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# SMART LINKS, LIVEABLE CITIES

**MTR** 



MTR's vision is to connect and grow communities with caring service. Through our transport operations and properties, we leverage our assets, skills, and resources to enhance the liveability of our communities by providing safe and efficient rail services as well as connectivity to buildings and spaces outside railway premises. On every weekday in 2017, we transported an average of 5.76 million passengers in Hong Kong and carried around 6.49 million passengers overseas.





# **MTR**

# Sustainability Report 2017

Our overarching Corporate Responsibility Policy (CoR Policy), updated in July 2017, guides MTR's approach to corporate responsibility outlining our principles, objectives, and behavioural expectations. The CoR Policy also presents our focus areas categorised under **Operating Responsibly** and **Contributing to Society**. To highlight our approaches and focus areas, this Sustainability Report has been inspired by, and largely echoes, the structure and content of the CoR Policy. For more on the CoR Policy, please see the **Corporate Governance** section of the Report.

MTR publishes a sustainability report annually for the purpose of disclosing environmental, social and governance information deemed material and relevant by the Corporation and its stakeholders. Where relevant information is not provided in this Report, readers will find links to other publicly accessible sources such as our **Annual Report** and our **website**. For a complete list of relevant issues and where to find our disclosure on these issues, please refer to the **content index**.







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# SMART LINKS, LIVEABLE CITIES



# CHAIRMAN'S MESSAGE

**Professor Frederick Ma Si-hang** 

It has been another exciting and delightful year at MTR. I am proud to serve as Chairman in a company which has a central role to play in the lives of many communities. As MTR builds vibrant spaces and connects people and places with an expanding railway network, the communities where we operate grow and transform. Through our operations, we aim to enhance the liveability of our cities as attractive places to live, work and thrive.

MTR is keenly aware of our wider corporate social responsibility given our wide footprint in society, connecting people to where they work, study and play. In all of our processes in the course of constructing, operating and maintaining the railway network, we take our environmental impacts into account to ensure that we build long-term low carbon and resilient mobility and green infrastructure that support sustainable development. Indeed, in an increasingly urbanised world, transport and infrastructure play a vital role in the sustainable development of our cities. According to a study published by the United Nations, Department of Economic and Social Affairs, 60% of the global population is expected to live in urban areas by 2030, with 41 mega-cities with 10 million inhabitants or more . Providing mobility for the masses while minimising carbon footprint is a real challenge.

Steadfast to the objective of helping our communities thrive, MTR's mission is to build resilient and adaptive infrastructure to serve for the long term which will enhance the liveability of the places we operate. Planning for this time horizon requires that we actively assess the physical and indirect climate risks on our operations, and continue to invest in smart technologies and innovate for emission reduction. Customer centricity is also vital and we continuously roll out new digital solutions such as mobile app functions and e-payment options. MTR is committed to making continuous investment in the railway network to better serve our customers and the generations to come.

As we expand our network in Hong Kong and overseas, we work closely with the government, local communities and our partners to provide people-oriented services and liveable spaces that will best serve the interest of society. Transparency and communication with our customers and the community are central to MTR's continued success. From the senior management team to our station assistants, we rely on each employee to communicate with customers and members in society.

As a good corporate citizen, MTR also leverages on our skills, asset and resources to support different segments in the

## Sustainability Report 2017

communities where we operate. In 2017, on top of the various community engagement programmes we have been running, we launched the inaugural STEM Challenge through which secondary school students can learn about how STEM knowledge is applied to solve societal problems, present their vision for a sustainable and inclusive community and the winning teams will have the opportunity to visit MTR's operations in Sweden. Through consistent engagement programmes and open dialogue, we listen to our stakeholders from different backgrounds to improve our performance, grow and support our communities.

As MTR connects and builds homes. commercial, retail and recreational spaces, we ensure that the cities where we operate can grow and prosper, and that our operations contribute to a positive life for all. Our efforts in this area have received international recognition as we were the only Hong Kong company included in the 2017 FORTUNE "Change the World" Top 50 companies list. In addition, MTR won the inaugural "Hong Kong Sustainability Award 2016/2017" organised by the Hong Kong Management Association. In the coming year, as we are gearing up to commencing in September the operation of the Express Rail Link connecting Hong Kong to the vast high speed rail network in the Mainland of China. I am excited to invite all our stakeholders to embark on the journey of creating a more sustainable and liveable environment.





# <image>

# CEO'S MESSAGE

Lincoln Leong Kwok-kuen

MTR's focus has always been on connecting and growing communities with caring service. Corporate responsibility is a vital factor in all our activities in providing safe and efficient mobility and community-oriented retail and residential developments. Keeping our Corporate Responsibility Policy in mind, MTR's colleagues worldwide work collectively to deliver our strategy and serve our customers in line with our Vision, Mission and Values.

We serve over 12 million passengers every weekday; 5.76 million of them are in Hong Kong, our home city. We are proud of what we have achieved and continue to be committed to serving Hong Kong, working hard to realise the Rail Gen 2.0 initiatives to deliver greater convenience for our customers. Leveraging the knowledge acquired in Hong Kong, MTR has expanded globally and is now operating in the Mainland of China, Australia, Sweden, and the United Kingdom. With the beginning of MTR Pendeltågen operations in Sweden in December 2016, we are now that country's largest rail operator in terms of passenger volume. Alongside our rail operations, we develop new communities around the railway by building residential blocks, shopping centres and recreational space with convenient connections to the railway. Besides transforming and energising the local communities, this "Railway plus Property" model ensures financial sustainability of the Corporation which is crucial in enabling us to upgrade existing railway assets and to expand the railway network further to provide safe, efficient and quality services, and at the same time keeping fares at affordable levels.

Our Corporate Responsibility Policy guides our approach in addressing our impacts on the environment and contribution to surrounding communities, as we continue to enhance and expand our business in and outside of Hong Kong. In addition to the environmental management and monitoring plans implemented throughout the life cycle of our projects and operations, we are constantly in search of opportunities to further improve our emissions performance and our long-term resilience to the effects of climate change. For example, our train's regenerative braking system allows us to turn kinetic energy from trains braking into electricity for use by nearby trains, and at the South Island Line (East), an extra electricity storage system allows surplus electricity to be stored for future use. We also work with our business partners, suppliers and relevant stakeholders to help us realise our vision of being a leading responsible and sustainable business. Being one of the earliest issuers in Hong Kong, MTR's Green Bond is a case in point. Continuing from the success of our inaugural issuance in 2016, we issued an additional five Green Bond private placements

in 2017. Going forward, we will continue this effort when market conditions are suitable.

Sustainability Report 2017

We consciously listen to communities that we serve to ensure that we meet their needs. We placed great efforts in enhancing barrierfree access to our stations ensuring that all passengers are able to travel with ease. In 2017, we have created breastfeeding space in the staff rest rooms located at 20 interchange stations and will continue to make suitable enhancement going forward. With the vision of growing together with the communities we serve, under the Community Connect platform, we extend our caring service to our communities through outreach initiatives, art and culture programmes and activities to promote green and healthy living. We have been actively engaging the next generation through specially tailored programmes aimed at empowering them with skills, motivation, and opportunities as they enter the workforce.

Beyond our physical assets, our colleagues are truly our most important resource as they maintain and enhance the safe, efficient service we enjoy every day. Many of our colleagues choose to stay with us for long periods, a testament to our commitment to building an open, inclusive, positive and rewarding workplace. In recognition of our efforts. MTR was named the most attractive employer in Hong Kong SAR at the Randstad Employer Brand Awards 2017. We are leveraging the experience we hold today to build future capacity through the MTR Academy, a hub for rail and rail-related best practices serving a wider audience in Hong Kong and beyond, assisting other regions as they develop their rail infrastructure.



# **ABOUT THIS** REPORT

# **Report Scope**

# Reporting Guidelines -

Our sustainability disclosure references internationally recognised reporting guidelines. For this reporting period, we have prepared our sustainability report in accordance with the Global Reporting Initiative (GRI) Standards Core option. To ease navigation, we have provided a GRI Content Index, which also references the International Association of Public Transport (UITP) Sustainability Charter Reporting Guide 1.0, ISO 26000 Guidance on Social Responsibility and the United Nations Sustainable Development Goals (SDGs). Please refer to our Materiality Matrix for a list of Identified Material Topics.

As a publicly listed corporation (SEHK: 0066), MTR (the "Corporation") abides by the listing rules of Hong Kong Exchanges and Clearing Limited (HKEx), as such, we have also included a content index that outlines our level of compliance with Appendix 27 Environmental, Social and Governance Reporting Guide (ESG Guide) issued by HKEx.

# Report Scope

MTR Sustainability Report 2017 discloses details on issues identified as material to the Corporate during 2017 (1 January until 31 December). The majority of our activities take place in Hong Kong. MTR has also prudently expanded operations internationally with a presence in the Mainland of China, Australia, Sweden and the United Kingdom. With the aim of augmenting the accuracy and transparency of our disclosure, the report incorporates data from all operations, where applicable, including wholly or majority-owned subsidiaries where the Corporate exercises management control. Selected quantitative data disclosed in this report has been independently assured by Deloitte Touche Tohmatsu. Please refer to the independent assurance report for details.

The following operations are included in this report:



## Please refer MTR Business for details regarding our operations in Hong Kong and worldwide.

ABOUT THIS REPORT

# **MTR**

# Sustainability Report 2017

# Stakeholder Engagement

MTR's stakeholder engagement process is ongoing and includes a diverse set of groups providing a wide range of views, opinions, and expectations. Through our engagements, stakeholders provide essential input to help us identify possible emerging risks to our business operations. The process is also an opportunity for us to communicate and gain feedback on our initiatives.

To identify our stakeholders, we consider any entity or individual who is significantly affected by our principal activities along our value chain in Hong Kong and/or whose actions are expected to significantly affect the ability of the Corporation to achieve its objectives.

# MTR Society Link

MTR Society Link was established in 2009 as a platform for our Operations Division to exchange views and connect with professional groups and members of civil society through visits, gatherings, and e-newsletters. There are now 25 member organisations representing a range of societies, associations, professional institutes and NGOs in Hong Kong. In 2015, this initiative was awarded the "Outstanding Award for Social Inclusion" by the Hong Kong Council of Social Services for engaging a wide range of stakeholders and proactively exploring opportunities for continuous improvement in building community-friendly facilities.





# Our Process

To structure our stakeholder engagement process, we have categorised our stakeholders from different geographic regions, ages, socio-economic groups, and types of employment into ten main stakeholder groups. Definitions of each stakeholder group and the various ways in which they are engaged can be found in the Appendix on Stakeholder Engagement Channels Table.

Our stakeholders raised a number of concerns during engagements including how our operations impact them. The concerns brought to our attention by the different stakeholder groups are listed below along with links to areas in the report where we have addressed these concerns.

Stakeholder Groups	Key Interests	Our Response	
Business Partners	Organisational governance structure and process	Corporate Governance	
	Fair operating practices (ethical dealings with other organisations)	Fair and Ethical Business	
	Anti-corruption	Fair and Ethical Business	
	Responsible political involvement	Enabling Progress	
	Fair competition	Fair and Ethical Business	
	Fair marketing (factual and unbiased information and fair contractual practices)	Fair and Ethical Business	
	Customers' health and safety	Management Approach; Customer Safety	
	Customer data protection and privacy	MTR Privacy Policy	
	Access to essential services (including avoidance of service disruption)	Train Service Performance; Enabling Progress	
	Employee and contractor health and safety	Staff and Contractor Safety	
Communities	Fair operating practices (ethical dealings with other organisations)	Fair and Ethical Business	
	Customer education	Customer Safety	
	Customers' health and safety	Management Approach; Customer Safety	
	Customer data protection and privacy	MTR Privacy Policy	
	Access to essential services (including avoidance of service disruption)	Train Service Performance; Enabling Progress	
	Employment practices	Management Approach; Nurturing Corporate Culture - Sense of Community	
	Employee and contractor health and safety	Staff and Contractor Safety	
	Community involvement and development	Enabling Progress; Investing in Communities	
	Education and culture	Investing in Communities	
	Employment creation and skills development	Recruitment	
	Wealth and income creation	Financial Sustainability	
	Community investment	Investing in Communities	



Stakeholder Groups	Key Interests	Our Response	
Customers and	Fair marketing (factual and unbiased information and fair contractual practices)	Management Approach	
Passengers	Customers' health and safety	Management Approach; Customer Safety	
	Sustainable products and services	Operating Responsibly	
	Customer service, support, complaint handling	Management Approach	
	Customer data protection and privacy	MTR Privacy Policy	
	Access to essential services (including avoidance of service disruption)	Train Service Performance; Enabling Progress	
Environmental Interests	Community involvement and development	Enabling Progress; Investing in Communities	
Investors	Organisational governance structure and process	Corporate Governance	
	Fair operating practices (ethical dealings with other organisations)	Fair and Ethical Business	
	Anti-corruption	Fair and Ethical Business	
Media	Comprised both traditional and online media outlets that deliver information such as news, commentary and other stories to the public. Media reflects topics that our stakeholders have already raised with us separately.		
Political Interests	Anti-corruption	Fair and Ethical Business	
	Customer education	Management Approach; Customer Safety	
	Customers' health and safety	Management Approach; Customer Safety	
	Access to essential services (including avoidance of service disruption)	Train Service Performance; Enabling Progress	
Regulators	Prevention of pollution	Waste	
	Sustainable resource use	Energy; Water	
	Climate change	Climate Change	
	Technology development and access	Customer Service in Rail Operations; Customer Service in Our Properties; Investing in Communities	
Staff	Customer service, support, complaint handling	Management Approach	
	Customers' health and safety	Management Approach; Customer Safety	
	Conditions of work and social protection	Management Approach; Work-Life Balance	
	Employee and contractor health and safety	Staff and Contractor Safety	
Suppliers	Fair competition	Fair and Ethical Business	



# External Review Panel

For the fourth year, we have drawn on the extensive sustainability related expertise of members of an External Review Panel to provide independent feedback on a mature draft of this report. We have given due considerations to the comments received, which helped us to enhance the relevance and the quality of the disclosures in this report.

This year's panel members include:



Shirlee Algire Executive Manager – Sustainability, Hong Kong Jockey Club



Mike Kilburn Acting General Manager, Sustainability, Hong Kong Airport Authority



**Jane Lau** CEO, UNICEF Hong Kong



Robert Gibson Fellow, Civic Exchange and Adjunct Professor, Hong Kong University of Science and Technology



Calvin Lee Kwan General Manager, Sustainability, Link REIT



Simon Ng Independent Consultant



Agnes Tai Director, Great Glory Investment Corporation



**SK Wu** Risk Manager, Alliance Construction Materials Limited



# Materiality

To ensure that our sustainability report addresses topics that reflect MTR's significant economic, environmental and social impacts, and/or that substantively influence the assessments and decisions of our stakeholders, we conduct a materiality assessment every year that helps us identify material issues that reflect the shared concerns of the Corporation and all our stakeholder groups.

Our materiality assessment methodology involves four steps:



For a more detailed explanation of our materiality methodology please click here Z.



## Materiality Matrix

Following our materiality process, we have identified the following issues as material to MTR:



Highly material issues are listed in the top right quadrant of the matrix, while the least material issues are found at the bottom left. Shifts in the materiality of issues may occur after the review and validation by the Corporate Responsibility Steering Committee and External Review Panel during the fourth step of our materiality assessment methodology. We value feedback from our stakeholders on the outcomes of our materiality assessment as well as our report content; please contact us with **your views**.

