽¹⁾ Promotion refers to promotion to a new grade. Progression refers to staff advancement under specific progression / trainee schemes.

certified training systems, MTR received six awards from the American Society for Training & Development (ASTD) for its outstanding training practices. The most recent awards were:

- 2001 ASTD Excellence in Practice Award for its Executive Accelerated Development Programme
- 2001 ASTD Excellence in Practice Citation for 'Fulfilling Statutory Requirement Through New Technology and Effective Training Management'

To meet the changing needs of the railway, a total of 3,293 training courses on operations, technical and safety were delivered, amounting to 44,560 trainee mandays in 2002.

There are more than 30 regular managerial, supervisory and professional training and development programmes. In 2002, more emphasis was put on programmes that addressed Staff Attitude Survey issues. A total of 295 classes covering 4,730 trainee man-days were conducted.

Table 5.3 *Training and Development Data for 2002*

	Total for all Departments	Environmental Training	Management Training & Development
# Training Classes	3,293	32	492
# Trainee Mandays	44,560	244	8,060

Leadership Development

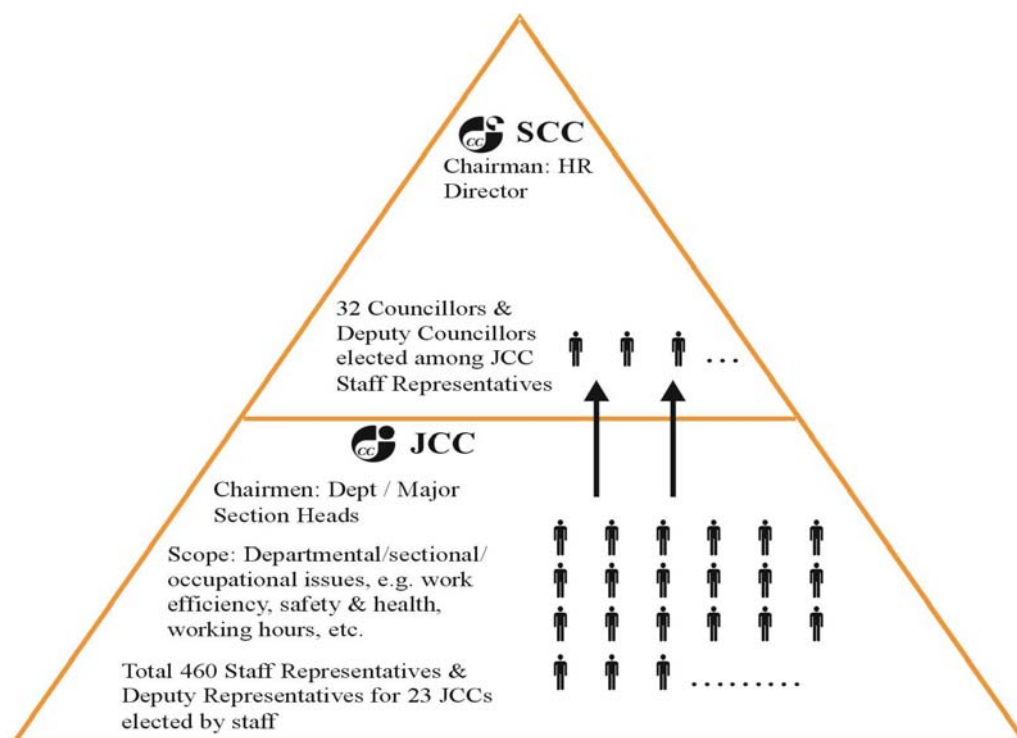
To foster leadership development, a Manager Accelerated Development Programme was launched to groom a pool of top-notch talent for future leadership needs. The programme broadens the experience of managers by exposing them to areas beyond their normal working dimensions through a series of specially designed training modules and action learning projects. In addition to ensuring succession for senior management positions, it acts as a powerful performance driver at the managerial level.

5.6.4 *Staff Communication and Consultation*

Since 1980, MTR has established a comprehensive staff consultation mechanism that has proved to be successful in resolving issues of common concern between management and staff as well as reinforcing a mutual trust (Figure 5.5).

This mechanism is a two tier one comprising the Joint Consultative Committees (JCCs) at the foundation level and the Staff Consultative Council (SCC) at the corporate level. The SCC is for discussing matters of company wide interest while JCCs are departmental consultative bodies. About 460 staff are elected by their colleagues to serve on 23 JCCs across MTR.

Figure 5.5 MTR Staff Consultation Mechanism



Apart from the staff consultation mechanism, there are two staff unions, the Staff General Association and the Staff Union. MTR maintains regular dialogue and cordial relations with the unions.

In recognition of our outstanding performance in human resources management and significant efforts in maintaining good staff relations, MTR received the Good People Management Award 2001 from the Hong Kong SAR Labour Department.

5.6.5 *Rewards & Benefits*

MTR benchmarks the rewards and benefits provided to staff against other large and reputable Hong Kong companies to attract and retain high calibre people at all levels.

In 2002, the performance-oriented culture at MTR was further enhanced by the launch of a more rigorous performance-based pay review mechanism for general staff after intensive consultation with SCC Councillors and line managers.

5.6.6 *Staff Attitude Survey*

To gauge staff's attitude and opinions about working at MTR, we conducted our fourth Staff Attitude Survey (SAS) in 2001. This provided essential input in formulating our future policies and plans. Staff identified a number of areas where MTR was strong including company image, pay and benefits, training, safety and working conditions, downward communication and

employee involvement. Staff also raised concerns on job security, staff morale and work stress.

To maintain areas of strength and seek further improvements, the SAS Senior Management Committee (SSMC) and the Corporate Issues Working Group (CIWG) identified six corporate issues for more focused follow-up.

- Job Security.
- Work Organisation and Operating Efficiency.
- Management/Management of Change.
- Communication and Consultation.
- Satisfaction and Commitment.
- Training, Promotion and Career Development.

An action plan for the corporate issues has been devised and communicated to staff. Implementation of the action plan commenced in 2002 with on-going efforts by various parties. Some of the major actions are:

- Enhance communication between Management and staff and show appreciation and understanding for staff's effort.
- Share human resources statistics at opportune times to address staff misconceptions.
- Promote cultural change by communicating MTR's direction to staff and by reinforcing the Core Values.
- Provide training to staff (especially for redeployed staff), encourage and facilitate multi-skilling to improve staffs skills, knowledge and their readiness for change.
- Department heads to review organizational effectiveness and provide guiding principles.
- Promote the staff consultation mechanism and involve staff in matters concerning them wherever possible through the SCC and JCCs.
- Launch a training program in year 2003 to enhance the communication and management skills of 1,200 junior managers and senior supervisors in view of their important role in implementing changes while maintaining staff morale.

5.6.7

Equal Opportunities

MTR's Code of Conduct formally commits the Corporation to the achievement of equal opportunities for all its employees. All employees are assessed on

their ability and suitability to meet their job requirements irrespective of their seniority, gender, race, age or educational background.

5.7 *HUMAN RIGHTS*

All MTR's core business activities take place in Hong Kong where Human Rights violations such as child, forced and compulsory labour are extremely rare.

5.8 *COMMUNITY*

As a corporate citizen, MTR seeks to identify areas of need where it can assist the community at large and interacts with people in ways that reinforce MTR's standing in the community.

5.8.1 *Supportive Advertising Policy*

The Corporation often supports community events by providing free advertising space to non-profit making organizations.

5.8.2 *Art in Stations Initiatives*

The programme commenced in 1998 with the aim of incorporating artistic elements into the MTR network to provide passengers with a more comfortable and enjoyable travelling environment. The most recent initiative was the Art in Station Architecture programme which was launched in 2001.

5.8.3 *Liaison with Public*

To facilitate communication with the general public, liaison meetings in the form of coffee evenings (24 during 2002), school talks (30), talks to senior citizens (16), visits to the railway and related work sites (304) were organized. MTR representatives also attended 39 community liaison Meetings and 18 live phone-in radio programmers.

5.8.4 *Pedal Kart 2002 Grand Prix*

On the second and third of March 2002, a 24-hour Pedal Kart Grand Prix was organised by the Hong Kong Round Table No 10. 29 organisations entered 45 karts to raise funds for the needy. MTR's four kart teams raised around HK\$71,000 for charity and travelled over 2,000 km. Major beneficiaries include Worldwide Fund - Wheelchair Access Walkway at Mai Po Marshes, Sunbean Children's Home, Hong Chi Association and Hong Kong Society for Rehabilitation.

5.8.5 *MTR's Corporation Community Involvement Team (CCIT)*

With their caring attitude, the 120 staff belonging to the CCIT organize between 8 and 10 events per year to help those in the community in need.

5.8.6

Donations

In 2002, MTR donated a total of HK\$273,650. Of this, HK\$245,650 went to the Community Chest of Hong Kong. To demonstrate our commitment to supporting charitable causes and promoting 'Green' initiatives, MTR provided 30,000 free tickets for the Community Chest Green Day in 2002.