#### I. GOVERNANCE

 Organisational governance structure and process

2 Fair operating practices (ethical dealings with other organisations)

- 3 Anti-corruption
- 4 Responsible political involvement
- 5 Fair competition

#### **II. CUSTOMERS**

6 Fair marketing (factual and unbiased information and fair contractual practices)
7 Customer education
8 Customers' health and safety
9 Sustainable products and services
10 Customer service, support, and complaint handling

- Customer data protection and privacy
- Access to essential services (incl avoidance of service disruption)

#### **III. EMPLOYEES**

- 13 Human rights risks assessment
- 14 Human rights risk issues
- **15** Human rights grievances mechanism
- **16** Diversity and equal opportunity
- 17 Fundamental principles and rights at work (based on ILO)
- **18** Protection of civil and political rights of staff



- Sustainable resource use (resource efficiency and water use)
- 26 Climate change
- 27 Biodiversity

### **V. SUPPLY CHAIN**

- 28 Supply chain human rights risk
- **29** Promoting social responsibility in the value chain

### VI. COMMUNITY

- **30** Payment from government / tax payment
- Community involvement and development (engagement)
- 32 Education and culture
- 33 Employment creation and skills development
- **34** Technology development and access
- **35** Wealth and income creation
- 36 Community health
- **37** Community investment (incl staff volunteering)



# The Sustainable Development Goals

We acknowledge our role in the sustainable urbanisation of the locations in which we operate, specifically through our contribution to the development of sustainable urban infrastructure including mass transit systems and housing. In 2016, we considered how MTR can leverage its expertise as a company that specialises in providing rail and property services to contribute to the global sustainable development agenda as defined in the United Nations Sustainable Development Goals. We believe that our operations work to further enhance the liveability of our operating locations, helping to connect and grow communities in a sustainable manner. We have identified three areas where MTR can play a significant part as a global citizen in furthering the SDGs and have informed the Sustainable Development Goal Secretariat of our overall support of these goals:



Please refer to the following sections:

**Financial Sustainability** 

**Our People** 



Please refer to the following sections:

MTR Business

Financial Sustainability

Our Customers

Environment and Natural Resources

Our People

Enabling Progress



Please refer to the following sections:

Financial Sustainability

Safety

**Our Customers** 

Environment and Natural Resources

Enabling Progress





# **ABOUT MTR**

Established in 1975, MTR Corporation Limited (MTR) is a publicly-listed corporation headquartered in the Hong Kong Special Administrative Region which primarily constructs and operates mass transit railway systems in Hong Kong and internationally in the Mainland of China, Australia, Sweden, and the United Kingdom. either directly or through joint ventures. On every weekday in 2017, we transported an average of 5.76 million passengers in Hong Kong and carried around 6.49 million passengers overseas.

While we are recognised as a leading passenger railway transport provider in the world, we also take part in the development and sale of residential and commercial properties in partnership with property developers and operate a property management service. These operations take place primarily in Hong Kong and in the Mainland of China.

# Vision, Mission and Values

Our Vision, Mission and Values (VMV) underpins our success as it guides our activities to achieve our goal to connect and grows communities with caring service.

Vision	We aim to be a leading multinational company that connects and grows communities with caring service.		
Mission	We will		
	<ul> <li>Strengthen our Hong Kong corporate citizen</li> <li>Grow and enhance our Hong Kong core busi</li> <li>Accelerate our success in the Mainland and</li> <li>Inspire, engage and develop our staff</li> </ul>	nesses	
Values	Excellent Service	Value Creation	
	We anticipate, listen and respond to customer needs and provide a safe, effective and caring service.	We create profit and community goodwill through growth, effective execution, continuous improvement and innovation.	
	Mutual Respect	Enterprising Spirit	
	We work internally and externally in a collaborative environment based on trust, joint commitment and respect.	We question the status quo, proactively seek improvement and take ownership to overcome obstacles.	



# **MTR Business**

Our business is organised into four areas in Hong Kong. Please refer to our **Annual Report** for further details on our business related to **Transport Operations**, **Station Commercial Businesses**, **Property and Other Businesses**, and **Network Expansions**.

HONG KONG OPERATING NETWORK WITH FUTURE EXTENSIONS





In addition to the operations outlined in the map, we also operate station commercial businesses, property investments, rail-related consultancy, the Ngong Ping 360 theme village which accompanies the Ngong Ping Cable Car, and the Octopus card payment system.

Our subsidiaries and associates overseas build, operate and maintain railway systems and provide related services. In the Mainland of China, we are also involved in leasing retail space, providing estate management services and developing properties. Please refer to our **Annual Report** for further details on our business in the Mainland of China, Australia, Sweden, and the United Kingdom.

## MAINLAND OF CHINA AND INTERNATIONAL BUSINESSES AT A GLANCE



Please refer to About this Report for details on which operations are included in the scope of the Report.

# SMART LINKS, LIVEABLE CITIES



# Sustainability Report 2017

# MTR Academy

On top of our railway and related commercial businesses, MTR is keen on nurturing the next generation of railway professionals and maintaining top skills and capabilities not only from own operations, but also for the global railway industry.

MTR Academy was established in 2016 to offer railway executive and professional programmes for the general public in Hong Kong as well as the railway industry in the Mainland of China and overseas. By training talent and developing experts and executives, the MTR Academy will contribute to the advancement of service and operational excellence of the railway industry in Hong Kong and worldwide. To view the latest updates on MTR Academy, please visit **here**.

Over 100 executives from 17 countries attended MTR Academy's Corporate and Thematic Programmes to enhance their knowledge on pursuing operational excellence. To promote the railway industry and induce motivation and curiosity among Hong Kong young generations, the Academy has supported the development and delivery of an Applied Learning subject "Railway Studies". The programme is the first railway related Applied Learning subject approved for the Hong Kong Diploma of Secondary Education Examination (HKDSE). The subject will be first offered in the Secondary School Academic Year 2018/2019.

Supported by MTR, the Metro Academy at Metro Trains Melbourne also provides opportunities for the general public to gain a deeper understanding of Melbourne's metropolitan railway and learn about railway operations. To view the latest information on training opportunities, please visit **here**  $\mathbb{Z}$ .

# **Financial Sustainability**

The capital-intensive nature of our core business has traditionally posed a challenge for railway companies to secure the necessary financing needed to operate and grow. We rely on sustainable and stable financing streams, including fares, to be able to consistently provide the best service to our customers through continuous capital investments in maintenance and upgrades across our business.

## Fares for Hong Kong Transport

Fare revenue is one of the major sources of stable and sustainable income for MTR, enabling us to support significant capital investments required to maintain, replace and upgrade our assets to continue providing the level of service our customers have come to expect of us in the long term. MTR is sensitive to the dependence of our passengers on our services and understand the sensitivity to changes in fares of some passenger segments, particularly those living on low incomes or those living in remote parts of our city. The affordability of our services is important to us as we continue providing on-going and fixed-term promotions and concessions which target particular passenger segments.

The Fare Adjustment Mechanism (FAM) is designed to enable fair, objective and transparent fare adjustments over time and was agreed with Government in 2007 and approved by minority shareholders. Every five years, we are scheduled to review the FAM under the Operating Agreement. Following a request from Government in March 2016, we reached a mutual agreement in April 2016 and advanced the FAM review by one year. The review result was released in March 2017. Building on the foundation of the FAM formula, which remains unchanged, we have implemented new arrangements which will benefit all passengers, while ensuring the financial sustainability of the Corporation to support safe, reliable and efficient railway services.

Read more about the result of the FAM review, which was conducted jointly by MTR and Government **here**.

# Rail plus Property \_\_\_\_

The Rail plus Property model, which financed our first railway line around 40 years ago, also plays a key role for us to provide reliable and high quality railway services to the public. The land development rights granted alongside railway alignments, upon payment of the relevant land premiums, allow us to generate income through assets such as investment properties. The resources are in turn used to support railway operations and help fill funding gaps when building new railway lines.

### **RAIL PLUS PROPERTY MODEL**



Note: This is a simplified model, only meant to illustrate and explain the general framework of the Rail plus Property Model. Actual implementation may vary.

# SMART LINKS, LIVEABLE CITIES



# MTR

# Economic Value Generated and Distributed \_\_\_\_

The value-added and distribution statement illustrates the economic value created from the transport, property and other services we provided to our customers and how they were distributed to our stakeholders – suppliers, employees, lenders, shareholders, Government and the community at large.

## Green Bonds

To integrate environmental, social and corporate governance into our financing and decision-making process, we established our Green Bond Framework in 2016, which is in line with the core components of the Green Bond Principles set out by the International Capital Market Association and provides guidance on the issuance, use of proceeds and reporting on green bonds. To learn more about our Green Bond Framework and our green bond issuances, please see the **Green Bond Report**. The green bond issuances have allowed us to tap into a new and fast-growing bond investor base and hence expanded and diversified our funding sources. They have provided similar cost effective financing as traditional bonds for our environmentally friendly services and network enhancements envisaged in Rail Gen 2.0.

#### Notes:

- 1 Before taking into account staff costs of HK\$23 million.
- 2 Excludes staff costs relating to Hong Kong railway system maintenance of HK\$2,104 million and capitalised for asset creation of HK\$1,191 million.
- 3 For simplicity, operating costs include interest income and share of profit or loss of associates and joint venture, netted with profit attributable to non-controlling interests.

Excludes operating costs relating to Hong Kong railway system maintenance of  $\rm HK\$1,678$  million.

- 4 Excludes interest expenses capitalised for asset creation of HK\$373 million.
- 5 Represents current income tax and excludes deferred tax for the year.
- 6 Represents ordinary dividends payout during the year. Excludes the payment of the second and final tranche of special dividend under the XRL Agreement of HK\$13.0 billion (HK\$9,756 million to the Financial Secretary Incorporated of the HKSAR Government and HK\$3,253 million to other shareholders).
- 7 Includes donations, sponsorships and other community engagement contributions (inclusive of HK\$6.8 million donation made to victims of the arson attack that took place on 10 February 2017), and excludes ongoing fare concessions and promotions of HK\$2,672 million and in-kind donations of HK\$24 million.
- 8 Economic value retained for reinvestment to generate future economic values. This represents underlying business profit attributable to shareholders of the Company [before depreciation, amortisation and deferred tax] for the year retained, after the amounts distributed to our stakeholders and invested in asset maintenance, renewal and upgrade of our Hong Kong railway system, but before payment of the second and final tranche of special dividend under the XRL Agreement of HK\$13.0 billion.





For further details on our financial highlights, please refer to our Annual Report.

# **MTR**

# Sustainability Report 2017

# **Corporate Governance**

Members of our Board and Executive Committee work together to ensure that MTR is well-managed in the interests of all its stakeholders. After formulating the strategic vision and direction of the Corporation, the Board of Directors tasks Executive Committee Members with the development and implementation of policies and systems to drive MTR forward in its sustainable growth which contributes to the development of our communities both in Hong Kong and abroad. Please see the **Corporate Governance Report** in our Annual Report for more details on our corporate governance approach and structure.

Please click the links below for further details on our Board of Directors:

Board Diversity Policy 🗷

Board Diversity Data 🗷

Terms of Reference of Board Committees 🗷

As the Corporation continues to grow outside of Hong Kong, in the Mainland of China, Australia, Sweden, and the United Kingdom, our Governance Framework outlines the Corporation's responsibility to develop a governance structure tailored for individual subsidiaries and associates. Through this structure, MTR exercises a certain level of control and oversight, however we also require our subsidiaries and affiliates to adopt management practices and policies appropriate for their business nature and local contexts. This approach ensures that our overseas operations will regularly consult and notify the Corporation on important issues. Our subsidiaries and associates report on their compliance with management practices and the governance structure annually.

## **GOVERNING SUSTAINABILITY AT MTR**

## Board of Directors

The Board of Directors is our highest governing body, led by the Chairman, it focuses on overall strategic policies and corporate governance. As an integral part of good corporate governance, the Board has established a total of six Board Committees to oversee different aspects of the Company's affairs.

### **Executive Committee**

The Board has delegated the day to day management of the Company's business to the Executive Committee, led by the Chief Executive Officer and is made up of all the Members of the Executive Directorate.

#### Corporate Responsibility (CoR) Committee

Reports to:	Board of Directors
Chaired by:	Chairman of the Board
Frequency of meetings:	Twice a year
Composition:	One Non-Executive Director (being the Chairman of the Board), four Independent Non-Executive Directors, three members of the Executive Directorate, including the Chief Executive Officer, the Human Resources Director and the Corporate Affairs Director.

### Corporate Responsibility Steering Committee (CoRSC)

The CoR Steering Committee provides input to and cascades initiatives related to corporate responsibility and sustainability across all divisions of the Company.

Reports to:	Executive Committee
Chaired by:	Corporate Affairs Director
Frequency of meetings:	Three times a year
Composition:	Executive Directors and senior managers representing all major business units.

# SMART LINKS, LIVEABLE CITIES



# Sustainability Report 2017

# Corporate Responsibility Policy

In 2017, we have further refined our CoR Policy to align with the focus areas of the Corporation when it comes to our social and environmental impacts. The policy provides guidance for the development and implementation of our sustainability initiatives with the ultimate aim of maintaining our position as a responsible business that contributes to society. We understand that our operations and services are closely linked to the lives of the people and communities that we serve. Supported by our sustainable financial model, to us, corporate responsibility is about operating safely and responsibly in all aspects of our business and contributing positively to the development of our communities.

# ENABLING THE SOCIAL AND ECONOMIC DEVELOPMENT OF COMMUNITIES, ENHANCING QUALITY OF LIFE AND FOSTERING A THRIVING ENVIRONMENT IN WHICH TO LIVE AND DO BUSINESS







## Corporate Policies

Our management approach to corporate responsibility comprises a number of corporate policies, particularly on issues that are considered to be highly material to our stakeholders and/or that require extensive crossdepartmental coordination.

Please refer to the following policies and statements:

Corporate Responsibility Policy Safety Policy Whistle-blowing Policy Green Procurement Policy Climate Change Statement Biodiversity Policy Slavery and Human Trafficking Statement

# Awards and External Charters

Testament to our employees' efforts in instilling and maintaining a strong sustainability management culture, we have received a number of awards during the reporting year, including the inclusion of the 2017 FORTUNE "Change the World" Top 50 companies list. Please click **here** I for a detailed list.

We endorse externally developed charters, principles and initiatives, and participate in associations and advocacy organisations. To download a list, please click **here >**.

# Fair and Ethical Business

To uphold the highest standard of business ethics and respect principles of fairness, impartiality and integrity in all locations where we do business, the Code of Conduct is regularly reviewed and updated to ensure appropriate ethical business practices and behaviour and compliance with corporate and regulatory requirements. The Code reinforces the trust placed in us by our stakeholders and aligns with our VMV. After a regular review of our Code, a revised code was released to all employees in May 2018. To view the latest version of our Code of Conduct, please click **here** .

As an organisation with high ethical standards, all employees are required to uphold the anti-bribery and anti-corruption regulations in all places where we do business, which means zero tolerance for all forms of bribery or corruption. The Corporation's values and expected ethical behaviours are guided by our Code of Conduct, and supplemented by internal policies on the Prevention of Bribery and Illegal Acceptance/Offer of Advantages, and on Conflict of Interests. On top of briefings to new recruits during employee induction programmes, there are also regular seminars with a guest speaker from the Independent Commission Against Corruption (ICAC).

In support of our policies on ethical behaviours, the Corporation's Whistle-blowing Policy provides various channels to receive complaints in relation to fraudulent acts, unethical acts or non-compliance with laws and regulations and/or the Corporation's policies which have or could have significant adverse financial, legal or reputational impact on the Corporation. We encourage and assist whistle-blowers to raise grievances without fear of reprisal. Our Whistleblowing Policy applies to all employees and to anyone who has dealings with the Corporation, including customers, business partners and suppliers. All reports of misconduct are treated with the utmost urgency, confidentiality, and respect. Members of the Whistle-blowing Panel, chaired by Head of Internal Audit, include the Legal & European Business Director and the Human Resources Director. During 2017, our Whistleblowing Panel evaluated 142 cases and concluded 118 of those cases did not meet the definition of "whistle-blowing". Of the 24 whistle-blowing cases, follow-up investigations were completed: 1 substantiated, 3 partially substantiated and 8 unsubstantiated cases. The remaining 12 cases were under investigation as of 31 December 2017. Appropriate followup actions, including disciplinary actions, were taken by management in response to the substantiated and partially substantiated cases.

# Risk Management

Sustainability is integrated into our risk management which helps us to ensure better control on our business. Our Enterprise Risk Management (ERM) Framework which underpins our day-to-day business activities provides a simple and effective management process to identify and review risks across all business units, and prioritise resources to manage risks that may arise. It also gives management a clear view of the significant risks facing the Corporation and is used to support decision making and project execution, which in turn helps to deliver better business performance. The Enterprise Risk Committee, the Executive Committee and the Risk Committee review the enterprise risk profile and brainstorm emerging risks quarterly to ensure key risks are captured.

Details of how we identify and evaluate enterprise risks including sustainability risks, and the focus areas for risk management can be found in our **Annual Report**. To learn about the details of our risk management system and process, please click **here**. The Terms of Reference for the Risk Committee can be found **here**.





# OPERATING RESPONSIBLY





As a mass transit operator and property services provider that links and builds communities in different parts of the world, operating responsibly is at the heart of everything we do while running our business. We bear this principle in mind and are proactive in rolling out activities and initiatives to operate our services in a safe, and environmentally and socially responsible manner. We are committed to providing safe and reliable rail and property services, enhancing operational efficiency, reducing resource consumption, delivering excellent service to cater to customers' needs, and promoting sustainable supply chains.











Safety is our first priority as we provide reliable and enjoyable journeys to nearly 5.76 million passengers in Hong Kong every weekday and 6.49 million passengers outside of Hong Kong. Our senior management constantly stresses the importance of safety and takes the lead to instil an uncompromising Safety-First culture in MTR – spreading care and conveying safety messages to customers, staff, contractors, and anyone else who legitimately enters our facilities, and ensuring the culture is infused into all our operations.









-5% Door-related accidents\* in Hong Kong



# Management Approach

Guided by our **Corporate Safety Policy** and the Corporate Safety Governance Framework which together outline our approach and objectives for safety management, we ensure that safety is essentially the duty and responsibility of each director, manager, supervisor and all employees in MTR.

Our Corporate Strategic Safety Plan is in place to guide us to reinforce our fundamentals to continue to effectively manage safety across all of our business areas, supporting our rapid growth and expansion globally. To keep abreast of the latest trends and continuously update safety practices, we review and formulate our Corporate Strategic Safety Plan every four years. Our latest Corporate Strategic Safety Plan 2017-2020 outlines safety aspirations, safety goals and strategic focus areas, to communicate safety messages and drive safety improvements in every place where we operate.

## **CORPORATE STRATEGIC SAFETY PLAN 2017 - 2020**

## Safety Aspirations

- A1. To provide an environment that brings zero harm to people
- A2. To extend our safety excellence globally to uphold our reputation

## Safety Goals

- G1. Zero fatalities every year
- G2. Zero major safety system incidents every year
- G3. Planned reduction in injuries year on year
- G4. To be amongst the very best in safety performance globally in all of our businesses
- G5. To be the safest mode of public transport in every place we operate

## Strategic Focus Areas

- S1. Drive Safety-First culture further, both top-down and bottom-up
- S2. Enhance competence standards and human performance in safety
- S3. Bring contractors to our way of managing safety
- S4. Enhance effectiveness in safety management
- S5. Enhance safety standards and guidance for the Corporation
- S6. Drive safety risk management best practices into all parts of the business
- S7. Enhance resilience and crisis management

Our well-established Corporate Safety Management Model, comprises eight core elements, and provides an effective and robust system adaptable to business expansion and various safety challenges. To effectively oversee our safety performance and constantly improve across our businesses, fit-for-purpose safety management processes have been established for each of the eight core elements.





### 1. Organisation and Management Accountability

The Corporation Safety Management Committee (CSMC), chaired by the Engineering Director, provides assurance to the Executive Committee and the Board on the adequacy of safety management and risk control. It monitors safety performance and the

implementation of the Corporate Strategic Safety Plan. It also commissions reviews and audits to promote continuous safety improvements.

## **OUR CORPORATE SAFETY MANAGEMENT STRUCTURE**



line managers in discharging their safety responsibilities in their respective areas of the business.

# SMART LINKS, LIVEABLE CITIES

# Sustainability Report 2017



## 2. <u>Stakeholder Management</u>

Stakeholder management facilitates two-way communication between ourselves and relevant stakeholders on safety practices and performance. We actively engage our stakeholders to:

- inform, educate and raise awareness of safety requirements and performance;
- establish areas of cooperation and involvement by listening and responding to resolve concerns;
- promote understanding and ownership of safety responsibilities; and
- learn and improve through sharing lessons and knowledge.

We also regularly engage and closely monitor our site teams to make sure they uphold the highest safety standards on all construction sites. Please refer to "**Staff and Contractor Safety**" and "**Collaboration with Our Contractors**" for more information.

### 3. Competence Management

We have developed a competence management model to systematically review and determine the competence requirements of our people which ensures our employees have the capability to safely perform their duties and manage risks. Contractor capacity is also assessed as part of the selection process.

In addition, our Human Factors Programme aims to maximise employees safety and service performance, whether under normal circumstances where the same action is regularly repeated, or in emergency situations when employees must respond quickly and correctly. We make use of the "fingering procedure" (i.e. the employee points with their finger and states aloud actions to be taken) in many areas of our operations to effectively reduce human errors.

### 4. Standards and Procedures

In addition to our **Corporate Safety Policy**, other safety documents, such as safety rules, procedures and work instructions, give our employees safety instructions and ensure management of relevant risks. These documents are formulated as necessary, reviewed regularly and are readily accessible by all employees.

We set safety targets in relation to our customers, the public, our employees and our contractors and monitor our performance against these targets regularly throughout the year. The annual review of safety targets is based on a systematic approach that takes into account actual performance, new safety challenges and safety improvement initiatives, under the directive of reducing injuries year on year.

#### 5. Safety Culture

Safety leadership training helps cultivate our safety culture and facilitate the formulation of an effective and practical safety management plan by our management leaders. Therefore, all our managers are required to participate in the mandatory corporate safety management training course to familiarise themselves with the Corporate Strategic Safety Plan, understand their safety management responsibilities, and strengthen their safety knowledge. As at end of 2017, over 2,170 managers have completed the training.

We have created an effective safety culture which encourages the proactive reporting of safety hazards to relevant teams and regular exchange of best practices amongst our employees worldwide through various platforms and channels within MTR. Our Operations Division implements a safety reporting scheme which utilises various means of communications, including mobile applications (apps), Anomaly • Alert • Action (AAA) iSPOTit, to enable employees to instantly report safety issues and potential safety hazards in the operating railway so that they can be appropriately handled quickly and efficiently.

In addition to mobile apps, we also make good use of our online portal to communicate safety messages with all our employees. We have developed a safety webpage at our mtrconnects portal for all Hong Kong and overseas employees to access safety related knowledge and information. We have also established a Safety Professionals' Community to develop a communication network across the Corporation covering subsidiaries and associates inside and outside of Hong Kong to facilitate sharing on safety management and good practices.



MTR

It is also important that we look beyond our own operations to benchmark our performance against other transport operators, and learn from others. This is achieved through:

- Joint Utilities Safety and Occupational Health Policy Group To provide enhanced consultation and liaison, as well as share good practices between the Government, Occupational Safety and Health Council (OSHC) and utility companies on safety and occupational health issues.
- International Association of Public Transport (UITP) A worldwide network to bring together all public transport stakeholders and all sustainable transport modes. MTR actively participates in UITP for knowledge exchange with other transport operators.
- CoMET Benchmarking We participate in safety performance benchmarking and information sharing with metro operators around the world through the Community of Metros (CoMET).

Find out how our safety performance benchmarks against other metros from the **CoMET Benchmarking Result**.

### 6. Asset Management

To ensure compliance and adequately identify and mitigate safety risks, we systematically manage and continuously improve our capital assets. Our Operations Division has been ISO 55001 Asset Management System certified to meet our high standards of safety and services. There is a process in place to ensure that critical items, which are defined as items that are either associated with a high safety risk ("safety critical engineering spares") or may potentially lead to prolonged service interruptions ("service critical engineering spares"), conform to our specifications. In addition, our Asset Management System also involves assessing operational safety impacts and ensures we deliver a safety system for all our operations.

## 7. Audit and System Assurance

To assure that plans in our Safety Management System are implemented with the intended objectives in an effective manner, we have structured audit programmes in place to ensure that safety management processes are well-implemented and identify opportunities for continuous improvement. The robust system assurance process is applied where appropriate to ensure that safety risks are duly considered and continue to be managed. For example, we have a safety system assurance process for the design, construction, and commissioning of our new rail lines, which has been adopted for more than 20 years. In particular, we work with different departments and contractors to interface the different safety systems and mitigate any impacts that may arise. We integrate, verify and validate safety requirements through both top-down and bottom-up approaches including contract requirements setting, safety integrity level assessments for safety-related and safety-critical systems and design as well as onsite verification and validation activities. We employ independent safety assessors to check the adequacy and effectiveness of the development processes of our safety critical systems, providing additional assurance to the safety of the systems.

## 8. <u>Risk Management</u>

As a company that serves millions of customers and connects with communities every day, managing our safety risks is a top priority. We proactively identify and register safety hazards, as well as assessing and monitoring associated risks in a structured manner to a level that is as low as reasonably practicable.

We also work and communicate closely with Government departments to formulate emergency preparedness plans, such as the Corporate Infectious Disease Business Continuity Plan and the Corporate Crisis Management Plan, to swiftly respond to public health issues, emergencies and crises in an effective manner. Risk management and control are regularly reviewed, adjusted and prioritised as needed.

# Customer Safety

MTR

# **Customer Safety Performance**

We are deeply saddened by the arson incident which occurred on one of our trains during the evening peak hour on 10 February, 2017. During the incident, the train captain forewarned colleagues at the Operation Control Centre who had in turn alerted staff in the Station. We immediately evacuated the train, and provided assistance to injured passengers. The station was also evacuated in a swift and orderly fashion as our passengers followed our staff's instructions.

An Executive Review Panel was immediately established to thoroughly examine the incident handling and safety procedures and to identify areas for improvement in responding to emergency situations. The panel confirmed that our colleagues handled and responded to the incident robustly, speedily, effectively, and in an orderly manner, and collaborated well with the Police Force and Fire Services Department. It is our primary responsibility to make every journey safe and comfortable. The findings from the panel were submitted to the Government in April 2017. The link to the executive summary of the report can be found **here**  $\mathbb{Z}$ .

To enhance our safety risk management and raise public awareness of fire safety, we introduced a number of initiatives in 2017 including:

- ✓ Increased the number of joint emergency drills and exercises with the Police Force and Fire Services Department from 12 to over 15 in 2017;
- ✓ Installed additional portable fire extinguishers with prominent fire extinguisher location labeling at stations and on trains;
- Provided fire blankets at platform level for use by our staff;
- Launched "Travel Safely Every Day in the MTR", a safety campaign with a series of new promotional posters and railway safety videos to convey important railway and fire safety messages, remind customers not to bring any dangerous goods into MTR areas and educate them on emergency response procedures.

The Panel also recommended medium to long term actions on railway safety. For instance, we plan to install CCTV in all heavy rail trains by 2023, to help improve passenger security and enhance our response during emergency situations.





# NUMBER OF CUSTOMER AND PUBLIC INJURIES REQUIRING HOSPITALISATION IN HONG KONG



## **CUSTOMER AND PUBLIC SAFETY – FATALITIES IN HONG KONG**



# NUMBER OF INJURIES REQUIRING HOSPITALISATION PER 100 MILLION PASSENGER JOURNEYS IN HONG KONG

	2016	2017
Heavy Rail		
Target	9.48	9.29
Performance	8.39	7.30
Light Rail		
Target	13.66	13.66
Performance	14.55	9.52
Bus		
Target	6.88	6.88
Performance	6.29	9.44

# NUMBER OF INJURIES REQUIRING HOSPITALISATION PER MILLION PASSENGER JOURNEYS

	Shenzhen Metro Line 4	Melbourne's Metropolitan Rail Services	Stockholm Metro	Stockholms Pendeltåg	TfL Rail/ Elizabeth Line
Target	1.47	2.00	1.35	1.35	2.80
Performance	1.12	0.76	1.08	0.74	3.03

# **Customer Safety Initiatives**

Operating almost 1,000 escalators across our railway network, we continue our efforts to minimise safety risks to our customers. In August 2017, we launched the second wave of "**Travel Safely Every Day in the MTR**", reminding customers to be alert when using escalators, stand clear of edges, use a lift when travelling with prams and bulky luggage and avoid using mobile phones on escalators. We also deployed our Safety Ambassadors in red uniforms at strategic stations to remind customers of safety tips and distribute mini-board games carrying related messages.

## **Suicide Prevention**

According to our internally collected statistics, there were 8 suicides and attempted suicides on our railway network during 2017. To help reduce the number of these tragic events, we continued to collaborate with The Samaritan Befrienders to set up Emotional First Aid counters in selected East Rail Line stations. We also introduced the Suicide Prevention team in critical stations and the Suicide Prevention roving team.

In addition, to enhance passenger safety while on our platforms and prevent unauthorised access to the rail tracks, MTR is carrying out platform modification works along East Rail Line and the Ma On Shan Line under the Shatin to Central Link (SCL) project. Except for these two lines, all other MTR lines are already equipped with platform gates. At the end of 2017, we completed the installation of automatic platform gates at all nine Ma On Shan Line stations. MTR will continue to work on the installation of automatic platform gates along the East Rail Line to provide a safe and pleasant journey to passengers. Please refer to "**Our Customers**" for details.

## Metro Trains Melbourne's Trauma Management

Metro Trains Melbourne's Trauma Management Steering Committee secured funding from the Victoria State Government this year for the implementation of initiatives such as suicide prevention training for employees, targeted fencing and signage at hot spots providing contact numbers for Lifeline counselling services. Campaign posters are placed in stations with the aim of encouraging individuals to take an intervention step and call Lifeline.



## Light Rail and MTR Bus Safety

Our buses and light rail services share the road with other users making road safety a primary concern for these vehicles. To raise public awareness on road safety when travelling on Light Rail and MTR Buses, MTR joined Traffic New Territories North of Hong Kong Police Force, the Road Safety Council and Hong Kong Road Safety Patrol (New Territories North Region) to launch the Traffic New Territories North of Hong Kong Police Force "Attentive Driving Kick-off Ceremony" cum "Light Rail & MTR Bus Road Safety Campaign". For details of the campaign, please refer to this **press release** . We have also carried out studies in widening platforms and providing additional lighting at junctions within the MTR boundary. Furthermore, zigzag barriers are put in place to guide pedestrians to keep an eye on approaching traffic before crossing the tracks.

## **Managed and Investment Properties**

Our Property Division also places great emphasis on safety to keep our customers, residents and the general public comfortable and secure at our managed and investment properties at all times. We continue to make every effort to mitigate potential safety hazards at our managed and investment properties and raise safety awareness amongst our residents and tenants. For example, we regularly conduct fire safety audits on our food and beverage tenants, ensuring they are compliant with all applicable laws and improving work practices to minimise fire hazards. A total of 395 fire safety audits were conducted in 2017. Electrical installations inside the shops of all our mall tenants were also inspected to reduce the risk of electrical fires.

We also arrange fire safety training sessions for our tenants to refresh their fire safety knowledge and regularly inspect all emergency escape routes in our residential properties and shopping malls to ensure that they are unobstructed and that fire doors have been closed properly. Emergency drills are also regularly conducted in our residential properties and shopping malls to build awareness and familiarise our customers, tenants and residents with evacuation routes during emergency situations.