5.9

GOVERNMENT

Following the partial privatisation and public listing of the Company on the Hong Kong Stock Exchange in October 2000, the Hong Kong SAR Government currently owns 77% of MTR. The Government has pledged to continue to hold at least 50% of shareholding in the Company for a minimum of 20 years from the date of the listing, and to provide the same support to the Company as before the privatisation.

Despite its majority ownership by the Government, MTR is independently managed on commercial principles. It is financially independent and does not rely on any subsidy from the Government.

The development of new rail infrastructure and the operation of the MTR network requires ongoing discussions with a wide range of external stakeholders. The planning process is considerably enhanced by extensive discussions with the Government who ensure that new rail infrastructure is consistent with Hong Kong's vision as Asia's World City and fully takes account of the concerns of local residents.

During construction, excellent environmental performance and good communication with local residents and the Environmental Protection Department ensures that projects proceed smoothly. During 2002, MTR attended 9 Legislative Council and Executive Council meetings and 48 District Council meetings.

5.10

PROGRESS AGAINST 2002 TARGETS

We are pleased to report that MTR fully completed all of the 9 people targets presented in last year's report. MTR's people targets for 2003 are presented in *Chapter 8*.

Target	Progress
To achieve the targets in MTR's 2002 Customer Service Pledges	✓ Achieved
To deliver an average of 10.7 training days to Operations Division staff and 2.4 training days to staff in other divisions	✓ Achieved
To implement the action plan developed from the 4th Staff Attitude Survey	✓ Achieved
To maintain the same level of community involvement	✓ Achieved

Target	Progress
To maintain the number of meetings with external stakeholders at 2001 levels.	✓ Achieved
To reduce the number of incidents per million journeys carried	✓ Achieved
To reduce the number of staff and contractors' staff accidents *	✓ Achieved
To publish Codes of Conduct on MTR's Web site	✓ Achieved
To deliver Corporate wide training on MTR's Code of Conduct	✓ Achieved

* Number of Operations staff and contractors' staff accidents: 39 (2001), 24 (2002).

6.1 INTRODUCTION

MTR delivers a world-class railway service, transporting over 2.3 million passengers every day. In doing so, MTR makes a significant contribution to reducing traffic congestion, noise and air emissions in the densely populated urban surroundings of Hong Kong. However, as discussed in *Chapter 4*, there are a number of environmental issues that are considered to be priority risks for MTR's overall business. A selection of these risks is presented in *Table 6.1*.

Table 6.1 *Priority Environmental Risks and Actions*

Priority Environmental Risk	Ownership	Action
Breaches of Statutory Environmental Requirements	Operations Project	ISO14001-certified Environmental Management System
	Property	Environmental Management Guidelines
Long-term Energy Supply without Renewables	Operations	Ongoing program to Enhance Energy Efficiency
		Green House Gas Emissions Reporting
		Watching Brief on Scheme of Control

6.2 ENVIRONMENTAL MANAGEMENT

At MTR, environmental responsibility starts at the highest level and cascades down throughout the organisation to ensure that staff understand their own responsibilities and how they can assist MTR achieve its environmental targets.

The Corporation initiated a corporate-wide Environmental Management System (EMS) in 1997 to ensure that all environmental impacts were monitored and controlled. The system integrated environmental management into all divisional activities to ensure that opportunities for cost effective avoidance or mitigation were identified and implemented.

During 2002, MTR further developed its EMS to meet the requirements of the international ISO14001 environmental management system standard. After certification audits in November and December 2002, MTR received ISO14001

certification for “provision of railway project management, operation, maintenance and relevant administrative services”⁽¹⁾ in March 2003.

MTR’s ISO14001-certified EMS is distinctive in a number of ways.

- The system is based around a set of challenging, quantitative targets which are designed to improve performance (*Chapter 8*). These are supported by detailed action plans defining responsibilities and timescales.
- Environmental risks were identified and prioritised through a bottom-up approach through a series of nine workshops involving over 200 staff from across Project and Operations Divisions.

6.3 ENVIRONMENTAL PERFORMANCE

Through our efforts to improve efficiencies and reduce costs, we have actively sought to improve MTR’s environmental performance. The results of our efforts over the last three years are summarised in *Table 6.2*.

Table 6.2 Key Environment Data 2000 - 2002

Issue	Division	2000	2001	2002
<u>Green House Gas Emissions</u>				
Electricity Consumption <i>MWh</i>	Operations	709,603MWh	709,170MWh	726,390MWh*
Traction Energy <i>kWh / train km</i>	Operations	2.48kWh/train km	2.50kWh/train km	2.46kWh/train km
<u>Waste Generation</u>				
Metals Recycled <i>Tons</i>	Operations	680 tons	720 tons	941 tons
Spent Oil Recycled (% Total) <i>Litres</i>	Operations	0% 0 litres	20% 3,154 litres	50% 9,414 litres
<u>Water Usage</u>				
Water Consumption <i>m³</i>	Operations	224,256 m ³	211,073m ³	187,031m ³

*The increased electricity consumption is due to the opening of the Tseung Kwan O Line in August 2002.

6.4 PROGRESS AGAINST 2002 TARGETS

During 2002, we fully achieved 88% of the 151 environmental targets presented in the last year’s Corporate Sustainability Report (*Table 6.3*). A discussion on those targets not fully achieved is presented at the end of this

⁽¹⁾ Stated scope of ISO14001 Certificate

chapter. The full list of targets is available in the *MTR Corporation Sustainability Report 2001*.

Table 6.3 *Progress against 2002 Targets*

Division	No. of Targets	No. of Fully Achieved Targets	% of Fully Achieved Targets
Corporate	4	4	100%
Finance	12	11	92%
Human Resources	12	10	83%
Legal and Procurement	13	13	100%
Operations	35	35	100%
Projects	21	21	100%
Property Development	34	22	65%
Property Management	20	17	85%
TOTAL	151	133	88%

Of particular interest is MTR's progress towards achieving the targets set for the corporation as a whole (*Table 6.4*).

Table 6.4 *Progress against 2002 Targets – Corporate Environmental*

Target	Progress
To achieve certification to ISO14001 (the international environmental management system standard) in 2003.	✓ Achieved – formal certification ceremony held in March 2003.
To continue to move from a large number of process-oriented targets to a smaller number of quantitative process and performance targets with a view to developing Key Performance Indicators (KPIs) in 2003.	✓ Achieved as part of ISO14001 implementation. Key Performance Indicators to be developed in 2003.
To extend the roll out of the Green Procurement policy.	✓ Achieved. Environmental questionnaires included in Pre-Qualification requirements.
To develop a better understanding of paper consumption with a view to setting a quantitative reduction target in 2003.	✓ Achieved. 2003 target of 5% paper reduction for selected Departments.

6.5 ENVIRONMENT TARGETS FOR 2003

Environmental targets for year 2003 for all Divisions are presented in *Section 8*. MTR's targets for the corporation as a whole are presented in *Table 6.5*.

Table 6.5 *2003 Targets – Corporate Environmental*

Target
Maintain ISO14001 certification and consider expansion of certificate scope within MTR
Develop Key Performance Indicators to track eco-efficiency improvements
Calculate MTR's Green House Gas (GHG) emissions using international guidelines

Target

Examine opportunities for sourcing electricity from renewable sources prior to expiry of Scheme of Control in 2008

6.6***GREEN HOUSE GAS EMISSIONS***

Even on one of the world's most efficient railways, transporting 2.3 million people every day necessitates the consumption of large quantities of electricity. As one of MTR's most significant direct costs, electricity consumption is constantly monitored and opportunities for further efficiencies actively sought and assessed.

Scheme of Control

In Hong Kong, it is currently only possible to purchase electricity generated from oil, coal, gas or nuclear sources. This is due to the Scheme of Control, an agreement between the Hong Kong SAR Government, CLP Power and Hongkong Electric which regulates the generation and supply of electricity. Neither CLP Power nor Hongkong Electric generates electricity from renewable sources ⁽¹⁾ and the Scheme of Control does not allow other electricity providers to enter the Hong Kong market. The situation may change on expiry of the Scheme of Control in 2008 or after the Interim Review of the Scheme of Control in 2003. As such, MTR's efforts to reduce Greenhouse Gas Emissions are currently restricted to the efficient use of electricity in its operations.

⁽¹⁾ CLP Power has the right to use capacity at the Guangzhou Pumped Storage Power Station.

Case Study: Static Inverters

Since MTRC commenced operations in 1979, motor alternator (MA) sets have been used to convert 1500V (dc) supply into 440V (ac) supply for train auxiliary loads. MA sets use the conventional method of rotating machines for energy conversion and electrical isolation and as a consequence, are large, heavy and noisy and have a low efficiency. Over the next 3 years, MTR will replace all 469 existing motor alternator (MA) sets with static inverters (SIV). The project is expected to have an internal rate of return of 13% due to energy and maintenance cost savings. By March 2003, twenty-two MA sets had already been replaced. SIVs employ semi-conductor power devices and microprocessor controls to perform rapid switching to convert electrical energy. SIVs are lighter, wear free and virtually silent in operation.