### Safety awareness in the community

In addition to our on-going safety initiatives, we also recognise that the community's support and cooperation is vital to ensuring the safety of our railway system. Therefore, we regularly engage with our community partners to raise safety awareness and promote safe and courteous behaviour while riding the MTR. For example, during the Hong Kong Book Fair 2017, we organised a number of events to promote safe and courteous behaviour to children including a stage performance of the popular interactive drama "MTR x Repertory Theatre (HKRep): Master of Railway Safety – The Devil Returns" and a special storytelling session by "Kee Gor", Chief of Operating of MTR Corporation, Mr. Francis Li. In addition, we supported People On Board Social Enterprise Limited (POB) to host an exhibition booth with a series of fun games to test visitors' understanding of railway and fire safety, and the release of a newly upgraded version of the "MTR Safety and Courtesy Board Game". Proceeds of the sales went to POB for use in support of youth development projects in Hong Kong.



## Safety awareness initiatives across the globe

## Little Professionals Programme

In Shenzhen Metro Line 4 (Longhua Line), we launched the Little Professionals programme to educate children on how to travel in a safe and courteous manner and encourage them to share the knowledge with their family and friends.



# "But Dad, You Cannot Do That!" Safety campaign for children in Stockholm

Traveling on MTR is a major part of everyday life in Stockholm. The Little Safety Award is a yearly campaign that was launched in 2014 to encourage children to learn how to travel safely and courteously on trains. In 2017, our safety campaign theme was "But dad, you cannot do that!", where the children provided advice to their family members on how to travel safely on MTR trains. Please visit the **MTR Nordic website** for details of the safety campaign.



## Metro Trains Melbourne Campaign: "Dumb Ways to Die"

Metro Trains Melbourne launched the safety campaign "Dumb Ways to Die" to promote railway safety to the public. With over 200 million online views and more than five billion game sessions played worldwide, the safety campaign was so successful that it has been licensed to another operator, the Regional Transportation District in Denver, Colorado, USA, for the first time, helping to promote safety education in the wider community.



# SMART LINKS, LIVEABLE CITIES

## Sustainability Report 2017

# Staff and Contractor Safety \_\_\_\_

## Safety Performance on Construction Site

We strive to maintain staff and contractor safety in everything we do. Despite our best efforts to implement safety practices across all our construction sites, and reinforcing these practices with our contractors and their subcontractors, we are deeply saddened to report the loss of lives in 2017 involving one staff member and two of our contractors. On 12 September 2017, a fatal fall-from-height accident was reported at LOHAS P5. After one of the wire sling eyebolts used to suspend a tilted bamboo platform erected on a podium to shield the temporary opening Metro Trains Melbourne came loose, a contractor engaged in metal works fell from the platform and landed on surface ground. The platform was not erected for working purposes and a fleet check has been conducted on site. Lessons learnt from the accident were shared amongst other projects to help avoid recurrence. Another incident involved the loss of a contractor's life when a worker fell to the ground while carrying out modification works on the steel working platform at Siu Ho Wan Depot. An investigation panel was convened to identify the cause of the incident and made recommendations to prevent a recurrence.

	20	)16	2017
Staff Safety – Fatalities		0	1
Contractor Safety – Fatalities	5	1	2



## Lost time injuries for staff

We remain committed to improving the conditions of our workplace environment and upholding safety culture in all operations. Our staff lost time injuries [LTI] across our business have improved in 2017 as compared to 2016 and our Property Division's LTI remained the same as previous year. Continuous effort was made to raise employees safety awareness through various initiatives such as the Safety Professionals' Community Forum and Forklift Truck Operation Safety Competition, as well as our annual signature event, Corporate Safety Month in June which includes a series of activities such as an online safety quiz, site safety visits, safety forums and seminars to refresh our employees on the Safety-First principle and safety knowledge.

## LOST TIME INJURIES PER 100,000 MAN-HOUR IN HONG KONG

	2016	2017
Corporate Support Functions	0.09	0.06
Operations Division	0.47	0.42
Projects Division	0.25	0.20
Property Division	0.09	0.09

At Metro Trains Melbourne, we continually look for opportunities to enhance the safety and efficiency of our employees by providing better equipment to help them carry out their duties. The Fatigue Risk Management Program is also in place to provide supervisors with the tools to manage fatigue in the workplace. To enable employees to quickly and easily report safety issues and send feedback directly to the responsible department or team, we launched the "MetroSafe Hotline". In addition, we developed a Trauma Management Framework with TrackSAFE to help employees and their families manage their mental health after experiencing a potentially traumatic event.

#### **Reportable accidents for contractors**

We observed a slight improvement in reportable accident frequency rates in 2017 for most divisions. Our ongoing safety campaigns ensure that continuous efforts are being made to enhance the safety awareness of our contractors. Regular review of work-related risks and assessment of high risk activities are also carried out to safequard the safety of our contractors.

There was a total of ten contractor reportable accidents at our investment properties during the year, four of which were caused by external factors which were not under our control such as traffic accidents and vandalism.

## **REPORTABLE ACCIDENTS PER 100,000 MAN-HOUR FOR CONTACTORS IN HONG KONG**

	2016	2017
Corporate Support Functions	0.22	0.21
Operations Railway	0.16	0.18
Projects Construction – Railway Extension Projects	0.49	0.32
Project Construction - Network Improvement Projects	n/a	0.22
Property Development and Investment Projects	0.03	0.03
Investment Property	0.05	0.26
Management Property	0.12	0.18



# **Occupational Safety and Health Awards**

We were pleased to receive the Best Property Safety Management Award in Hong Kong organised by the Occupational Safety and Health Council, the Labour Department, the Electrical and Mechanical Services Department and the Hong Kong Associated of Property Management Companies in recognition of our occupational health and safety efforts.

# **Contractor Safety Initiatives**

To keep contractors abreast of the latest safety trends in the industry and ensure they are aligned with MTR's safety principles, we work with our contractors to uphold the highest level of safety and spread safety messages to all workers on our project sites. Please refer to **Collaboration with Our Contractors** for more information.

## Safety Campaigns and Safety Plan

To improve the safety and health standards of our contractors, we organised various promotion campaigns in Hong Kong to raise their awareness. We also engaged directly with construction workers through training, multilingual workplace campaigns, mentoring and a variety of communication initiatives. Safety campaigns conducted in 2017 include:

- Safety Innovation Conference and Exhibition organised to promote the use of innovative approach and engineering controls to achieve a higher standard of safety.
- Safety leadership forums held to align contractors with the MTR Safety-First mindset.
- The 'High Risk Focus Areas' campaign aimed at enhancing engineering control to eliminate risks associated with work at height and electrical works.
- The 'Hands Off' campaign encouraged and recognised the elimination of the risk of hand and finger injuries by engineering control.
- The 'Safe Steps' campaign organised to enforce site housekeeping to provide safe and proper passageways.
- Safety videos supported contractors in conveying important safety messages to workers.
- The 'No Regrets' campaign aimed at positively influencing the risk taking propensity of our workforce.
- Educational materials on fatigue awareness for employees and contractors provided guidance on work-life balance.

In 2018, we will continue to focus on working at height and electrical safety which are highly prevalent in our construction programme. We will also focus our campaigns on improving housekeeping and turning to engineering solutions to avoid manual handling because they are major contributors to workplace accidents.



# MTR

# Sustainability Report 2017



On our rail operations, we continue to serve more than 12 million passengers every weekday globally. The integrated nature of our property and railway services means that we interact with our customers throughout their days from morning commutes to evening entertainment and leisure activities. We are aware that our services have a profound impact on many people, therefore we are highly committed to providing quality and efficient services and a positive customer experience, making journeys more convenient and comfortable and keeping our tenants in our properties satisfied.

For more detailed rail customer statistics, including demand levels of our railway network, and total and average number of passengers, please refer to our Annual Report 2017.



**99.9%** Passenger journeys on-time in Hong Kong





Value of ongoing concessions and promotions provided in 2017

# 🔀 MTR

# Sustainability Report 2017

# Management Approach

While the conditions of our licence to operate are detailed in our Operating Agreement with Government, in our quest for excellence, our internal targets often go beyond the terms of this agreement.

**Our Customer Service Pledge** reinforces our commitment to providing safe, reliable and efficient journeys for our customers. It is updated annually and is publicly available on our customer website to inform our passengers of our ambitious quantitative targets across 15 areas of performance, including train punctuality, service and facility reliability, cleanliness and customer response, as well as the performance of the previous year. A performance update is published on a quarterly basis in the MTR Service Newsletter available on our **website**.

To ensure our ability to continue to deliver on our Customer Service Pledge in the long term, we carefully plan our investments to maintain and upgrade our assets over time. The Asset Management Manual used by the Operations Division outlines system requirements for asset management in alignment with best practices. RailASSURE, our internal asset management system, provides a functional overview of equipment management, work management, maintenance planning, budgets and analysis and is certified under the ISO 55001:2014 asset management system standard. As our network matures, we expect these annual expenditures to increase over time. For more details on the investments we made during the reporting period, please refer to **Asset Upgrades** section of this report.

Alongside asset upgrades, we also work to enhance our customer experience by improving existing initiatives or developing and implementing new ones as necessary. A Customer Experience Management Model was established in 2015 which included end-to-end journey mapping exercises and regular customer user group meetings to gather feedback on our initiatives and customer needs. The Customer Experience Development Section works to improve customers' end-to-end journeys which deepens our understanding of what matters most to them and to formulate plans to continue improving our services. To further ensure service quality, our operating railway has also been certified under the ISO 9001:2015 quality management standard.

## Incident response

In the event of a service disruption, we are prepared to respond rapidly, and provide timely and accurate information with proactive assistance to our customers as the relevant teams work to quickly restore our services.

When train service disruptions occur, our Customer Service Rapid Response Unit as well as station staff are on the frontline assisting passengers by providing timely information about the situation and the impact on train services. They also manage arrangements for free shuttle bus services to transport affected customers to the nearest MTR station so that they can resume their journey with as little delay as possible. Specialised teams are rapidly mobilised behind the scenes to resolve service disruptions. For example, the Infrastructure Maintenance Rapid Response Unit repairs railway infrastructure, the Rolling Stock Rapid Response Units rectify train faults, and the Infrastructure Engineering Control Centre uses its real-time monitoring and control system to integrate fault reporting centres that are located at depots across the railway network. Since the end of 2013, volunteers from various departments of the Corporation established our Customer Service Support Team (CSST). They provide extra support to frontline staff during incidents and are trained with the skills needed to handle these types of situations.

# Train service performance \_\_\_\_

In Hong Kong, train service delivery and passenger journeys on-time in our heavy rail network in 2017 remained at a world-class level of 99.9%. As a result, we exceeded both the targets in our Operating Agreement and our own, more stringent, Customer Service Pledges. In 2017 there were nine delays on the heavy rail network and one delay on the light rail network, each lasting 31 minutes or more which were caused by factors within our control. We continue to work diligently to reduce both the number of delays and the impact on passengers. Click **here** A for our Hong Kong operations performance in 2017.

According to the CoMET Benchmarking Results 2016, the most recent data available, our Hong Kong heavy rail network has maintained or improved performance for the majority of indicators. Benchmarking against 17 metro systems in 16 cities globally, the MTR network fares comparatively well however, we continue to seek further improvements.

To gauge the level of customer satisfaction, we conduct regular surveys and the results are reflected in the Service Quality Index and the Fare Index. For details on our performance please refer to our **Annual Report**.



# Customer Service in Rail Operations

Providing a smooth and enjoyable ride for our customers is a primary objective which is achieved through caring customer service and technological solutions to enhance the customer experience.

# **Enhancing the Customer Experience**

During peak periods, we deploy station assistants to assist passengers within the station and help manage crowds at major interchange stations. We have also introduced Caring Points at select stations during peak hours in the winter months to support customers who require special assistance. We have introduced new uniforms to ensure that customers can easily recognise station assistants in the stations.

Our regular customer research programmes help us identify our customer service needs and formulate future plans for continuous improvement to ensure a pleasant journey with MTR.

To make MTR journeys more safe and enjoyable, we strive to highlight the importance of positive, safe and courteous behaviour to our customers. Through the launch of our courtesy campaign "**Travel Happily Every Day in the MTR**" in 2017, we continuously promote courteous behaviours which help to bring a pleasant and comfortable traveling experience on MTR. In addition, the MTR x RTHK Courtesy Campaign 2017 with the theme "Sharing of love by you and me" encouraged passengers to show care and love to others through courteous actions such as giving seats to persons in need to create pleasant MTR journeys for everyone.

We have taken steps to ease crowding in certain parts of our network by, for example, increasing the frequency of trains during peak periods wherever possible. During festive seasons, we provide additional train trips and overnight train services for select festivals, enabling customers to travel with ease to celebrations with their families and friends. Information about average train frequency and service hours for all lines can be accessed **here**  $\mathbb{Z}$ .

Keeping our customers informed is an important aspect of our people-oriented service. We leverage technology to enhance communication with our customers. Some of the solutions used include the installation of a new LCD information display system for station platforms, free Wifi-service hotspots at all MTR stations, mobile device charging facilities at 13 strategic stations and comprehensive mobile apps which provide useful and real-time information for customers to enjoy a more personalised travelling experience. In 2017, we enhanced our mobile apps adding new features such as chatbot, fast exit, and fare suggestions which provides details on the most cost-effective fare options. Learn more about our MTR Apps available in Hong Kong.

Our consistent efforts to utilise digital technologies to enhance customer experience and railway services have once again been recognised over the year. MTR is proud to have been selected as the "Hong Kong Digital Transformer of the Year" and awarded the regional title of "Asia Pacific Digital Transformer of the Year" by the International Data Corporation in 2017.

# Shenzhen Warm Customers' Heart with Quality Services"

In Shenzhen, we invited 40 customer representatives to participate in our "Warm Customers' Heart with Quality Services" programme, providing an opportunity for the representatives to experience staff duties and responsibilities in our day-today business. The customer representatives were divided into three sub-groups, representing customer service staff, train attendants and railway protection team members to understand our operations behind the scenes and our commitment to providing quality customer service.




#### Asset Upgrades

Our Customer Service Centres provide information and assistance to customers within stations across our network. To better serve our passengers and improve our colleagues' working environment, we have been upgrading these centres with new designs since 2010. In some stations of our railway network where there is no customer service counter, we have installed multi-function Self-Service Points for customers to contact staff in the control room for immediate assistance. In addition, the new "2 IN 1" Ticket Issuing & Add-Value Machines are replacing the Single Journey Ticket Issuing Machine to provide passengers with one-stop service kiosks. Some ticket issuing machines have been upgraded to support mobile payments for a trial programme starting in December 2017 at select stations allowing passengers to use Alipay, Alipay HK, WeChat Pay and WeChat Pay HK for the purchase of single journey tickets. The trial programme will gradually extend to Tsim Sha Tsui, East Tsim Sha Tsui and Causeway Bay stations by the first half of 2018.

To ensure accessibility for all members of our community, including the elderly and the disabled, we go beyond the Hong Kong regulatory requirements to provide barrier-free access facilities at our stations. Over the years, we have installed external lifts, wide gates, braille signs, tactile toilet signs and guide paths to assist individuals with special needs. In addition, we also trialed a free accessible-car service for passengers in wheelchairs to facilitate the use of Tai Koo station's barrier-free Entrance D1 on Taikoo Shing Road. We are also tracking and sharing our progress in implementing barrier-free facilities online at **Caring for our Customers with Special Needs**. A list of barrier-free facilities can also be found on our customer **website** A and on the MTR Mobile app.

# Pedestrian Facilities to Tsz Wan Shan Area

To improve the walking environment and access to MTR Diamond Hill station, under the SCL project, MTR has undertaken pedestrian improvement works, comprising new pedestrian walkway systems, since 2015. With the completion of the project, local residents in the Tsz Wan Shan area can enjoy more convenient connections to MTR Diamond Hill Station or around Tsz Wan Shan with barrier-free access. Find out more about the improvement works for pedestrian facilities in the Tsz Wan Shan area here



MTR continues to invest and re-invest to ensure that we can meet our customers' high expectations today as well as in the future. In 2017, we spent more than HK \$8.6 billion to maintain, replace and upgrade our existing network. Here are some highlights:

#### **RAILWAY INFRASTRUCTURE AND TRAINS**



 A total of HK\$6 billion is being spent on 93 new, more comfortable 8-car trains to replace those on the Kwun Tong, Tsuen Wan, Island and Tseung Kwan 0 lines. The first 8-car train was delivered to Hong Kong in January 2018, with the final batch of trains due to be delivered in 2023.



• The two remaining new railway projects under construction, namely the Hong Kong Section of the Guangzhou-Shenzhen Hong Kong Express Rail Link and Shatin to Central Link, will improve connectivity across Hong Kong and with the Mainland of China when they are completed.



• The new signaling system will increase overall passenger capacity by providing more frequent train services to our customers. In 2017, we continue with our efforts in installing advanced Communications Based Train Control (CBTC) technology on select lines and have tested it during non-service hours to minimise disruption to our passengers. Signalling replacement works are progressively taking place along the network in Hong Kong with an expected completion date of 2026.





# STATIONS AND IN-STATION FACILITIES

 Over the past five years, we have conducted a series of train conversions and modifications, as well as platform retrofitting works along the Ma On Shan Line (MOL) to prepare for the 8-car train operations of the East West Corridor. At the end of 2017, MOL was entirely served by 8-car trains, with a total of 720 pairs of Automatic Platform Gates installed at all nine MOL stations, providing a comfortable and safe traveling environment for our passengers. Our project to retrofit Automatic Platform Gates on MOL was completed in December 2017, one year earlier than the original target.



- Installation works for the replacement of the first **29 chillers** in seven stations and two depots commenced in December 2017, with targeted completion in April 2018.
- The existing 28 7-car trains on the West Rail Line are being converted to 8-car trains to enhance existing train services and to serve the future East West Corridor of the new line. By 31 December 2017, 24 of the converted 8-car trains had entered service on the West Rail Line and full conversion is targeted in mid-2018.



• One new lift and seven refurbished escalators came into service in 2017.



- We have provided **breastfeeding spaces** in staff rest rooms located **in 20 interchange stations** since December 2017, providing passengers in need with a comfortable breastfeeding environment.
- We commenced works to **install public toilets at two interchange stations**, namely Tiu Keng Leng and Yau Tong stations, and expect to complete them by the first half of 2019. A re-layout of male, female and accessible toilets and provision of a nursery room at Hung Hom Intercity Departure Hall was completed during 2017.



 As part of our continuing efforts to ensure timely and relevant information for passengers, the roll out of the new generation of Passenger Information Displays in Kwun Tong, Tsuen Wan, Island and Tseung Kwan O lines was mostly completed during 2017. Improvements were also made to onboard information on the Airport Express and buses.

# LIGHT RAIL

• The first batch of **30 light rail vehicles** will be delivered to Hong Kong in 2018 and the vehicles will enter passenger service progressively between 2019 and 2023.





# **MTR**

# Sustainability Report 2017

# Customer Service in Our Properties

We work to provide our customers with a comfortable and pleasant environment while shopping at MTR Malls. To provide a high-quality shopping experience for our customers, we offer a wide array of services that aim to enhance customers' comfort and convenience. We also continuously optimise and upgrade our in-mall facilities to better cater to the needs of shoppers, such as improving barrier-free facilities beyond the statutory requirements, and providing breastfeeding spaces in all MTR Malls. Additionally, we have developed mobile apps for our shopping malls to provide shoppers the most updated information on shopping and lifestyle experiences. With the opening of the Maritime Square 2 in December 2017, a Green Balcony and a Roof Garden are available for enjoyment by the community and for enhancing the customer experience.

#### **OUR MTR PROPERTIES MOBILE APPS**



#### MTR Malls

A smart shopping platform for MTR Malls, featuring shop directory and latest promotions.



#### **Elements Mall**

Elements mall app provides details on exclusive reward programmes, instant shopping privileges and the latest promotions.

To provide our customers with an unprecedented level of one-stop round-the-clock management services, our Premier Plus brand under the MTR Corporation provides six-star property management services to high-end developments. These include the residential development, The Cullinan, and the Two ifc office building. To realise our continuous improvement culture, we obtained the ISO 10002:2014 Complaints Handling Management System, and ISO 22301:2012 Business Continuity Management System certificates at Two ifc, a first for MTR managed properties.

The outstanding performance of MTR Malls has been recognised through the various awards received in 2017, including the "Top Ten My Favourite Malls Awards" and "Best Customer Service Mall Award" from Apple Daily, "Hong Kong Service Award - Shopping Mall" from East Week magazine, "Top 10 Shopping Mall Experiential Marketing Brilliance Award" by Metro Finance, as well as "Top 10 My Favourite Shopping Mall Awards 2016" from Hong Kong Economic Times.

# Customer Service in Station Retail Shops

At the end of 2017, we have over 1,416 MTR Shops across our railway network, providing a wide array of goods and services that serve our passengers' shopping needs with options including food and beverages, convenience shops, beauty and wellness products, fashion and accessories and passenger services. We also offer self-service vending machines throughout our railway network to satisfy customers' needs which include ATMs and automatic photo booths. Promotions and details of MTR Shops are updated regularly on our **website** A.

In order to provide the maximum level of convenience for passengers using our network, the mix of tenants in our MTR Shops is determined with reference to the Optimal Trade Mix Model, which takes into account our commercial team's assessment of the profile of passengers utilising each station and introduces an appropriate mix of tenants to best suit our customer needs.

We provide assistance to support new tenants in MTR Shops, including advice on shop design, guidelines on operations and management to facilitate their initial set-up at stations and a onetime free poster package within the MTR network for increased exposure to potential customers.





As the world faces increasingly difficult environmental challenges, preserving a healthy ecosystem is essential to maintaining liveable thriving communities all around the world. MTR plays an active role by providing a sustainable form of mass transportation. We strive to become one of the most resource-efficient and ecologically sustainable railway and property service companies in the world. We aim to reduce our direct emissions, use resources efficiently and strengthen our resilience to a changing climate.







compared to 2016



## Management Approach

Our **CoR Policy** defines our overarching approach to conserving resources and minimising and managing our environmental impacts with a specific focus on environmental protection, climate change and biodiversity. This approach governs all our operations throughout project lifecycles from conception to construction to long-term operation.

In Hong Kong, before any project commences we engage in the statutory Environmental Impact Assessment (EIA) process which alerts us to possible impacts and helps us avoid, minimise and mitigate these impacts. EIAs include an element of stakeholder engagement, inviting the public into the process through consultations, and expert review as needed. Following the process, the environmental permits issued specify conditions that apply to a project throughout its lifespan. Over the past several years, we have provided numerous environmental submissions to the Environmental Protection Department (EPD) and implemented various mitigation measures for the West Island Line, the South Island Line (East), the Kwun Tong Line extension, the Express Rail Link and Shatin to Central Link projects to ensure the environmental impacts are minimised to acceptable levels.

When building our new rail lines, the Continuous Environmental Improvement Programme (CEIP) facilitates information exchange between our construction and environmental employees as well as our consultants, contractors, and relevant Government officials. Environmental NGOs are also regularly updated on the environmental aspects of our new line construction.

During construction and operation, our Environmental Management Systems (EMS), which are designed to align with the ISO 14001:2015 and are certified to this standard, help us identify environmental impacts and work to achieve continuous improvements.

In addition, more detailed guidance on key environmental areas is established in our **Corporate Biodiversity Policy** and **Green Procurement Policy**. The MTR **Climate Change Statement** reinforces our commitment to mitigating and adapting to climate change to ensure safe, reliable and efficient delivery of our services in the future. We also support the **UITP Declaration on Climate Leadership** at the industrial level, which is an 11-point declaration outlining the impact of climate change, our responsibility to act, and our commitment to be Climate Leaders.

### Environmental Protection

Guided by our CoR Policy, we manage and minimise the environmental impacts of our business by implementing extensive environmental management and monitoring plans.

#### Energy

Providing reliable and convenient mobility requires a large amount of electricity generated from non-renewable and renewable fuel sources. As a major consumer of electricity, MTR is committed to energy efficiency in all our operations. Since purchased electricity represents our largest non-staff operating cost, MTR views energy efficiency initiatives as opportunities to reduce our impact on the environment while saving costs.

This year we consumed close to 3,000 GWh of electricity worldwide. The majority of our electricity consumption takes place in Hong Kong with a total of 2,023.7 GWh in 2017. Our international operations consumed a total of 947.5 GWh in 2017.

#### **ELECTRICITY CONSUMPTION IN HONG KONG (MWh)**

		2015 )	2016	) 2017
Total		1,954,893	1,948,421	2,023,667
Railway Operations	Total	1,541,108	1,542,581	1,628,344
	Heavy Rail	1,486,014	1,487,354	1,573,174
	Light Rail and Bus	55,094	55,227	55,170
Properties		413,785	405,840	395,323

Note: This takes account of energy use that we control in owned and managed properties (i.e. it does not reflect energy consumed by our tenants).



# MTR

# Sustainability Report 2017

In Hong Kong, our Railway Operations and Property Division accounted for 80.5% and 19.5% of our consumption, respectively. Electricity consumed in Hong Kong is primarily used by our heavy rail operations which experienced a network expansion with a full year of operation of the South Island Line (East) and the Kwun Tong Line Extension, and increased train frequency this year resulting in a slight increase in our electricity intensity.



#### ELECTRICITY EFFICIENCY RATIO OF RAIL ASSETS (HONG KONG)

#### **ELECTRICITY CONSUMPTION OF HEAVY RAIL OPERATIONS BY LOCATION**

Location	In GWh
Hong Kong	1,628.34
Shenzhen Metro Line 4	91.43
Melbourne's Metropolitan Rail Services	460.20
Stockholm Metro	169.73
Stockholms Pendeltåg	183.32
TfL Rail/Elizabeth Line	43.21
Total	2,576.23

#### **Properties Operations**

At our properties operations, we are committed to green building standards to help us manage environmental impacts seeking to achieve BEAM Plus or Leadership in Energy and Environmental Design (LEED) certifications for all our new projects.

In Hong Kong, we were the first company involved in property development to voluntarily and systematically implement the local green building standards. We have adopted the following actions to fulfil our commitments.

Achieve green building standards	<ul> <li>Aim to achieve a minimum of BEAM Plus Gold certification for our new residential property developments</li> </ul>
Support government energy efficiency initiatives	<ul> <li>Signed the Charter of External Lighting to switch off non- essential lighting after midnight</li> <li>Signed the Energy Saving Charter to voluntarily maintain an indoor temperature between 24–26°C during summer months in areas under our control</li> </ul>
Adopt energy saving technologies at our managed properties	<ul> <li>Installed variable speed drives in pumping and air-conditioning systems at some of our residential buildings</li> <li>Wide application of solar film for large external glass windows in clubhouse areas</li> </ul>
	<ul> <li>Installed motion and optical sensor controlled lighting with dimming function at the rear staircases and mechanical floors in some of our residential buildings</li> <li>Wide adoption of energy saving LED lamps</li> </ul>
Upgrading of facilities at our managed properties	<ul> <li>Upgraded Building Management System (BMS) for efficient operation management</li> <li>Replacement of aged air handling units of central air-conditioning systems in club houses and office buildings</li> <li>Replacement of aged air-conditioning units with high energy efficiency ones in residential entrance lobbies</li> <li>Replacement of aged water pumps of central air-conditioning systems in office buildings and residential properties</li> <li>Replacement of aged chillers in clubhouse and office buildings</li> </ul>
Drive behavioural change	• Partnered with China Light and Power to promote their energy saving programme



In 2013, we set a target to reduce energy use for our investment properties portfolio by 12% by 2023. As of end-2017, our Hong Kong investment properties portfolio has achieved a reduction of 10%.

In 2017, the CLP GREEN PLUS programme, a collaborative platform in Hong Kong that recognises energy efficiency and conservation, commended our energy saving efforts with the GREEN PLUS Award. Telford Plaza, an MTR Mall, received the Bronze Award in Property Management – Industrial & Commercial, which recognises energy saving efforts. The Two ifc building was awarded the BEAM Plus (Platinum Class) accreditation for its energy efficient operations.

#### **In Our Stations**

In Hong Kong, our efforts have focused on the energy demands required to maintain a comfortable temperature for our customers in the city's hot climate.

Exhaust fans	When the outside temperature is below 22°C, exhaust fans are used to create negative pressure in the station, which draws in cool ambient air through station entrances to reduce the overall cooling demand.
Screen doors	To conserve the cool air in the stations, we install screen doors to lessen the piston effect whereby moving trains pull cooled air into the tunnel and push hot air from the tunnel into the station, which in turn minimises the cooling volume on platforms.
Chiller replacement	Our chiller replacement plan is underway in stations until 2023

and is expected to reduce our electricity consumption by up to 30% from 2017 levels.

In Shenzhen Metro Line 4, we turn off standby escalators during less busy periods and we also switch off station fans during non-operating hours. At Stockholms Pendeltåg stations, we have been replacing all lighting to more energy efficient LED-lights in 2017. The replacement project is expected to be completed at all 32 stations in the beginning of 2018.

At London's Elizabeth Line, the platform and footbridge areas of Chadwell Heath station have been selected as the first location to trial the benefits of large-scale LED lighting systems. This has been complemented by the recently completed ticket hall refurbishment and external works which introduced LED lighting to smaller station areas. The project, which includes LED lights installation, control settings and lux level controls, was completed in December 2017 and we are looking forward to fully understanding the impact of this low energy solution on overall energy consumption.

#### **Rail Operations**

We aim for a 21% reduction in the electricity consumed per passenger-kilometre by 2020 in our heavy rail network, compared with 2008 levels. We also undertake a number of additional initiatives at our operations worldwide.

Understanding the need to coordinate our efforts, our Energy Management Working Group explores energy efficiency initiatives in our heavy rail operations. These initiatives include promoting energy conservation amongst employees. Through these initiatives we have been able to keep our electricity consumption per passenger kilometre to a modest increase of 1.26% compared to 2016 despite increases in train frequency to accommodate rising passenger numbers and accounting for a full year of South Island Line (East) and Kwun Tong Line Extension operations.

In Hong Kong, we adopted regenerative braking technology, which converts kinetic energy produced during braking into electrical energy which is then fed back into the power supply network for use by other trains through the overhead power system. Super-capacitor energy storage devices have also been installed in the South Island Line (East) to make better use of the surplus energy produced by regenerative braking.

During the procurement phase of our new railway lines, we implement a lifecycle cost assessment with our potential suppliers helping us embed energy saving technologies early in the lifecycle to ensure energy efficiency gains begin with the first phase of the process. Find out more on our train procurement process **here A**.



#### Water

The availability of clean water is important for the vitality of our surroundings. Our stakeholders have indicated that the consumption and availability of water are important issues, especially as a global water shortage has been affecting businesses and communities. We rely on the main supply provided by municipal water services as our primary source of water which is used largely for cleaning and landscaping purposes. To minimise our water consumption, we have installed water recycling systems and water saving devices in our operations.

#### WATER CONSUMPTION BY OPERATION (HONG KONG)



- Managed and investment properties
- Rail operation municipal water
- 🗱 Rail operation water from station cooling tower

#### **Rail Operations**

The majority of the water consumed in our railway operations is used for cleaning trains, railway infrastructure, and stations. In Hong Kong, water used for washing train cars is recycled for toilet flushing in depots or for another round of train washing. In Melbourne, as we operate in a drought-prone region, we emphasise water conservation using water tanks to collect water at stations and depots, and using recycled water to wash trains.

#### **Properties Operations**

In Hong Kong, 51% of our total water consumption takes place at our managed and investment properties. To address the intensive use of water from landscaping, a grey water recycling system was installed at LOHAS Park, which can collect and treat up to 440,000 litres of water a day. Recycled wastewater is used in landscaping and cleaning of outdoor public spaces. During winter, we used pool covers overnight to reduce heat and water loss from the heated indoor swimming pools. Other water saving devices such as dual flush toilets and automatic faucets are installed in our shopping malls.