Energy saving

SIVs have a high efficiency (85-92%) over the operational range compared to the low efficiency (70-82%) of MA sets. Energy savings of HK\$7.6 million per annum are expected due to higher efficiencies and the 50% weight reduction.

Reliability/Maintenance

SIVs are much more reliable due to mature and proven design and are virtually maintenance free due to the use of power semi-conductor devices. Savings of HK\$1.0 million per annum are expected due to maintenance reductions.

Spare power capacity

The power capacity of the existing MA sets is not sufficient to cope with future demands. The SIVs will have the potential to deliver a 54% increase in power capacity.

Noise Reduction

The noise level of SIVs measured at depots is 20dBA less than that of MA sets.

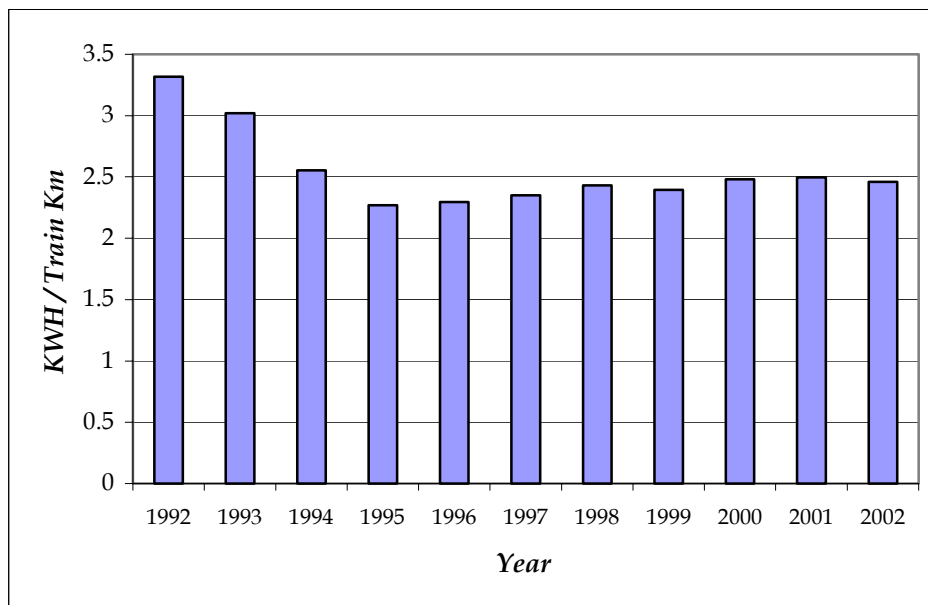
Electricity Consumption 2002

Over 2002, the total energy consumption for the operating railway increased by 2.4% to 726,390MWh. This increase was due to the opening of the 5.5km Tseung Kwan O extension in August 2002.

Figure 6.1 illustrates MTR's traction energy per train-kilometre ⁽¹⁾ over the last ten years. Traction energy decreased in the early 1990s when regenerative braking, which converts forward motion into energy to be used later for acceleration, was introduced but has increased slightly year on year since 1995 as increased train frequency has required more demanding regulation between stations.

(1) MTR uses 'traction energy per train-kilometre' rather than 'traction energy per passenger' as train frequency is specified in MTR's Operating Agreement with the Hong Kong SAR Government.

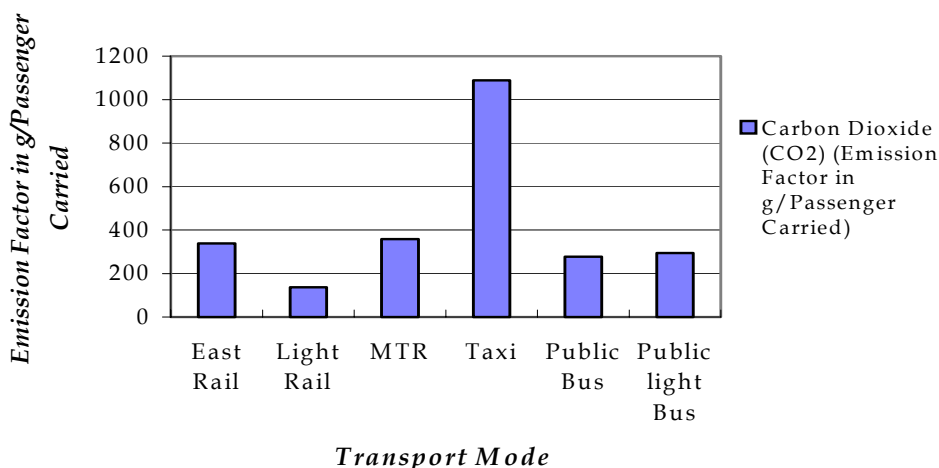
Figure 6.1 Traction Energy (1992-2002)*



* Data prior to 2001 has been previously published. Due to changes in data management, data prior to 2001 has not been verified.

Figure 6.2 illustrates how carbon dioxide emissions per passenger carried vary across the different types of transport available in Hong Kong (W. Barron & Steinbrecker 1997).

Figure 6.2 Carbon Dioxide (CO₂) Emissions from Alternative Transport Modes*



* With the exception of taxi data, information extracted from W. Barron & Steinbrecker 1997

6.7 WASTE

MTR seeks ways to avoid, reduce, reuse and recycle waste materials but if this is not possible, waste is disposed of in a responsible and legally compliant manner. In order to improve the way we manage our waste, especially in the light of the forthcoming landfill tax, we have developed a number of challenging targets for Project and Operations Divisions (*Section 8*).

6.8 NOISE

6.8.1 *Operating Railway*

MTR has developed programmes to reduce noise from its operations particularly from above ground train movements. Trains on the urban and airport lines are fitted with wheel dampers along with wheel and rail lubricators. Comprehensive maintenance programmes help reduce noise and extend the working lives of rails and wheels. Extensive noise monitoring programmes are in place across the MTR rail network, and all results were within legal limits for 2002. This compares with 97% of results being compliant in 2001. MTR uses its monitoring programmes to demonstrate compliance and to guide further performance improvements. 49 complaints were received regarding train noise in 2002. These were all investigated and corrective action taken where required, such as retrofitting silencers. No abatement notices or prosecutions were brought against MTR as a result of any complaints or EPD activity.

6.8.2 *Railway Construction*

MTR has developed a comprehensive range of tried and tested measures that are incorporated into its construction contracts to ensure that people living and working close to construction works do not experience unacceptable levels of noise. MTR monitors the noise from construction works undertaken by contractors in much the same way as it monitors its own operating railway. During 2002, all monitoring results were within legal limits, in comparison with 99.7% of samples being within limits in 2001.

6.8.3 *Property*

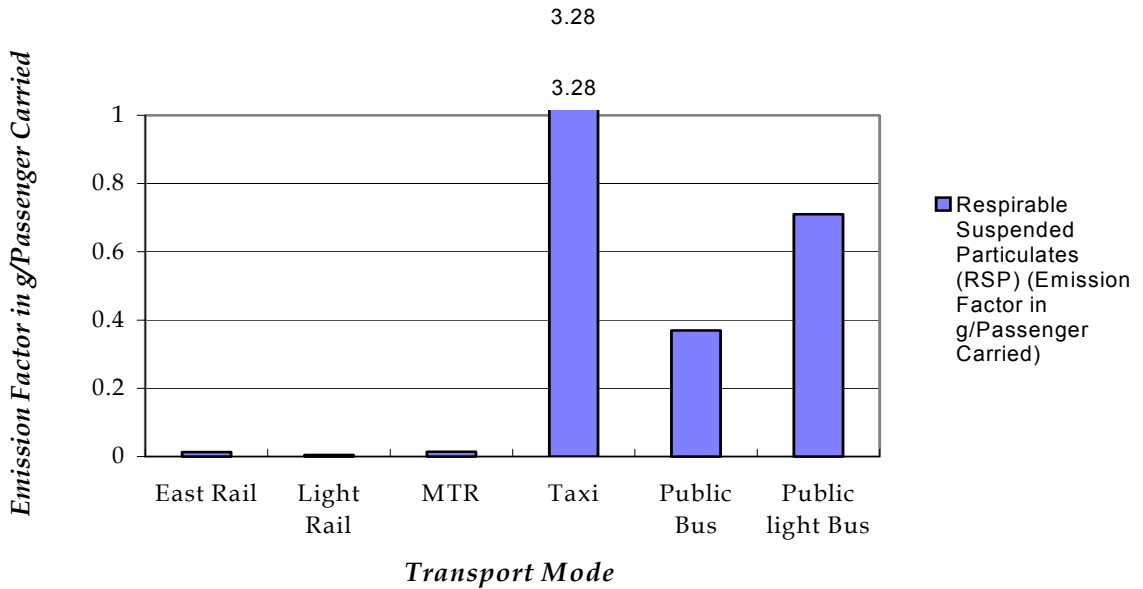
Noise can also create problems at MTR's managed property developments. To manage this issue, MTR implements a noise control policy and undertakes acoustic improvements to reduce noise from its water pump rooms. As a result, no abatement notices or prosecutions were experienced in 2002, and all monitoring data were within legal standards.

6.9 LOCAL AIR QUALITY

Electrically powered rail transport is the least polluting form of mass transport mainly because air borne emissions arising from a small number of power stations can be more easily controlled than those from mobile internal

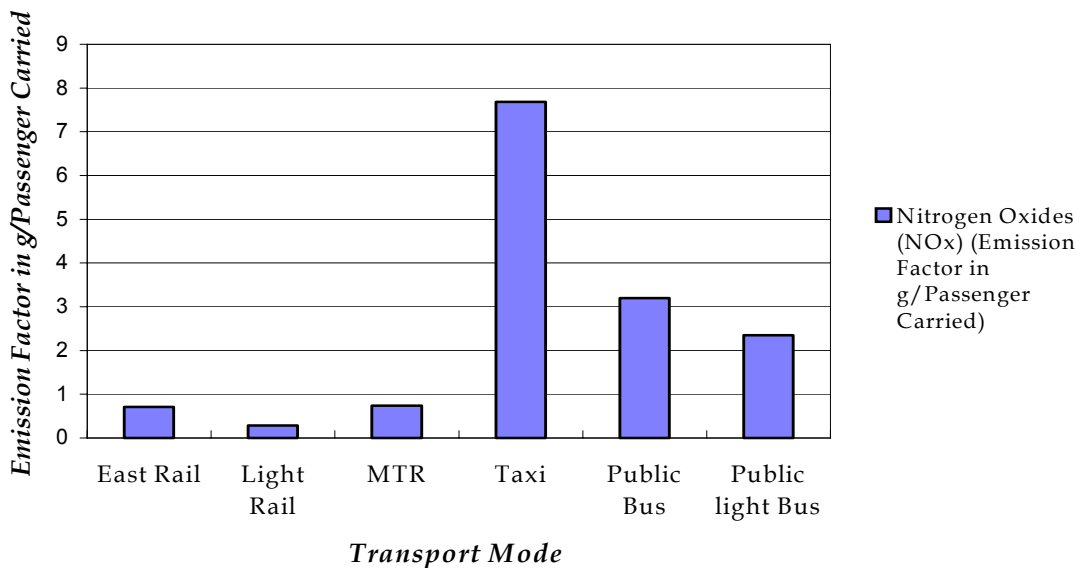
combustion engines. In addition, power plant emissions are generally more widely dispersed and occur further away from densely populated areas. Figures 6.3 and 6.4 provide a graphical comparison of the emissions from the different types of transport available in Hong Kong (W. Barron & Steinbrecker 1997).

Figure 6.3 *Respirable Suspended Particulates (RSP)**



* With the exception of taxi data, information extracted from W. Barron & Steinbrecker 1997

Figure 6.4 *Nitrogen Oxides (NOx)**



* With the exception of taxi data, information extracted from W. Barron & Steinbrecker 1997

6.10 *WATER CONSUMPTION*

The main source of water consumption is keeping MTR's tunnels, tracks, facilities and equipment clean. MTR has introduced measures to reduce water usage with the result that water consumption for Urban Line and Lantau Airport Railway stations in 2002 was 187,031m³, a decrease of over 11% compared to 2001 (211,073 m³).

6.11 *INDOOR AIR QUALITY*

MTR has a comprehensive monitoring programme to assess whether air within the operating railway, its own offices, Public Transport Interchanges and managed properties meets its own design standards. During 2002, the programme demonstrated that indoor air quality fully met MTR's design standards.

6.12 *DUST*

Fugitive dust emissions at our construction sites are regularly monitored, and all results were compliant with legal standards during 2002, as were those in 2001. This compares with 99.6% of results being compliant in 2000.

6.13 *OZONE DEPLETING SUBSTANCES*

MTR has an ongoing programme to phase out its use of Ozone Depleting Substances (ODS). 100% of chillers in MTR-managed properties and an estimated 50% of operational railway chillers now contain zero refrigerants containing Chlorofluorocarbons (CFCs). The remaining chillers will be modified by 2015, with all new chillers complying with ODS legislation.

6.14 *DISCHARGES TO WATER*

Wastewater is generated from both construction and operational activities and MTR has introduced practical measures to reduce and improve discharge quantity and quality. These and other initiatives enabled Operations Division to be compliant with the Water Pollution Control Ordinance during 2002.

6.14.1 *Environment targets 2002 - Summary of Incomplete Targets*

During 2002, MTR fully achieved 88% of the 151 environmental targets presented in the last year's Corporate Sustainability Report. Details of the 26 targets not achieved are presented in *Table 6.6*.

Table 6.6 Environment Targets 2002 – Summary of Incomplete Targets

Target	Status	Explanation
FINANCE		
Logistic & Material Management - Electronic Requisition System - Design an electronic requisition system for new stock items to replace the existing paper requisition.	50%	Feasibility study identified technical constraints to be considered in design.
PROPERTY DEVELOPMENT		
External Education & Training - Establish formal records of environmental training.	0%	Records to be established in 2003.
External Education & Training - In line with the Dream City Concept developed by the Corporation, develop program design packages for tendering.	75%	Development awaiting Government approval.
Property Construction - Encourage contractors to: use off site pre-fabricated modular construction.	75%	Off-site methods to be adopted for new sites.
Regulatory Compliance - Design the Kowloon Station Development Packages 5, 6 & 7 to achieve at least Level 2 Indoor Air Quality.	75%	Design in progress.
Audits and Reporting - Complete the HKBEAM assessments on 3 new property developments (ie HK Station Mega Tower, Olympic Station Package 3 Residential Development, Kowloon Station Package 3 Residential Development) and, as applicable, commence/undertake assessments for new property developments.	75%	HKBEAM assessments are ongoing.
Environmental Management System (EMS) - Comply/implement the requirements of the Corporate EMS as applicable.	75%	EMS has been implemented as applicable.
Property Construction - Encourage contractors to: use dry wall construction.	75%	Dry wall techniques to be used at new sites.
Property Design - Adopt Electronic Ballasts in the new office building of Kowloon Station Development Package 5, 6 & 7.	50%	Electronic Ballasts have been adopted in Package 7.
Property Design - Adopt Variable Air Volume (VAV) Air Conditioning in the new office building of Kowloon Station Development Package 5, 6 & 7.	50%	VAV Air Conditioning has been adopted in Package 7
Property Design - Adopt Variable Speed Pumping System (VSPS) in the design of the new shopping centre in Kowloon Station Development for potable water supply system, and in the new office building in Kowloon Station Development Package 5, 6 & 7 for the air-conditioning system.	50%	VSPS has been adopted in retail center in Package 5 and in the air conditioning system of the office tower in Package 7.
Property Construction - As appropriate, encourage the adoption of metal formwork instead of timber formwork for building construction in new development sites.	75%	Metal formwork will be adopted on new sites.
Property Construction - Encourage the use of tropical hardwood from managed sources only.	75%	Hardwood from managed sources is being used for new LAR & TKO developments.

Target	Status	Explanation
HUMAN RESOURCES		
Develop and implement Environmental Management System and support development of corporate EMS.	50%	Human Resources is integrated into the ISO14001-certified EMS to the extent currently necessary.
Disseminate information on new environmental protection issues.	75%	Greater information sharing was anticipated.
PROPERTY MANAGEMENT		
Internally benchmark waste generation of MTR managed properties and develop quantitative targets and action plan for 2003.	25%	Data collection in progress. Quantitative targets will be prepared in Q1 2003.
Work with Legal and Procurement on the implementation of the 'Green Procurement' policy.	0%	Postponed to 2003 / 2004.
Internally benchmark energy and water consumption of MTR managed properties and develop quantitative targets and action plan for 2003.	25%	Data collection in progress. Quantitative targets will be prepared in Q1 2003.

7.1 INTRODUCTION

Whilst corporate reporting on financial performance is well established through our Annual and Interim Accounts, reporting on the interactions between MTR and the economy is at an early stage of development. As such, this chapter outlines MTR's financial performance and economic contribution and presents the actions for selected priority financial risks (*Table 7.1*).