#### Noise

We aim to minimise as much as practicable any noise generated by our operating trains and railway network maintenance activities which can impact our surrounding neighbours. We maintain the quality of life in communities along the railway and around the stations by implementing noise mitigation measures in our rail operations. The construction stages of new lines are particularly challenging, often requiring bespoke design of noise enclosures taking into account site limitation and construction challenges. The increasing urban density and new residential developments built around the railway also pose challenges. During 2017, our Operations Division received 174 complaints about noise, accounting for 84% of all environmentrelated complaints received throughout the year.

#### **Rail Operations**

We monitor noise levels along our railway and inside trains. The benchmarking level inside the trains was established based on feedback from passengers. Along with our many enhancements to increase our customer comfort, we are also always making improvements to mitigate the effects of operational train noise on the community.

In Hong Kong, we build our Rail plus Property communities consciously by keeping potential impacts of noise generated from the rail and trains in mind. Our noise mitigation measures are often designed to blend in with the surroundings, with the South Island Line (East) being the most recent example. The noise enclosure/barrier around the viaduct section is complemented by trees and shrubs planted under the viaducts to help structures blend in with the natural landscape in the area.



As the first of its kind in Hong Kong, a 150m long natural ventilated noise enclosure was built at Portal 1A of the Shatin to Central Link near Oi Man Estate combining noise protection, with aesthetically pleasing and energy saving functions. Due to the two level design with an opening at the top, the noise enclosure is able to meet fire regulations without the aid of a mechanical ventilation system. This brings the benefit of zero operating electricity cost and zero operating noise from mechanical ventilation. The enclosure was built with no disruption to East Rail Line service despite construction time and space constraints.



During the construction of new lines, we have implemented a number of systematic initiatives to ensure consistent application of noise mitigation measures across the construction of new lines. These include:

- The employment of independent acoustic consultants to review and recommend noise mitigation measures
- Provision of a construction noise permit management plan as needed
- Establishment of a permit-to-work system to ensure equipment use meets specifications and users are trained in noise control compliance when working during restricted hours (i.e. Monday to Saturday from 1900-0700, and all day Sunday and public holidays)
- Installation of "mobile sound insulation booth" for East Rail Line platform strengthening work

#### **Properties Operations**

In the property construction industry, precast elements and modularisation are becoming widely used in the building works. Pre-fabricated building and electrical and mechanical (E&M) services components are assembled on-site which help to minimise construction works and noise nuisance. Modularisation of the E&M system allows multi-discipline components to be erected as one operation, improving construction efficiency and reducing noise and waste generation.

To enhance logistical planning and installation processes for property construction, Building Information Modelling (BIM) has been introduced for recent property development projects for improved management of construction and interfaces to mitigate wastage in the installation process. The adoption of modular construction supported by BIM modelling has improved the construction process and alleviated nuisance and noise impacts during property construction.



# Air Quality

With millions of passengers and customers passing through our stations and trains, and visiting our shopping malls, we take extra care in monitoring and improving air quality in our rail operations and properties, which ensures healthy and comfortable journeys for our passengers and relaxing shopping experiences for our customers.

#### **Rail Operations**

At our Hong Kong operations, we have been proactively monitoring the air quality in our stations and inside the trains in accordance with the Practice Note for Managing Air Quality in Airconditioned Public Transport Facilities: Railways published by the EPD to ensure adequate ventilation.

#### **Properties Operations**

Our Hong Kong offices and properties were presented with a "Special Commendation Award" by the EPD for continuous efforts over the years to maintain a good and healthy indoor environment for employees and customers.







# SMART LINKS, LIVEABLE CITIES

# Sustainability Report 2017

### Waste

Every day, passengers pass through our stations in Hong Kong and countless others visit or live in our managed properties. While moving through these spaces, our customers may generate a wide range of waste, all of which is collected by MTR. To reduce the amount of waste going to landfills, we encourage waste separation and recycling by equipping rail stations and shopping malls with clearly marked recycling bins. This practice is also replicated at all common areas of our managed properties. In addition to recycling, we strive to minimise resource use by fostering internal behavioural change and proper waste handling in our rail operations and properties.

#### **Rail Operations**

Multiple approaches are adopted to manage the diverse types of waste generated by our rail operations.



Municipal Solid Waste	To prepare for the implementation of new waste regulations in Hong Kong, we have added more recycling bins in select stations and introduced directional signage in 2016 to inform customers of the locations of these bins to encourage their use. Meanwhile, to gain a nuanced understanding of the recycled waste collected at our rail operations, we collect and report recycled waste data.
	In London, MTR Crossrail is obligated to recycle at least 90% of commercial waste collected and not to send any commercial waste to the landfill. To achieve this, we depend on waste contractors to process the collected waste at Material Recovery Facilities (MRF), where waste is sorted, stored and recycled.
Excavation Materials and Construction Waste	Excavated materials and construction waste generated during new rail projects in Hong Kong are managed through the Government-regulated trip ticket system which applies at all sites in order to keep track of waste and ensure proper disposal.
	The Corporation also encourages the reuse of excavation materials, and the recycling and reduction of waste by our contractors during construction. All new railway projects contain related contractual requirements such as the implementation of a Waste Management Plan (WMP) to outline waste management best practices and mitigation measures on-site. Regular checks are in place to review waste records to ensure that waste management is properly implemented.
Wastewater	The majority of the water consumed by MTR in Hong Kong is appropriately treated and discharged into the public storm drainage/sewage system maintained by the HK SAR Drainage Services Department, while wastewater is treated at the sewage treatment plants at Lok Ma Chau and Lo Wu stations and effluent is discharged into coastal waters at Tai Po Kau Staff Quarters.
Chemical Waste	We produce minimal chemical wastes which primarily consist of used batteries and spent lubricant oil from our railway operations. In compliance with the Waste Disposal Ordinance (Cap 354) (WDO) of Hong Kong, we have registered our heavy rail stations and depots as well as bus depots with the EPD as chemical waste producers. For the proper collection, transportation and disposal of our chemical waste, we appoint chemical waste collectors licensed under the WDO.

#### **Properties Operations**

At our managed properties in Hong Kong, we collaborate with the Owners' Committees and Incorporated Owners to promote waste separation programmes to residents. Where possible, we liaise with recyclable waste collection contractors and organise green visits for our residents. Through our "Green Train Initiatives" and the provision of special recycling bins in the common areas of our managed properties, we collect used clothes, ink cartridges, and CD discs for recycling or donation to charities. Under the "Glass to Brick" programme, we go one step further to collect and turn waste glass bottles into reusable materials. We also partnered with green organisations appointed by the Environmental Campaign Committee on organising "Clean Waste Recyclables" workshops at some of our managed properties.

To help reduce food waste, MTR joined the Food Wise Hong Kong Campaign as one of its first signatories and as a member of its steering committee to support Government and other stakeholders. We strive to reduce the environmental impacts of food waste in the following ways:

MTR Malls	Under our self-initiated "MTR Malls Food Waste Reduction
	Pledge", we work with food and beverage tenants to minimise
potential waste at source and to promote food-waste reduct	
	practices in the shopping mall sector.

Managed residential properties

Under our "Central Food Waste Recycling for Improving Estate Environment" initiative, we have organised different promotional programmes, such as festive food donations and seminars to encourage residents to reduce their food waste by either donating to the underprivileged or by utilising leftovers in other dishes. At some of our managed properties, we also convert food waste into compost using composting machines.

# Climate Change

Resilience to climate change impacts affects the long term sustainability and prosperity of a city. MTR builds and operates green transportation networks in cities where we proactively mitigate environmental impacts in our operations and we also prepare for the compounding adverse impacts of climate change. At the same time, our reliable services connect communities and provide freedom of movement, allowing cities to have a more robust transportation infrastructure with greater capacity to absorb the shocks brought by climate change.

Given the enduring nature of our rail and property infrastructure, we recognise climate change as a rising risk with short, medium and long term implications. Extreme weather events, such as a higher incidence of strong storms, increase the likelihood of flooding and landslides among other environmental impacts which in turn could result in service disruptions, safety risks for our people and communities, and damages to our rail and property assets. Heat stress from rising temperatures also present an additional risk to MTR which may impact our Heat, Ventilation and Air-Conditioning systems, existing above-ground rail, and new rail and property projects.

With the introduction of the Hong Kong Climate Action Plan 2030+ in January 2017, MTR backs the Government's efforts to contribute to Mainland of China's wider obligations to reduce or avoid greenhouse gas (GHG) emissions under the Paris Agreement which has been in effect since November 4, 2016. We also support government initiatives in Australia, such as the Victorian Climate Change Adaptation Plan 2013 which highlights the risks related to rising temperatures and greater frequency and severity of bushfires.

We are doing our part to alleviate the increase in global temperature by promoting and providing a reliable and environmentally friendly mode of transport, working on **energy efficiency improvements** and reporting our progress to our stakeholders through our Sustainability Report as well as through other instruments such as the CDP Climate Change Investor Questionnaire. MTR also seeks opportunities to work collectively on climate change issues through local and international organisations such as the UITP.

Climate risks are incorporated into our **Enterprise Risk Management Framework** which integrates direct physical risks and other indirect risks into our strategic planning and cascades these concerns into departments within railway operations, property development, investment and management facilities that identify and manage relevant risks at the asset-level.

We structure our response to climate change to align with recommendations from climate scientists to simultaneously focus on mitigation and adaptation to reduce and manage identified risks.



# **Mitigation**

Purchased electricity for transport operations, properties, and other businesses is the leading contributor to our GHG emissions. To further understand our impact, we conducted a pilot lifecycle carbon assessment and found that a high proportion of GHG emitted throughout the lifecycle of our rail projects arises during the operational phase. Similarly, research has shown that daily operations of buildings such as environmental control systems and lighting account for up to 90% of GHG emitted throughout their lifecycles. Although we consume a significant amount of electricity, it is purchased directly from local energy providers leaving us with minimal direct influence on the sources of energy and the fuel mix. As a result, MTR focuses mitigation efforts on **energy saving measures** where we can make the greatest impact.

In addition to energy saving measures, our Hong Kong operations now assess lifecycle costs during the asset replacement process incorporating capital investment, operational resource use, maintenance, and spare part replacements. We have also replaced our older feeder bus fleet with new Euro V standard buses which have increased carrying capacity, and are equipped with energy efficient LED lighting and with efficient engines, reducing GHG emissions as well as other pollutants. These new buses have commenced service at the end of 2017. For more on our energy efficiency initiatives, please refer to **Energy**.

In order to incorporate more green materials into our projects, we pioneered the use of ground granulated blast furnace slag (GGBS) in 2015, which holds about 67% less embodied carbon than conventional cement.

# Adaptation

MTR has conducted weather impact assessments of our facilities in Hong Kong and abroad and adaptation measures have been implemented. For example, having ascertained which stations are most vulnerable to flooding or landslides resulting from heavy rains, we have enhanced or retrofitted flood protection measures at the high risk locations.

We also inspect and assess our existing railway infrastructure on a regular basis to ensure its robustness to extreme weather events. Before the rainy season begins, our Operations Division inspects the slopes surrounding our stations as a precautionary measure to identify any weak areas early. During the rainy season, we implement special procedures and deploy specific equipment for frontline staff in cases of extreme weather such as stronger typhoons and rainstorms, and our Customer Service Typhoon Support Team continues to provide **tips for safe travel during typhoons** and assist our customers during typhoon-related incidents. At our Property Division, procedure implementation is being strengthened, while steps have been taken to ensure that there is sufficient manpower and equipment to handle serious flooding situations.

In London, MTR Crossrail is working closely with Network Rail, which is responsible for track maintenance to develop a climate change adaptation plan. Meanwhile in Australia, MTM has implemented new planning and procedural measures for periods of extreme heat to help safeguard our operational performance. We now monitor the temperature of our substations in real-time allowing us to rapidly alert our electrical control centre to potential hazards.



# **Our Greenhouse Gas Performance**



TOTAL GHG EMISSIONS IN HONG KONG IN TONNES CO2e

Scope 1 emissions are direct GHG emissions from sources that are owned or controlled by the Corporation, such as emissions from fossil fuels burned on site.

Scope 2 emissions are indirect GHG emissions resulting from the generation of electricity, heating and cooling, or steam generated off site but purchased by the Corporation.

Scope 3 emissions include indirect GHG emissions from sources not owned or directly controlled by the Corporation but related to our activities.

#### BREAKDOWN OF SCOPE 1 EMISSIONS IN HONG KONG (tCO2e)





#### BREAKDOWN OF SCOPE 3 EMISSIONS IN HONG KONG (tCO2e)





# Biodiversity

A liveable city melds the convenience of urban life with the natural environment. At MTR, we maintain our community's connection to its natural heritage through conserving and nurturing biodiversity. We believe that rail and property development can coexist with nature in harmony.

# Rail Operations

We are dedicated to protecting the natural environment during the construction of new rail projects and take particular care on sections of the lines that impact natural habitats and areas with high ecological sensitivity.

# Living with the Trees

Trees serve as the city's lungs, allowing people to breathe fresh air and connect with nature and in some Hong Kong neighbourhoods, trees are even considered a cultural heritage. To preserve the natural and cultural value brought by trees, we try our best to preserve trees during the planning and construction of new lines, and have supported different initiatives and programmes to enhance their protection.

Preservation of trees is always our preferred choice. During the Island Line Extension construction phase, we shifted the location of our station and changed railway alignment to preserve the collection of Banyan trees that make up the "stone wall trees" on Forbes Street in Kennedy Town which have a unique historical, aesthetic, ecological and cultural value for the neighbourhood and the wider community in Hong Kong.

While tree felling is at times unavoidable, we strive to implement mitigation measures through compensatory planting of new trees. New parks and gardens are carefully designed and re-developed for public enjoyment after project completion.

To help us further improve our management practices and better understand trees in Hong Kong, we supported research led by the Tree Management Office of the Development Bureau, the Chinese University of Hong Kong and an arboriculture consultant firm to study the strength of the wood of different tree species in Hong Kong and Southern China, drawing data from trees removed along the Shatin to Central Link. Since late 2015, we have reduced the risk of fallen trees affecting our train services by increasing the frequency of our large-scale tree survey for over 33,000 trees along the open sections of the railway network from once every four years to once every two years. In addition to the adoption of a more stringent tree coding system, we also developed smart tags for trees along the railway network. Using radio-frequency identification ("RFID") technology, information about tree species, height and condition can be retrieved in a simple and quick manner. This enables us to monitor tree health and enhance our care of the trees while maintaining safety along the railway network during the typhoon season. Learn more about the use of smart tags **here**  $\mathbb{R}$ .

#### Learn more about our efforts in protecting trees





# Where Birds always Sing

MTR's management of the Lok Ma Chau wetland is an example of best practice in the region in terms of biodiversity management. In 2002, the Sheung Shui to Lok Ma Chau Spur Line, a portion of the East Rail Line, became a Designated Project under the Environmental Impact Assessment Ordinance. For the construction and operation of the spur line, the EIA stipulated a 32-hectare ecological enhancement area should be provided to mitigate impacts on wetland fauna in this ecologically valuable yet sensitive part of Hong Kong. The wetland located in northwest New Territories has been in operation since 2007 and helps to maintain biodiversity by providing various habitats as the marshes, fishponds and reedbed areas of the wetland provide important roosting sites for migratory birds.

For the past 15 years, we have worked with a group of environmental professionals on the management of the wetland with great conservation success. In addition to a high number of the endangered Black-faced Spoonbill (*Platalea minor*), the 2017 breeding season brought more than 100 pairs of birds representing eight different species including Little Grebe (*Tachybaptus ruficollis*) and White-shouldered starling (*Sturnia sinensis*), both of which are believed to have bred in the wetland successfully. Overall, more than 260 species have been spotted in the wetland since 2007, about half of all species ever recorded in Hong Kong. The area also hosts dragonflies, reptiles, mammals and amphibians including the vulnerable Chinese Soft-shelled Turtle (*Pelodiscus sinesis*) and the near-threatened Eurasian Otter (*Lutra lutra*).