Table 7.1 *Priority Financial Risks and Actions*

Priority Financial Risks	Ownership	Action
Maintaining Business in Deflationary Economy	Operations Property Project	Reduction of Direct Costs
	Human Resources	Development of Staff Skills
Growth of Shareholder Value in Developed Market	MTR Executive	Diversification within Hong Kong into other Businesses, Acquisitions and Mergers
	Operations	Provision of Consultancy Services Internationally
	Property	Improved Property and Shopping Center Management
	Project	Alternative Sources of Project Funding
Clarity of Roles between Government, Regulator and Central Provider.	MTR Executive	Review of Operating Agreement between MTR and Government
		Maintenance of Fare Levels
Ensure Continued Impartiality of the Board	Board	Corporate Governance

7.2 FINANCIAL PERFORMANCE

MTR's Annual Report 2002 describes how the Corporation enhances long-term shareholder value and details our financial performance during 2002. Of particular interest may be the Financial Review, Profit and Loss Account, Balance Sheet and Consolidated Cash Flow Statement. A summary of MTR's financial performance is presented in *Table 7.2*.

Table 7.2 Summary of MTR's Financial Performance (2001-2002)

	2001	2002
Profit & loss account (HK\$ million)		
Turnover	7,592	7,686
Operating profit before depreciation	7,301	7,769
Depreciation	(2,178)	(2,470)
Interest and Finance Charges	(874)	(1,125)
Profit	4,278	4,212
Dividend	2,118	2,161
Balance sheet (HK\$ million)		
Total assets	98,126	101,120
Loans, obligations under financial leases & bank overdrafts	31,385	33,508
Deferred income	8,411	6,226
Shareholders' funds	53,893	56,827
Financial ratios		
Operating profit from railway & related operations before depreciation as a % of turnover	53.4%	52.2%
Non-fare revenue as a % of turnover	24.6%	25.6%
Debt/equity ratio	58.2%	59.0%
Interest cover (in times)	3.8x	4.5x

7.3 CORPORATE GOVERNANCE

The Company is committed to ensuring high standards of corporate governance in the interests of shareholders and devotes considerable effort to identifying and formalising best practices.

The overall management of the Company's business is vested in the Board of Directors. Pursuant to the Company's Articles of Association and the Protocol adopted by the Board of Directors, the Board of Directors has delegated the day-to-day management of the Company's business to the Executive Directorate, and focuses its attention on matters affecting the Company's finances and shareholders. These include financial statements, dividend policy, significant changes in accounting policy, the annual operating budget, certain material contracts, major financings arrangements and major investments, risk management strategy, treasury policies and fare structures.

The Company takes care to ensure the Board is in a position to exercise its powers in an informed manner. The Board of Directors meets regularly and members of the Board receive information between meetings about developments in the Company's business. All members of the Board of Directors have full and timely access to the relevant information and may take independent professional advice if necessary. The Board of Directors held 14 meetings in 2002 and the average attendance rate was 82%.

7.3.1 *Audit, Remuneration and Nominations Committees*

As an integral part of good corporate governance, the Audit Committee, the Remuneration Committee and the Nominations Committee have been established. These committees comprise non-executive directors who have been invited to serve as members. Their independent and objective views on

various aspects of how MTR is governed provide proper control and ensure that we continue to achieve the high standards expected of a major listed company.

7.3.2 *Internal Audit*

The Internal Audit Department plays a major role in support of and in collaboration with the Company's management, in monitoring the internal governance of the Company. The department has unrestricted access to information that allows it to review all aspects of the Company's network of risk management, control and governance processes. On a regular basis, it conducts audits of the practices, procedures, expenditure and internal controls of all business and support units and subsidiaries. As the need arises, it also conducts ad-hoc reviews or investigations. The Internal Auditor reports directly to the Chairman of the Board and has direct access to the Audit Committee.

7.3.3 *Code of Best Practice*

The Company has complied throughout the year with the Code of Best Practice as set out in Appendix 14 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, except that non-executive Directors of the Company are not appointed for a specific term but are subject to retirement by rotation and re-election at the Company's annual general meetings in accordance with Articles 87 and 88 of the Company's Articles of Association (save for those appointed pursuant to Section 8 of the Mass Transit Railway Ordinance).

7.3.4 *U.S. Sarbanes-Oxley Act 2002*

This legislation which seeks to enhance the transparency and accountability of companies in the areas of corporate governance and financial reporting, was signed into law by the U.S. President on 30 July 2002. As the Company is an SEC reporting company, it is generally bound by this new legislation. The Company is in the process of reviewing the existing internal systems and practices and further taking other steps to comply with the relevant provisions.

7.4 *FARES*

MTR's fare setting policy is to review and adjust its fares annually, roughly in line with inflation. As a result, revenues generated should be sufficient to cover operating costs, debt servicing, and capital expenditure, in addition to providing an appropriate return to its shareholders.

One strategy to increase ridership in 2002 included improvement of linkages with other modes of transport. We extended our trial intermodal fare discount scheme for passengers using feeder buses and installed "Fare Saver" machines in five shopping arcades near MTR stations to allow passengers

with longer walks to stations to obtain fare discounts. We also increased patronage through other well-received discount initiatives such as the “Ride 10 get One Free” scheme, group tickets and concession fares on the Airport Express Line (AEL).

MTR has full autonomy in setting its own fares without any Government or legislative approval. Historically, MTR has voluntarily consulted with the public, the Government and the legislature before setting its fares. This consultation process was formally adopted in the Operating Agreement.

After carefully reviewing economic conditions in Hong Kong and in the overall interest of MTR, the Boards of Directors decided not to implement a fare increase of 2.3% originally scheduled for April 2002.

7.5 *INTERACTION WITH HONG KONG, ASIAN AND GLOBAL ECONOMIES*

MTR directly employs about 6,800 people and indirectly supports the employment of many more in Hong Kong, the region and globally through the hiring of contractors for projects (ranging from rail infrastructure construction to station cleaning), the purchase of supplies and energy and our involvement in joint property development ventures. Beyond this, MTR’s services, namely the efficient movement of people and the provision of residential, retail and office space, play an important role in the Hong Kong economy. In addition, the Octopus Smartcard pioneered and majority owned by MTR, provides electronic payment of fares for transport and other services in Hong Kong. The service allows more efficient transactions and reduces the need for cash handling.

7.6 *ROLE IN PROMOTING HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE*

MTR’s partial privatisation in October 2000 and subsequent inclusion in the Hang Seng Index (which represents Hong Kong’s 33 blue chip companies), MSCI and FTSE Index series has brought additional quality and diversity to Hong Kong’s equity capital market. As of 31 December 2002, MTR’s market capitalisation was HK\$42,560 million and MTR was ranked Number 12 in the Hong Kong Stock Exchange. Our ongoing borrowing needs for our capital expenditure programme were met by using a number of cost effective transactions involving different financial instruments and markets. However, we managed our debt portfolio prudently in accordance with our Preferred Financing Model which diversifies risk through different specifications. MTR continues to be active in raising corporate governance and transparency standards in Hong Kong and more widely in Asia through our excellent relations with investors.

We were pleased that our considerable efforts in the field of corporate social responsibility and sustainability were recognized by both the Dow Jones Sustainability world Index (DJSI World) and the FTSE4Good Global Index in

2002, becoming one of the few companies from Hong Kong to meet the globally recognized standards required for inclusion in these indices.

MTR won a “Gold Award” for our 2001 Annual Report in the *Overall Annual Report* category at the International ARC Awards in New York organized by the International Academy of Communications Arts and Sciences. In 2002, The Hong Kong Management Association presented MTR with the “Best Annual Report Gold Award” for the fourth consecutive time since 1998.

7.7 MEASURES OF MTR’S ECONOMIC CONTRIBUTION

The Global Reporting Initiative, which provides international best practice on corporate sustainability reporting, has proposed a set of core economic indicators. These together with additional MTR specific data provide an indication of MTR’s economic contribution (*Table 7.3*).

Table 7.3 Economic Contribution (2000-2002)

	2000	2001	2002
Financial Performance			
Turnover (HK\$ million)	7,577	7,592	7,686
Profit for the year attributable to shareholders (HK\$ million)	4,069	4,284	4,212
Return on Shareholder’s Fund	8.5%	8.2%	7.6%
Interaction with Hong Kong, Asian & Global Economics			
Number of Staff	7,332	7,231	6,891
Staff costs & related expenses (HK\$ million)	1,688	1,641	1,579
Energy & Utilities (HK\$ million)	500	501	502
Repairs & Maintenance (HK\$ million)	456	437	435
Stores & Spares Consumed (HK\$ million)	127	119	121
Railway Capital Expenditure (HK\$ million)	6,607	6,657	5,196
Total number of passengers (MTR & AEL)	778 million	767 million	786 million
Share of franchised public transport in HK	24.1%	23.5%	23.5%
Interest payments on borrowings (HK\$ million)	1,209	896	1,153
Dividend Payment (HK\$ million)	500	2,118	2,161
Taxes paid	Nil	Nil	1
Subsidies received (HK\$ million)	Nil	Nil	219*

* Pursuant to the financing arrangement under the Penny’s Bay Rail Link Project Agreement entered into between the MTR Group and the Government, interim cash dividend declared and payable to the Government during the year had been waived.

Through a process of internal discussion and review, MTR has developed a challenging set of sustainability targets for year 2003 comprising people and environmental targets at the corporate level and environmental targets for all Divisions.

2003 People Targets - Corporate

Target

Achieve the targets in MTR's 2003 Customer Service Pledges.

Maintain open staff communication and consultation.

Conduct a pilot training program for 1,200 managerial and supervisory staff as one of the follow-up actions of the 2001 Staff Attitude Survey.

Maintain the same level of community involvement.

Management training and development department to provide 346 training classes and 8073 trainee mandays for MTR staff.

Organise activities or staff events to enhance staff motivation and boost morale.

Develop a set of clear and practical guidelines that stipulates the standards of behaviour for employees to foster an ethical culture in the Corporation.

Reduce lost time injury frequency rate per 200,00 man-hours worked to 0.72 or below

Reduce reportable accident rate per 100,00 man-hours worked to 0.45 or below.

Reduce reportable accidents per 100,000 man-hours worked to 1.6 or below.

Promote HR knowledge sharing and enhance staff's knowledge through the development and provision of a comprehensive Human Resource Knowledge Management System.

To achieve the targeted training ratios for Operations Division Staff (3-4%) and staff of other divisions (1-2%)

2003 Environment Targets - Corporate

Target

Maintain ISO14001 certification and consider expansion of certificate scope within MTR

Develop Key Performance Indicators to track eco-efficiency improvements

Calculate MTR's Green House Gas (GHG) emissions using international guidelines

Examine opportunities for sourcing electricity from renewable sources prior to expiry of Scheme of Control in 2008

2003 Environment Targets - Operations Division (ISO 14001 Targets)

Objectives	Targets
Reduce noise generated from the Operations Division	<ul style="list-style-type: none"> - Zero complaints leading to abatement notice or prosecution (2001 Baseline : Zero complaints leading to abatement notice or prosecution, 100% compliance with NCO) - 100% of self monitoring noise samples within NCO criteria (2001 Baseline : 97%) - Set up regular feeder bus noise checking by 2003
Reduce air pollution generated from the Operations Division	<ul style="list-style-type: none"> - Zero complaints on exhausts from diesel locos (2001 Baseline: 0) - Zero complaints about external air quality with none leading to abatement notice/prosecution (2001 Baseline: 4 complaints and none leading to abatement notice/prosecution) - Replace all CFC refrigerant (R12) chillers with non CFC refrigerant chillers by 2015 - Replace all HCFC refrigerant (R22) Chillers with non HCFC refrigerant Chillers by 2015 - Meet existing MTR design criteria for Indoor Air Quality for operating railway - Full compliance on AEL feeder buses exhaust emission - Establish baseline of dust complaints on Property Management Department (Operations) works due to demolition work by end of 2002 and propose target for 2003
Reduce water pollution generated from the Operations Division	<ul style="list-style-type: none"> - 100% compliance with WPCO (2001 Baseline: 100%) - 95% of first round self monitoring comply with the discharge limits stipulated in the effluent discharge licenses(2001 Baseline: 92%)
Reduce land contamination generated from the Operations Division	<ul style="list-style-type: none"> - Implement land contamination reduction plan by 2003
Reduce Waste Disposal from Operations Division	<ul style="list-style-type: none"> - Increase waste paper recycling from stations and headquarter by 20% (Totally 202169Kg) - Assess Operation Division waste stream and propose reduction target for 2004 - Implement waste segregation by mid of 2003 - Maintain or better than last year waste metal recycling (2001 Baseline: 720 ton) - Recycling 23% of the total waste oil produced(2001 Baseline: 20%) - Implement un-repairable rechargeable battery recycling by 2003
Reduce Resource Consumption	<ul style="list-style-type: none"> - Meeting Energy Consumption Budget 758469MWh(Baseline: 709170MWh for 2001) - Hazardous Chemical Consumption Reduction - Overall 5% Water Consumption Reduction by 2002 at top 2 departments in Operations Division - Overall 5% Paper Consumption Reduction on the top 4 Departments on largest paper consumption in Operations Division and the Procedure and Manual Publication Section - Implement Diesel Oil Consumption Reduction by 2003

2003 Environment Targets – Projects Division (ISO 14001 Targets)

Objectives	Targets
Noise, Air & Water	
Improve Project Division's contractor compliance with noise, air and water environmental regulations.	<ul style="list-style-type: none"> - TST contractors to achieve 100% compliance with noise, air and water regulations (Baseline: Non-compliances for similar TKE contract – 6 Noise, 1 Air, 2 Water) - PBL contractors to achieve 100% compliance with noise, air and water regulations (Baseline: Non-compliances for similar TKE contract – 3 Noise, 4 Air, 5 Water)
Waste	
Minimize waste generated and waste sent to landfill during construction projects	<ul style="list-style-type: none"> - Concrete wastage to be below 7% for TST and 10% for PBL (Baseline: MTR contractor currently achieves <7%) - Rebar wastage to be below 7% for TST and 10% for PBL (Baseline: MTR contractor currently achieves <7%) - Less than 70% of TST excavated materials to be sent to landfill (Baseline not known) - Less than 40% of TST Construction and Demolition Materials to be sent to landfill (Baseline not known) - PBL and TST to implement system to determine waste generation and disposal by type and volume with view to setting additional reduction targets for 2003.

2003 Environment Targets relating to New Projects – Projects Division

Target
Introduce sustainability measures for Tung Chung - Ngong Ping Cable Car and Theme Village Project.
Undertake environmental impact assessments for South Island Link and West Island Link as needed.
Fully comply with environmental permits for Tung Chung - Ngong Ping Cable Car and Theme Village Project.
Further develop target cost contracts as a means for driving environmental performance improvements.

2003 Environment Targets – Property Management

Objectives	Targets
Hong Kong Properties	
Resources Use	<ul style="list-style-type: none"> - Internally benchmark energy and water consumption of MTR managed properties and develop quantitative targets and action plan.
Waste Minimisation	<ul style="list-style-type: none"> - Full implementation of noise pollution control policy and management system. - Use zero ozone depletion potential refrigerants for chiller plant repair works. - Re-use disposed construction materials (e.g. Hoarding board, shopfront glass panel, glass door etc.) for renovation work and spare parts for future maintenance use. - Continue the replacement of fresh water supply G.I. downfeed pipes and soil and waste C.I. drainage pipe with

Objectives	Targets
	<ul style="list-style-type: none"> - more durable material e.g. Copper pipes and UPVC pipes. - Internally benchmark waste generation of MTR managed properties and develop quantitative targets and action plan.
Education & Dissemination	<ul style="list-style-type: none"> - Waste recovery (plastic bottles, aluminium cans and paper) in residential estates. - Continuously promote environmental best practice by estate managers.
Comply with Hong Kong's Legislative Requirements and International Best Practice	<ul style="list-style-type: none"> - 100% compliance with air pollution, noise, water pollution control ordinances for operation, maintenance and renovation works. - Monitoring of tenant fit-out works and operation for compliance with statutory requirements. - Conduct positive measures to prevent existence of legionnaires disease at MTR managed properties. - Monitor indoor air quality in offices to maintain at least Level 2 Indoor Air Quality Objective.
Kowloon Properties	
Comply with Hong Kong's Legislative Requirements and International Best Practice	<ul style="list-style-type: none"> - 100% compliance with air, noise and water pollution control ordinances for operation, maintenance and renovation works. - Full implementation of noise pollution control policy and management system. - Carry out environmental assessment and justification before procurement of materials/equipment and implementation of works. - Monitor tenant fit-out works and operation for compliance with statutory requirements. - Regular cleaning of fresh water tank i.e. 4 times per year. - Conduct positive measures to prevent existence of legionnaires disease at Telford Plaza and Luk Yeung Galleria. - Construction of noise barrier at Telford Gardens refuse collection point to reduce noise produced during refuse collection.
Resource Use	<ul style="list-style-type: none"> - Replacement of 2 nos. R22 chiller with R134a type chillers at Telford Gardens.
Waste Minimisation	<ul style="list-style-type: none"> - Use of zero ozone depletion potential refrigerant for chiller plant repair works. - Re-use of disposed construction materials (e.g. Hoarding board, shopfront glass panel, glass door, etc.) for renovation work and spare parts for future maintenance use. - Continue replacement of C.I. S&W drainage pipe with more durable material e.g. UPVC pipes at Luk Yeung Sun Chuen and Telford Gardens.
Education & Dissemination	<ul style="list-style-type: none"> - Waste recovery (plastic bottles, aluminium cans and paper) in residential estates.
LAR Properties	
Energy	<ul style="list-style-type: none"> - Replacement of Tungsten filament light bulbs by compact fluorescent tubes for energy saving and reduction in heat generation in all newly handed over LAR properties including the Coastal Skyline, Caribbean Coast and Sorrento. - Reduction of unnecessary lighting for energy saving in all newly handed over LAR properties. - Reduction of energy consumption by setting higher room temperatures for air-conditioned spaces in Club Houses. - Reduction of energy consumption by setting a higher chilled

Objectives	Targets
	<ul style="list-style-type: none"> - water supply temperature during off-peak seasons. - Investigation of the use of electronic ballast for fluorescent lights.
Noise Monitoring	<ul style="list-style-type: none"> - Full implementation of noise pollution control policy and management system.
Ozone Depleting Substances	<ul style="list-style-type: none"> - Use of zero ozone depletion potential refrigerants for chillier plant repair works.
Waste Recycling	<ul style="list-style-type: none"> - Re-use of disposed construction materials (e.g. Hoarding board, shopfront glass panel, glass door etc.) for renovation works and spare parts for future maintenance use.
Waste Management	<ul style="list-style-type: none"> - Waste recovery (plastic bottles, aluminium cans and paper) in residential estates.
Regulatory Compliance	<ul style="list-style-type: none"> - Continue to encourage contractors to set up procedures to manage environmental complaints from both internal and external parties.
Environmental Campaigns and related Activities	<ul style="list-style-type: none"> - Continuously promote environmental best practice by estate managers.
Regulatory Compliance	<ul style="list-style-type: none"> - 100% compliance with air, noise and water pollution control ordinances for operation, maintenance and renovation works. - Monitoring of tenant fit-out works and operation for compliance with statutory requirements.