Through this project, we demonstrate rail development that conserves biodiversity and natural heritage creating lasting value for the community.





### **Ecological Enhancement at the Express Rail Link**

As part of the Express Rail Link project, 2.4 hectares of Mitigation Stream Habitat (MSH) in the form of a widened open channel was constructed next to Shek Kong Stabling Sidings. The purpose of the MSH is to provide a suitable habitat for wildlife, especially targeting the Little Egret (*Egretta garzetta*), the Chinese Pond Heron (*Ardeola bacchus*) and the Scarlet Basker (*Urothemis signata signata*).

Ecologically friendly designs were incorporated into the MSH to enhance the ecological value of the channel. The stream was widened to increase the overall wetland area, and using varied water-depths, we re-created the riffle-pool sequence found in nature. The hydrology of the stream was also carefully designed to maintain continuous water flow along the stream bed throughout the year. Natural materials were chosen for the channel beds to benefit the aquatic wildlife, and trapezoidal channel banks improved the interface connection between aquatic and terrestrial wildlife. Stream banks have also adopted gentler slopes to encourage visits from wading birds such as herons and egrets.

Since the completion of the MSH in February 2017, monthly ecological monitoring has been conducted with confirmed sightings of waterbirds, including the two targeted ardeidae species. The MSH was designed to provide a variety of habitats including open water, open stream floodplains, grasslands, reedbeds and bamboo clumps which encourage the development of a self-sustaining natural watercourse that supports a rich diversity of wildlife.









**OUR PEOPLE** 

# Sustainability Report 2017

# Every promise we deliver to our customers and the community is supported by our committed and dedicated teams. While we build and maintain resilient railways, tracks, depots and buildings, it is our employees who bring our assets to life every day, each of them inspired to achieve excellence with a positive attitude to meet our customers' expectations.

Average training days per employee in Hong Kong





# SMART LINKS, LIVEABLE CITIES

## Sustainability Report 2017

# Management Approach

MTR

Following our CoR Policy and corporate culture, we formulate strategies, policies and practices to create an engaging and inclusive work environment, encourage participative communication and collaboration, drive effectiveness and innovation as well as agility to change, support professional and personal development, take care of the well-being of employees and maintain harmonious relationships.

Building on our successes in Hong Kong, we have developed our global HR strategy around three key areas: corporate culture development, talent management, and human capital mobility and development.

- Human capital mobility and development: To support the HR needs of MTR's global expansion and growth strategy, we established a Global Resource Pool and a Global Mobility Policy to facilitate global resource deployment and provide consistent relocation terms across global offices. We have provided opportunities to around 200 Hong Kong-based employees to experience full-time or travelling assignments overseas. During these assignments, knowledge exchange is encouraged between employees and overseas colleagues which enables the transfer and localisation of best practices and expertise across regions.
- Talent management: Our Talent Management Strategy is business driven. We identify and groom talented employees to build the corporate talent pipeline to meet business and succession needs. Personalised development plans are formulated to provide diversified development opportunities including job rotations, project-based assignments and taking up different roles.
- **Corporate culture development:** To ensure that our overall strategy and global initiatives are reviewed and effectively launched within the local contexts, HR divisions across all hubs organise joint regular meetings. This helps to align expectations in identifying the right candidates for MTR, as well as maintaining and strengthening the company culture, and working environment at all operations.



Our Code of Conduct (Code) highlights the trust our stakeholders place in us and guides employees at all levels to uphold a high standard of business ethics and integrity. The Code sets out the requirements of the Corporation's ethical practices, philosophy and values governing employee conduct in achieving its business goals. All employees are required to read, understand and comply with the Code.

The Code is reviewed and updated periodically to ensure appropriateness and compliance with corporate and regulatory requirements. Following a comprehensive rewrite of the Code of Conduct in

2015, a regular review of the content was conducted with the revised Code released to all employees in May 2018. Education programmes including seminars and mandatory computer-based training are in place to raise employee awareness and enhance the understanding of the Code's principles in the workplace.

#### BREAKDOWN OF FULL-TIME EMPLOYEES BY LOCATION





# MTR

# Sustainability Report 2017

# **Staff Consultation**

Building mutual trust, healthy, stable and harmonious relations with our employees is vital. In addition to complying with applicable legal obligations concerning collective bargaining and protection against anti-union discrimination in places where we operate, we engage in proactive and open dialogue with our employees to maintain a committed, passionate and connected workforce.

Following the success of our first global Staff Engagement Survey conducted in November 2016 with a high response rate of 94%, we have developed and communicated follow-up actions at corporate and departmental levels to respond to employee feedback. In Hong Kong, corporate initiatives on communication, change management, performance management and recognition have been implemented with active participation and positive feedback from employees.

Our two-tier Staff Consultation Mechanism maintains constructive and open dialogue between employees and management in Hong Kong.



To further strengthen communication between employees and management, we hold regular meetings with seven staff unions. In addition to these platforms, we have also instituted a number of other employee communication channels including the Enhanced Staff Communication Programme under which more than 7,800 two-way communication sessions were organised in 2017. The Programme has been recently revamped to further enhance the effectiveness of communicating corporate messages.

In Stockholm, MTRS also works to foster an open dialogue between all employees through the "Our Joint Journey" initiative launched in 2013 and extended to MTR Pendeltågen in Q1 2017. We conducted dialogue on core values, strategy and goals led by team managers, and workplace meetings with discussion on continuous improvement to promote better job satisfaction and a stronger commitment to our vision.

# Recruitment

To ensure all employees, from Hong Kong to the Mainland of China, Australia, Sweden, and the United Kingdom, share the same commitment to our values and culture, we seek to recruit the right people with the right attitude. MTR employees around the world share common characteristics such as the pursuit of excellence and continuous improvements, a proactive approach to resolving challenges, a commitment to caring services for our customers, and a continuous search for opportunities to learn and develop.



A variety of career choices across our businesses are available for the right candidates.



As a testament to our recruitment strategy, we were named the "Most Attractive Employer in Hong Kong" by the Randstad Group in 2017, the second time we have achieved first place. We were also honoured with five awards at the Human Resources Asia Recruitment Awards 2017 organised by Human Resources Magazine, including Silver Awards for "Best Career Website" and "Best Recruitment Evaluation Technique", and Bronze Awards for "Best Graduate Recruitment", "Best On-boarding Experience" and "In-House Recruitment Team of the Year".

# Equal Opportunity

MTR is committed to providing an open and supportive workplace free from discrimination based on gender, sexual orientation, disability, age, race, national or ethnic origin, family status or other personal characteristics that are protected by law. We objectively assess potential and current employees solely based on competence, experience, skills, and qualifications.

In addition to non-discrimination policies, we also pay attention to particular underprivileged groups with the aim of providing additional career support.

In 2017, we collaborated with the Hong Kong Council of Social Service and local universities for the fourth year to provide summer internship opportunities for 10 university students with disabilities or special educational needs. We received the Friendly Employment Award under the Talent-wise Employment Charter and Inclusive Organisations Recognition Scheme organised by the Labour and Welfare Bureau of Hong Kong for our pilot internship programme with the Ebenezer School and Home for Visually Impaired. We also employed 346 individuals with disabilities, representing 2% of full-time employees in Hong Kong.

#### PERSONS WITH DISABILITIES EMPLOYED IN HONG KONG



Metro Trains Melbourne has aligned key aspects of our recruitment strategy, talent management, policy and procedure, parental leave payments, as well as facilities and amenities to improve gender balance to achieve a target of 50:50 gender ratio for all new recruits. The number of fully qualified female drivers on the network has grown to 182 in 2017. Going forward, Metro Trains Melbourne will continue to enhance its recruitment strategy and promote the rail industry to young women at schools and universities.

#### GENDER DISTRIBUTION OF WORKFORCE BY LOCATION (FULL-TIME EMPLOYEES)





# **MTR**

# Sustainability Report 2017

### BREAKDOWN OF FULL-TIME EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER IN HONG KONG IN 2017



#### TOTAL WORKFORCE BY EMPLOYMENT TYPE BY GENDER IN HONG KONG IN 2017





# **Recruiting Young Talent**

To ensure that we have a pipeline of skilled and experienced talent for future operational requirements, MTR has launched and participates in a number of apprenticeship programmes. In 2017, we recruited a total of 139 Apprentices and 26 Technician Associates worldwide.

In Hong Kong, we implemented the **Apprenticeship Training Scheme**, the **Technician Associate Scheme**, the one-year Junior Tradesman Associate Training Programme in collaboration with the Labour Department and the four-year **Dual Track Craft Apprentice Training Scheme** organised by the Vocational Training Council to groom more youngsters in technical and maintenance disciplines. 501 individuals are currently enrolled in these schemes and programmes.

In the UK, MTR's operating agreement includes provisions targeting youth unemployment. MTR complies with the following relevant provisions, among others:

- Apprenticeships: Offer apprenticeship opportunities over the next eight years in various departments.
- **Worklessness:** Working with appropriate agencies to assist those who have completed their formal education yet remain without the skills necessary to gain employment.
- Educational/career support: Offer placement days over the concession period to enable individuals to learn, develop or enhance their knowledge and skills in relation to the employment market. As part of our School Engagement Plan to deliver school engagement days with specific reference to Science Technology Engineering Maths Network (STEMNET) subjects.
- Job creation: Vacancies advertised through the corporate website and published in local and diverse press.

The corporate Talent Pipeline starts with the Graduate Development Programme which identifies and grooms high calibre graduates with a focus on general management or professional expertise for taking up future leadership roles in all areas of our businesses. In 2017, we recruited 30 graduates including 10 graduate trainees, 11 graduate engineers and 9 functional associates with prospects for developing into managerial positions in the future.

Our graduate trainees go through an accelerated 2-year cross-functional job rotation, with the third year in a final placement with senior supervisory responsibilities in a business function. Our graduate engineers are provided with a Scheme 'A' training programme accredited by Hong Kong Institution of Engineers leading to the attainment of a Chartership. Our functional associates are developed to be professional in a specific function through rotations.

Through our Executive Associate Programme, young talents are identified, selected and groomed as future middle managers through cross-functional or cross-geographic job rotations, mentoring by cross-divisional senior managers and experiential group learning.

# Training and Development

At MTR, we recognise training and development plays an important role in our business and in nurturing future talent. Therefore, we invest in training programmes for our employees to help them keep abreast of the latest trends in their professions, manage advances in technology and respond to constant evolutions in our business environment.

# AVERAGE TRAINING DAYS PER EMPLOYEE

Location	Days
Hong Kong	7.1
Shenzhen Metro Line 4	8.1
Melbourne's Metropolitan Rail Services	8.9
Stockholm Metro	1.8
Stockholms Pendeltåg	2.8
TfL Rail/Elizabeth Line	24.0



#### TOTAL STAFF TRAINING IN HONG KONG (MAN DAY)



# **Staff Training and Development Programmes**

We cater our training and development programmes to our employees' varied training needs at different career stages. A range of management skills courses targeting employee needs at supervisory levels or above are available. Additional management training programmes include:

- The Integrated Staff Development Programme provides future leaders the opportunity to gain supervisory experience and develop a network of colleagues to support them as they progress in their careers.
- Railway Leader 2.0 Leadership Development Programme provides a customised training programme with job rotation opportunities for in-scheme managers to enhance their specific set of competencies for taking up greater responsibilities at the next level in the future.
- The Executive Continuous Learning Programme adopts a blended learning approach to promote effective leadership as well as strengthen professional competencies, leadership and management skills through a series of tailored learning initiatives allowing leaders to participate in deep-dive round table discussions.
- Leadership Coaching Programme fosters a coaching culture and enhances the performance management capability of team leaders through role modelling by the Executive in the "Wisdom of Coach" video series together with other employee engagement initiatives and skills building programmes.

Our management approach to safety and customer service is underpinned by targeted and specialised training programmes necessary for all employees regardless of their area of work and level of responsibility. To encourage employees learning anytime, anywhere, a one-stop platform "Mobile Learning Hub" was launched to provide practical mobile learning modules. With language courses tailored to different business operations, we further entrenched a self-learning culture in MTR.

The knowledge and skills of our trainers are crucial in delivering high quality and effective training programmes. The Operations Training Network was established to serve as an interactive learning and sharing platform for trainers. Designed to connect training units from across all business units, members of the network can exchange ideas and strategies to improve training services, and gain access to best practices and the latest training technologies.

# Nurturing Corporate Culture

Through our VMVs, our corporate culture has always been a critical enabler of the Corporation's success. Facing today's rapidly changing environment, our corporate culture is further strengthened through four focus areas, namely Participative Communication, Effectiveness and Innovation, Collaboration and Agility to Change, helping us meet new challenges and achieve our Corporate Strategy. To enhance corporate culture awareness amongst colleagues of all levels, a series of online games, topical seminars and skills-based workshops were launched under the "Culture Miles" promotional campaign.

- The Work Improvement Team (WIT): Designed to motivate employees to apply their own initiative, innovative thinking, problem-solving and decision-making skills to develop work improvement projects, teams are voluntarily formed, include four to ten members and are supported by a facilitator. This concept has been in place in Hong Kong for 29 years, and has been adopted by subsidiaries and associates in Shenzhen, Beijing, Hangzhou, Melbourne and Stockholm. There are now around 1,100 teams and 460 teams established respectively inside and outside of Hong Kong, involving nearly 6,400 employees in Hong Kong and 3,800 employees overseas. In 2017, these teams submitted over 1,500 work improvement projects.
- Staff Suggestion Scheme: In Hong Kong, we also encourage our employees to suggest new ways to make their work even more effective. In 2017, we received 502 suggestions, 12% of which were awarded and implemented in the workplace including ideas on resource saving initiatives, enhancing operational reliability, specially designed tools to improve work efficiency and adopting more effective safety measures.





# Recognition

To thank our employees for their outstanding performance, we have implemented a number of awards in addition to annual performance awards and performance-based salary reviews.

The MTR Grand Awards for Outstanding Contribution	MTR's highest recognition is open to all individuals and teams across our businesses in Hong Kong, subsidiaries and associates outside of Hong Kong for their exemplary performance or behaviours that demonstrates MTR values and align with new cultural focus areas. Nominees are submitted through department heads or local management and winners are selected through a stringent process administered by a cross-divisional vetting committee.	
	In 2017, 32 teams and two individuals were honoured and acknowledged at the annual awards presentation ceremony held in October. Their dedication and professionalism have enabled us to further enhance our services and expand our businesses in Hong Kong and overseas.	
Living the MTR Values Award Scheme	This Hong Kong focused award scheme provides colleagues with immediate recognition and rewards for their commendable actions or behaviours, with an aim to encourage them to continue demonstrating MTR values and help strengthen the corporate culture. Exemplary stories of awardees are promoted on the We Praise We Support platform of our Enterprise Information Portal. To honour employees with a long-term contribution and commitment to MTR, our Long Service Awards recognise those who have attained 10, 20, 30 or 40 years of service. In 2017, a total of 893 Hong Kong employees received this award.	
Celebrating You Awards Ceremony	Held at our UK operations, this award recognises individuals and teams throughout the business who have delivered over-and- above their role, demonstrated company values and delivered excellent customer service. A structured shortlisting process takes place once nominations close with an awards panel deciding on the top three for each category as well as the winner. Long Service awards also recognises colleagues who have achieved 20 years or more of continuous service. Celebrating You awards also provides a platform to reward and recognise outstanding supplier contributions.	
	MTR Crossrail also has Shout-Outs, an internal employee recognition scheme that allows an instant way for colleagues to recognise each other's hard work, commitment, and demonstration of the MTR values. Shout-Outs are issued weekly and communicated via internal communication channels.	
The VMV Awards	The VMV awards, hosted by MTR Nordic, is an annual gala where colleagues who have embodied our VMV are recognised. Around 340 employees and guest attended the 2017 VMV awards. 124 "Golden nugget (Guldklimp)" awards were presented by managers to recognise their employees. 314 "Grain of gold (Guldkorn)" were also given to colleagues for their extraordinary achievements.	