2003 Environment Targets – Property Development

Objectives	Targets
Internal Education & Training	<ul style="list-style-type: none"> - Encourage staff to attend training programmes on environmental matters and concerns. - Keep staff abreast of latest technology which are environmental friendly.
External Education & Training	<ul style="list-style-type: none"> - Develop program design packages for tendering, in line with the Dream City Concept developed by MTR. - As appropriate, conduct further study trips to acquire information on the latest building design and construction technology.
Environment Impact Assessment	<ul style="list-style-type: none"> - As applicable, undertake EIAs for new development projects and fully comply with the requirements of the issued Environmental Permits.
Regulatory Compliance	<ul style="list-style-type: none"> - Comply with air, noise and water pollution control ordinances for new property developments.
Property Design	<ul style="list-style-type: none"> - Encourage developers to adopt Environment Management Systems. Comply/ implement the requirements of the Corporate EMS as applicable to the Property. - Encourage developers to incorporate Green and Innovative Buildings Practice Notes into the design of new developments. - Adopt energy saving fittings and electronic ballasts in new buildings. - Adopt a variable speed pumping system for potable water supply system for new shopping centres.
Property Construction	<ul style="list-style-type: none"> - Encourage contractors to use off site pre-fabricated modular construction. - Encourage contractors to use dry wall construction. - As appropriate, encourage adoption of metal formwork instead of timber formwork for building construction in new development sites. - Encourage the use of tropical hardwood from managed sources only.

2003 Environment Targets – Finance Division

Issue	Target
Logistic & Material Management	<ul style="list-style-type: none"> - Ensure 100% compliance with the EPD regulations on Chemical Waste disposal and handling. - Ensure 100% use of pollution-free mechanical handling equipment. - Ensure 100% use of lead free gasoline road vehicles. - Ensure 100% fitting of particulate removal device to pre-euro diesel road vehicles. - Electronic Requisition System - Design an electronic requisition system for new stock items to replace the existing paper requisition.
Green Accounting	<ul style="list-style-type: none"> - Develop a spreadsheet approach to estimate environmental spending.
Company Reporting	<ul style="list-style-type: none"> - Within the boundaries of the relevant legislation governing Company Reporting, reduce the printing and distribution of Company Reports and circulars.
General, Office & System Management	<ul style="list-style-type: none"> - Continue to purchase office equipment and stock items using green procurement guidelines - Continue to exercise the recycling program of PC equipment and to re-use PC equipment by 50%
Environmental Awareness	<ul style="list-style-type: none"> - Continue the Finance Division environmental working group to manage and monitor the progress of environmental targets on a regular basis. A workshop is going to be conducted in Q2 by the environmental section on environmental targets and objective setting.

2003 Environment Targets – Legal and Procurement

Objectives	Targets
Resource Use	<p>Green Procurement</p> <ul style="list-style-type: none"> - Review and implement the environmental assessment criteria for the prequalification of contractors and suppliers in terms of ISO 14001 requirements. - Identify 3 or more products/technologies which can be introduced each year to the Corporation. - Introduce the new G.S. which incorporates updated provisions on environmental requirements. - Seek to identify alternative products which are more energy efficient. <p>Paper Reduction</p> <ul style="list-style-type: none"> - Introduce the catalogue system to a wider group and promote its further use. - Introduce the 'e'-Tendering system (2nd Quarter 03). - Review and minimise the number of recipients of copies of Contractors/P.O.'s documents. - Promote the use of the LAN for MTRC publications.
Waste Minimisation	<p>Disposal Procedures</p> <ul style="list-style-type: none"> - Continue to implement a policy to segregate scrap to distinguish "re-cycle", "non-re-cycle" components and maximise sales benefits. - Explore the requirement for original suppliers to 'dispose' of parts/equipment etc. at the end of its life cycle through environmentally acceptable means.

Objectives	Targets
Environmental Education and Training	<p>Internal Education & Training</p> <ul style="list-style-type: none"> - As appropriate, support other Divisions to educate personnel in the use of the catalogue system, P. Card and 'E'-tendering. <p>External Education & Training</p> <ul style="list-style-type: none"> - Assist Corporation in promoting the environmental benefits of rail.
Environmental Impact Assessment	<ul style="list-style-type: none"> - Continue to facilitate the award of EIA contracts for all Divisions.
Environmental Management Systems (EMS)	<ul style="list-style-type: none"> - Implement the Divisional Environmental Management System established in 2002 and support the Corporate EMS.
Audit and Reporting	<ul style="list-style-type: none"> - Expand third - party (supplier/contractor) audits to make suppliers aware of MTRC policy on environmental priorities.

2003 Environment Targets - Human Resources

Targets

Maintain the number of environmental messages displayed on InfoPanels.

Organise visits for external parties upon request to share MTR's experience in environmental protection with other organisations or companies.

Disseminate information on new environmental policies.

Organise and support activities, campaigns and related initiatives to promote clean and green transport mode.

Organise and support activities to promote the environmental protection awareness among internal MTR staff.

Undertake Indoor Air Quality monitoring in MTR Tower. Compare results with established trends and verify compliance with WHO standards.

Maintain / increase printer cartridge recycling rate.

Continue to reduce paper consumption in MTR Tower.

Reduce levels of electricity consumption in MTR Tower.

Maintain / reduce fuel consumption by road vehicles.

Annex A

Global Reporting Initiative Indicators

ANNEX A: GLOBAL REPORTING INITIATIVE INDICATORS

This Annex describes the extent to which the *MTR Corporate Sustainability Report 2002* reports on those indicators proposed by the *Global Reporting Initiative Guidelines* (June 2002).

The following key has been used:

- ✓ Indicator as described in *GRI Guidelines* is fully reported;
- ~ Indicator is partially reported. This is usually due to (a) the GRI indicator has multiple elements and not all elements are fully reported against or (b) one of MTR's main operating Divisions (Operations, Project or Property) fully reports against the indicator but the other Divisions do not.
- - Indicator is not included in the *MTR Corporate Sustainability Report 2002*.

The assessment indicates that the *MTR Corporate Sustainability Report 2002* partially or completely reports against 84% of the indicators proposed by the *GRI Guidelines*.

Theme	Core GRI Indicator	Section of Sustainability Report	Extent of MTR's Reporting
Economic			
Customers	<i>Monetary flow indicators:</i>		
	EC1. Net sales.	<i>Chapter 7 Economic</i>	✓
	EC2. Geographic breakdown of markets.	All core businesses are in Hong Kong	✓
Suppliers	<i>Monetary flow indicators:</i>		
	EC3. Cost of all goods, materials, and services purchased.	<i>Chapter 7 Economic</i>	✓
	EC4. Percentage of contracts that were paid in accordance with agreed terms, excluding agreed penalty arrangements.	-	-
Employees	<i>Monetary flow indicators:</i>		

Theme	Core GRI Indicator	Section of Sustainability Report	Extent of MTR's Reporting
Providers of Capital	EC5. Total payroll and benefits (including wages, pension, other benefits, and redundancy payments) broken down by country or region.	<i>Chapter 7 Economic</i>	✓
	<i>Monetary flow indicators:</i>		
Public Sector	EC6. Distributions to providers of capital broken down by interest on debt and borrowings, and dividends on all classes of shares, with any arrears of preferred dividends to be disclosed.	<i>Chapter 7 Economic</i>	✓
	EC7. Increase/decrease in retained earnings at end of period.	<i>Chapter 7 Economic</i>	✓
	<i>Monetary flow indicators:</i>		
	EC8. Total sum of taxes of all types paid broken down by country.	<i>Chapter 7 Economic</i>	✓
	EC9. Subsidies received broken down by country or region.	<i>Chapter 7 Economic</i>	✓
	EC10. Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type of group.	<i>Chapter 5 People</i>	✓
Environmental			
Materials	EN1. Total materials use other than water, by type.	<i>Chapter 6 Environment</i>	~
	EN2. Percentage of materials used that are wastes (processed or unprocessed) from sources external to the reporting organisation.	-	-
Energy	EN3. Direct energy use segmented by primary source.	<i>Chapter 6 Environment</i>	~
	EN4. Indirect energy use.	-	-
Water	EN5. Total water use.	<i>Chapter 6 Environment</i>	~
Biodiversity	EN6. Location and size of land owned, leased, or managed in biodiversity-rich habitats.	No such land is owned, leased or managed	✓
	EN7. Description of the major impacts on biodiversity associated with activities and/or products and services in terrestrial, fresh-water, and marine environments.	No major impacts on biodiversity. Potential impacts due to construction activities are controlled through the Environmental Impact Assessment Process.	✓
Emissions, Effluents, and Waste	EN8. Greenhouse gas emissions.	<i>Chapter 6 Environment</i>	~
	EN9. Use and emissions of ozone-depleting substances.	<i>Chapter 6 Environment</i>	~
	EN10. No _x , So _x , and other significant air emissions by type.	<i>Chapter 6 Environment</i>	~

Theme	Core GRI Indicator	Section of Sustainability Report	Extent of MTR's Reporting
	EN11. Total amount of waste by type and destination.	<i>Chapter 6 Environment</i>	~
	EN12. Significant discharges to water by type.	<i>Chapter 6 Environment</i>	~
	EN13. Significant spills of chemicals, oils, and fuels in terms of total number and total volume.	-	-
Products and Services	EN14. Significant environmental impacts of principal products and services.	<i>Chapter 6 Environment</i>	✓
	EN15. Percentage of the weight of products sold that is reclaimable at the end of the products' useful life and percentage that is actually reclaimed.	Not applicable to MTR activities.	✓
Compliance	EN16. Incidents of and fines for non-compliance with all applicable international declarations/conventions/treaties, and national, sub-national, regional, and local regulations.	<i>Chapter 6 Environment</i>	✓
Social			
Employment	LA1. Breakdown of workforce, where possible, by region/country, status (employee/non-employee), employment type (full time/part time), and by employment contract (indefinite or permanent/fixed term of temporary). Also identify workforce retained in conjunction with other employers (temporary agency workers or workers in co-employment relation)	<i>Chapter 5 People</i>	~
	LA2. Net Employment creation and average turnover segmented by region/country.	<i>Chapter 5 People</i>	~
Labour/ Management Relations	LA3. Percentage of employees represented by independent trade union organisations or other bona fide employee representatives broken down geographically or percentage of employees covered by collective bargaining agreements broken down by region/country.	<i>Chapter 5 People</i>	~
	LA4. Policy and procedures involving information, consultation, and negotiation with employees over changes in the reporting organisation's operations (eg. restructuring).	<i>Chapter 5 People</i>	✓
Health and Safety	LA5. Practices on recording and notification of occupational accidents and diseases, and how they relate to the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases.	<i>Chapter 5 People</i>	~
	LA6. Description of formal joint health and safety committees comprising management and worker representatives and proportion of workforce covered by such committees.	<i>Chapter 5 People</i>	~
	LA7. Standard injury, lost day, and absentee rates and number of work-related fatalities (including subcontracted workers).	<i>Chapter 5 People</i>	~

Theme	Core GRI Indicator	Section of Sustainability Report	Extent of MTR's Reporting
	LA8. Description of policies or programmes (for the workplace and beyond) on HIV/AIDS.	-	-
Training and Education	LA9. Average hours of training per year per employee by category of employee.	<i>Chapter 5 People</i>	~
Diversity and Opportunity	LA10. Description of equal opportunity policies or programmes, as well as monitoring systems to ensure compliance and results of monitoring.	<i>Chapter 5 People</i>	~
	LA11. Composition of senior management and corporate governance bodies (including the board of directors), including female/male ratio and other indicators of diversity as culturally appropriate.	<i>Chapter 5 People</i>	~
Strategy and Management	HR1. Description of policies, guidelines, corporate structure, and procedures to deal with all aspects of human rights relevant to operations, including monitoring mechanisms and results.	<i>Chapter 5 People</i>	~
	HR2. Evidence of consideration of human rights impacts as part of investment and procurement decisions, including selection of suppliers/contractors.	-	-
	HR3. Description of policies and procedures to evaluate and address human rights performance within the supply chain and contractors, including monitoring systems and results of monitoring.	-	-
Non-discrimination	HR4. Description of global policy and procedures/programmes preventing all forms of discrimination in operations, including monitoring systems and results of monitoring.	<i>Chapter 5 People</i>	~
Freedom of Association and Collective Bargaining	HR5. Description of freedom of association policy and extent to which this policy is universally applied independent of local laws, as well as description of procedures/programmes to address this issue.	<i>Chapter 5 People</i>	~
Child Labour	HR6. Description of policy excluding child labour as defined by the ILO Convention 138 and extent to which this policy is visibly stated and applied, as well as description of procedures/programmes to address this issue, including monitoring systems and results of monitoring.	Not applicable to MTR.	✓
Forced and Compulsory Labour	HR7. Description of policy to prevent forced and compulsory labour and extent to which this policy is visibly stated and applied as well as description of procedures/programmes to address this issues, including monitoring systems and results of monitoring.	Not applicable to MTR.	✓
Community	SO1. Description of policies to manage impacts on communities in areas affected by activities, as well as description of procedures/programmes to address this issue, including monitoring systems and results of monitoring.	<i>Chapter 5 People</i>	~

Theme	Core GRI Indicator	Section of Sustainability Report	Extent of MTR's Reporting
Bribery and Corruption	SO2. Description of the policy, procedures/management systems, and compliance mechanisms for organisations and employees addressing bribery and corruption.	<i>Chapter 5 People</i>	✓
Political Contributions	SO3. Description of policy, procedures/management systems, and compliance mechanisms for managing political lobbying and contributions.	In accordance with THE Code of Conduct, MTR makes no political contributions	✓
Customer Health and Safety	PR1. Description of policy for preserving customer health and safety during use of products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programmes to address this issue, including monitoring systems and results of monitoring.	<i>Chapter 5 People</i>	~
Products and Services	PR2. Description of policy, procedures/management systems, and compliance mechanisms related to product information and labelling.	Not applicable to MTR.	✓
Respect for Privacy	PR3. Description of policy, procedures/management systems, and compliance mechanisms for customer privacy.	-	-

Annex B

MTR Corporate Sustainability Policy

MTR Corporation Limited is committed to the sustainable development of Hong Kong. We will explore and ensure the responsible management of the social, economic and environmental aspects of sustainable business opportunities.

We will:

1. Comply with all relevant laws regarding sustainability issues; in the absence of legislation, we will seek out and observe appropriate best international practice.
2. Regularly review our business to identify sustainability issues, set performance goals and monitor and publish our performance, so as to improve continuously our performance.
3. Conduct appropriate assessments including Environmental Impact Assessments and broad stakeholder engagement programmes for new projects, where required by law and suggested by best practice, and implement the recommendations.
4. Train and encourage our contractors and suppliers to implement MTRC recommendations to achieve sustainability, and to adopt sustainably acceptable practices in the products and services provided.
5. Educate and train staff in sustainability matters and raise their awareness of sustainable development.
6. Increase appreciation amongst passengers, legislators, opinion makers and the general public for the sustainable benefits of railways.
7. Devise, implement and continuously monitor corporate-wide management systems for implementing the sustainability strategy.

All queries regarding the above policy should be directed to Dr. Glenn Frommer, Sustainability Development Manager.

William Chan
Human Resources Director
10/12/2002

Annex C

Verification Statement

Scope

Environmental Resources Management (ERM) was asked to verify the reliability of the information presented in the MTR Corporation Sustainability Report 2002 (hereinafter the "Report"), which covers the period January 2002 to December 2002, inclusive. The verification covers the stated environmental, health & safety, and social performance for the MTR Corporation Ltd (MTR).

Approach

ERM chose a representative sample of factual statements and numerical data points and confirmed or otherwise, the accuracy of information by reference to appropriate source material, reviewing data management systems and interviewing staff at the MTR's headquarters.

The ERM verification team was independent of the reporting team, which had assisted the MTR in developing the Report structure and producing the narrative text.

Findings

ERM considers that the Report presents a good account of the principal MTR sustainability issues, and provides sufficient information on processes for sustainability management.

Based on the representative sample, we are satisfied that the factual statements and data contained in the Report, including progress against 2002 targets, are correct and provide a fair and balanced assessment of performance.

Recommendations

We encourage the MTR to continue making progress on actions already in place, such as increasing the proportion of quantitative performance targets, whilst considering the development and reporting of key sustainability indicators for year-on-year comparison. This will allow trend analysis and provide ongoing internal and external assurance of performance.



Dr Andrew Jackson

Managing Director, ERM Hong Kong
9th April 2003