# Work-Life Balance

We encourage our employees to lead a balanced and healthy lifestyle through a wide range of programmes.

In order to ensure that our employees are able to fulfil their family obligations, we provide a number of family-friendly employment practices including marriage leave, maternity leave, paternity leave, compassionate leave and study leave with full pay, as well as lactation rooms at the workplace and related support.

We engage with Hong Kong employees and their families through annual events and social activities, such as Ocean Park Halloween Night and Christmas Children's Day. Subject to eligibility, the children of employees who are studying at local schools and educational institutions have access to a number of scholarships provided by MTR. The wide range of recreational and fitness facilities and activities at the Metro Recreation Club are accessible to Hong Kong employees and retirees for their enjoyment with their families and friends for a nominal fee.

Over the year, we organised health-related seminars and activities for our employees, including annual free on-site seasonal influenza vaccinations. One of the initiatives that received compliments from our colleagues is the ICAN Programme, which provides practical psychological advice on managing stress, enhancing physical and mental health and encouraging positive thinking. Additionally, a dedicated 24-hour counselling service hotline manned by professional counsellors is available to all MTR Hong Kong employees and their eligible dependents.

Our "Healthy Living Programme" emphasises a holistic approach to wellbeing to our employees. Developed under the theme of "Body, Heart, Mind and Relationship" wellness, it includes physical, mental, intellectual and social wellness, and was awarded the "Joyful@ Healthy Workplace Best Practices Award" by the Occupational Safety and Health Council.

In Melbourne, initiatives such as the Trauma Management Framework, MetroSafe Hotline, and Fatigue Risk Management Programme help us to promote health and well-being among our employees.

MTR Crossrail in 2017 launched a new online portal "My Wellbeing Centre" to promote a healthier lifestyle. This online portal supports employees to lead a more active lifestyle, get ideas on better nutrition and learn about financial and money matters. "My Wellbeing Centre" also provides expert blogs, habits to a healthier lifestyle, a wealth of fitness and mindfulness videos, nutritional tips, and impartial advice from financial experts.

# Sense of Community

At MTR, workplace culture is marked by belonging, where our employees feel a personal connection to their workplace and with one another. To build a connected workforce, we promote the development of strong ties among our employees through team building workshops and other initiatives.

We encourage participative communication between employees from around the globe. Through mtrconnects, an internal communication platform, employees learn about the latest developments affecting our global operations while getting to know each other by sharing work experiences and MTR people stories.

In Hong Kong, the voluntary turnover rate for our employees, at 4.5% in 2017, is low when compared to other employers in Hong Kong and the railway industry worldwide. Our ability to attract and retain skilled, motivated and experienced people is reflected in the length of service of our employees which averaged 13.1 years in 2017.

Once our employees retire, we support them in this important life transition through helpful information and newsletters. The "We are MTR" retirement community in place since 2013 maintains strong bonds with former colleagues, helps to build new networks with other retirees, and connects retired colleagues with the Corporation keeping them informed of latest developments. The programme is now connecting over 1,500 retirees.

At our Stockholm operations, the results of the annual staff survey remain positive demonstrated by our Employee Satisfaction Index at 84%.

#### **VOLUNTARY TURNOVER RATE BY LOCATION**

Location	%
Hong Kong	4.5
Shenzhen Metro Line 4	12.0
Melbourne's Metropolitan Rail Services	5.6
Stockholm Metro	5.2
Stockholms Pendeltåg	5.8
TfL Rail/Elizabeth Line	3.7





The diversity of our products and services means that MTR's supply chain is wide ranging. Leveraging our collaborative approach to our partnerships across the supply chain, we promote quality, safety, reliability and business ethics, and invite our suppliers and contractors to take part in our sustainability journey in creating lasting, positive changes in our society.



72% Response rate of key suppliers to our Corporate Responsibility Questionnaire in 2017



**715** Trainees under the Shatin to Central Link Contractors Cooperative Training Scheme since 2012



# SMART LINKS, LIVEABLE CITIES

# Sustainability Report 2017

# **MTR**

# Management Approach

The Sustainable Procurement Task Force, established in 2012 under the Procurement and Contracts Department, reports to the Engineering Director and monitors the overall implementation of sustainable supply chain initiatives. Its focus areas include:

- Supplier Survey and Compliance: surveys of the Supplier Code of Practice
- Green Procurement: share green procurement initiatives and practice
- Events and Promotion: coordinate awareness raising and sharing activities with suppliers, as well as promotion of the sustainability initiatives of the Corporation
- Training and Development: organise and recommend sustainable procurement related training to Task Force members for capability building

Dedicated to the responsible management of sustainable business operations, we set out policies and guidelines relating to procurement activities applicable to all employees.

- Code of Conduct: Committed to ensuring fair, open and honest competition, our Code of Conduct sets out clear guidelines on business ethics, ensuring that each employee is responsible for upholding our business ethics and complying with all relevant legislation, such as the Competition Ordinance, in all our procurement activities. Our latest Tender Notices, Invitation for Tender/Expression of Interest, Notice of Contract Awards and Supplier/Contractor Registration and Administration can be found on our website.
- Green Procurement Policy: As a founding member of the Hong Kong Green Purchasing Charter, we apply green specifications for a range of procured items, emphasising resource efficiency, recyclability and biodegradability. We also work with our suppliers to explore and implement innovative environmental practices.

To embed our sustainable procurement practices into our supply chain, we have developed a set of policies and procedures which stipulate our expectations and requirements on the ethical, social and environmental performance of our suppliers.

- **Supplier Code of Practice** (SCoP): Launched in 2008, the SCoP provides a behavioural framework for suppliers on ethical standards, human and labour rights, and supply chain management. Full compliance with the SCoP is a requirement of all procurement contracts entered into by the Corporation.
- MTR Corporation Slavery and Human Trafficking Statement (the "Statement"): With our rail- and property-related projects spanning countries and cities, the Statement reflects our commitment to ensure that there is no modern slavery or human trafficking in our extensive supply chain.





# Supply Chain Assessment

The products and services delivered by our suppliers contribute significantly to the quality of the service we provide, and the infrastructure we build. We have in place a set of supply chain assessment procedures to ensure that our high quality standards are met by our suppliers.

The huge investment we make for new train procurement requires a refined and enhanced assessment of the purchased equipment. For all our new train purchases, we conduct lifecycle assessments on their performance, with consideration of future energy use and maintenance costs over an average lifespan of 40 years. We also monitor the quality of the manufacturing and assembly processes and ensure that all performance indicators are achieved. In addition, incentives are provided to suppliers which are able to meet their stated performance range.

The following diagrams show the breakdown of our spending on products and services in 2017. Based on the procurement category as a proportion to their total spend, three separate groups of suppliers are assessed for transport operations, property and railway extension projects.

#### PERCENTAGE OF SPENDING BY MAJOR CATEGORIES IN 2017





Sustainability risks are identified for each supplier category, allowing us to devise strategic focus areas for supplier engagement by division and category of spending. Supply chain risks we have identified include delays to production and delivery of goods due to extreme weather events associated with climate change, as well as higher insurance premiums on our infrastructure and property assets.

To effectively manage and monitor the identified risks in the supply chain, we work closely with our suppliers to formulate and implement appropriate risk mitigation measures. For example, our suppliers keep safety and service critical spares at sufficient levels in stock, and investigate ways in which they may develop alternative sources of supply for proprietary spares, securing the continuity of supply for goods and services.

We also assess the sustainability risks of our critical suppliers based on their business nature, geographic locations and historical performance. Suppliers identified with high sustainability risk will be closely monitored and improvement actions will be taken.

Other risks in our supply chain are subject to regular assessment through the Enterprise Risk Management System.

Supplier Engagement

With the aim of fostering interactive and constructive communications with our suppliers, contractors and consultants, we invite them to participate in forums, seminars and site visits to benchmark performance and share best practices. Our procurement teams also conduct regular visits to suppliers' facilities. Through a culture of cooperative and mutual support, we enable suppliers to exercise responsible and sustainable practices beyond compliance.

# Supplier Survey

To help us understand how our suppliers are aligning with the Supplier Code of Practice and the maturity of their sustainability practices, we survey our suppliers periodically to collect information about the status of their policies, initiatives and monitoring systems relating to:

- ethical standards
- human and labour rights
- environmental protection

- consumer protection
- supply chain management
- conflicts of interest

The survey results help us identify areas for improvement and collaboration, as well as future plans for enhancing sustainability requirements. In our most recent survey in mid-2017, we surveyed 803 key suppliers and received information from 72% in response to our Corporate Responsibility Questionnaire. Compared with the baseline from 2011, we have observed an overall increase in the proportion of suppliers indicating they have corporate responsibility policies, initiatives and monitoring systems in place.

# **Collaboration with Our Contractors**

We further monitor the impacts along our supply chain by requiring each supplier to ensure that their own suppliers, subcontractors and specialist contractors also fully comply with our Supplier Code of Conduct.

Securing buy-in from contractors is integral to our strategy and objectives of being a responsible and sustainable business. While contractors are obliged to comply with a set of stringent safety specifications and requirements in the contract, we also collaborate with them to improve delivery plans through non-contractual partnerships. This helps promote industry best practice for safety, environmental performance and quality. Examples of our collaboration with contractors include:





Material Testing Laboratory for Railway Extension Projects	To streamline the testing process, the Material Testing System (MTS) was developed in-house by the MTR Materials Testing Laboratory for the construction of the five new rail projects including West Island Line, Kwun Tong Line Extension, South Island Line (East), Express Rail Link and Shatin to Central Link.
	Making use of multiple QR codes, RFID and mobile phone technology to automatically capture and transfer information on each concrete and rebar sample, the risk of human error or mishandling of data is reduced significantly. The test results are also available online for approval by Hong Kong Laboratory Accreditation Scheme (HOKLAS)'s approved signatories, reducing the formal report turnaround time to 24 hours in a paper-less environment.
	The Hong Kong Construction Materials Association and Government's Buildings Department are also current users /supporters of the MTS. The successful development of this industry-leading technology is a result of extensive collaboration with our material suppliers, contractors and construction engineers.
Graduate trainee programmes in our new lines	The Shatin to Central Link Contractors Cooperative Training Scheme (SCL CCTS) launched in 2012 to tackle the shortage of skilled construction workers faced by our railway extension projects.
	Aiming to provide training and internship programmes for various trades in the construction industry, the SCL CCTS requires all contractors of SCL civil works contracts to recruit a specified number of trainees, provide training for them and offer 12-month employment contracts to graduate trainees who pass relevant trade tests.
	Up to the end of 2017, 759 trainees have received training with 497 of them having completed the programme and are re-continuing their careers in different trades including tunnel workers, carpenters and steel fixers.
Awards for Excellence in Quality, Safety, Environmental Management & Stakeholder Engagement	Since 2010, we have organised annual awards for our main contractors and subcontractors to commend and encourage their outstanding performance, as well as promote continuous improvement during delivery of new railway projects for Hong Kong.
	The Gold winners in 2017 for different award categories are:
	Gold Quality Award: GTECH - CIC Joint Venture of Contract 849: Radio Communications System
	Gold Safety Award: jointly won by Siemens Limited of Contract 851: Fixed Communications System, and Gammon E&M Limited of Contract 1164: Building Services for Diamond Hill
	Gold Environmental Award: Leader Joint Venture of Contract 1106: Diamond Hill Station
On-Board – Annual supplier day at MTR Crossrail	On-Board, our annual supplier day, has the aim of building stronger relationships with our supply chain, but most importantly, to engage with the local supply chain and Small and Medium Enterprise (SME) businesses. We shared our challenges with our key suppliers and gave a chance for participating organisations to introduce their business and learn more about MTR Crossrail. 22 attendees from 15 key suppliers also took part in a forum which was focused on four topics: Diversity and sustainability, Innovation, Performance, and Risk mitigation.





# CONTRIBUTING TO SOCIETY





MTR enables community development by linking people to each other and to the places they enjoy. We carefully design our railway and property development to accommodate different needs for attaining a productive, healthy and happy lifestyle.





# MTR

# Sustainability Report 2017

# **Enabling Progress**

40 years ago, we financed our first railway line through our Rail plus Property model. To date, we have expanded our network to reach all 18 districts in Hong Kong using the same model, providing access to residential areas, business districts, recreational facilities, entertainment, and nature. Under this model, we are granted land development rights alongside railway alignments to build integrated communities incorporating residences, offices, shops, schools, green spaces and other community facilities, upon payment of the relevant land premiums. This people-oriented approach to development maximises land use and encourages the use of convenient and efficient mass transit reducing the reliance on road traffic.

With a focus on seamless connections and convenient access, the Rail plus Property model encourages the sustainable development of thriving communities along our railway lines which serves to further enhance the liveability of the cities where we operate.

# Community Railway

# **Building New Communities**

We understand the changing lifestyle aspirations of society, which has moved beyond functional considerations. As such, we seek to meet community expectations further through our property developments.

#### Maritime Square 2, Hong Kong

Maritime Square 2, since its completion in 2017, has become a new focal point in Tsing Yi. Inspired by the residents' aspirations for convenience and more open space, MTR has worked to convert the former Tsing Yi Lorry Park from an under-utilised space into the new shopping mall extension with pedestrian connections, featuring an approximately 5,000 square metres scenic roof garden and green balcony as well as improvements in the public transport interchange.



#### LOHAS Park, Hong Kong

As one of our biggest developments to date, LOHAS Park is being developed as a comprehensively planned and integrated community. The station itself, which opened in 2009, serves as the principal transport hub for the area, and upon completion of the development, it is expected to connect approximately 68,000 residents via a network of covered walkways.

# Linking Existing Communities

We recognise that in order to continue to connect and grow communities which are currently underserved by an efficient mass transportation system, we must continue to explore new opportunities to expand our network.

#### Shatin to Central Link, Hong Kong

The 17-km **Shatin to Central Link (SCL)** connects existing railway lines to form an East West Corridor and a North South Corridor. The lines will enhance connectivity across the New Territories and provide a much needed new cross-harbour connection, serving an estimated residential and working population of 640,000 in 2021. Apart from building new stations and tunnels, the project enhances 11 community facilities and upgrades the existing railway systems, including 15 new pedestrian walkway systems to improve the walking environment in the neighbourhood. The construction of SCL is progressing well with 81.2% of the works completed at the end of 2017. The SCL will save travel time and provide convenient access to the future multi-purpose stadium and other recreational facilities at the Kai Tak New Development Area, thereby spurring the growth of tourism and commercial activities and creating new employment opportunities.

To address community concerns and accommodate the special needs of stakeholders, we set up Community Liaison Groups (CLGs) as a channel to regularly communicate progress and construction impacts of our projects with the local community. CLGs include local district councillors, representatives of residents and estate management offices, schools, commercials and local organisations as well as representatives from government departments such as Highways Department, Transport Department, Hong Kong Police Force, Lands Department and Home Affairs Department. We also organised workshops and talks where the SCL Project Team and Contractors presented the latest SCL works information to local organisations and schools.

MTR takes great care to protect and preserve the history and heritage of our communities. Two historical structures located at the former Tai Hom Village, the Old Pillbox and the former Royal Airforce Hangar, classified as Grade 2 and Grade 3 historical buildings respectively, are now properly stored in temporary storage compounds at the MTR works site at the former Tai Hom Village of Diamond Hill. In addition, modifications of the design and construction of the Sung Wong Toi Station have been made in accordance with the conservation options agreed with relevant authorities in order to preserve the archaeological features unearthed at the site.





#### Elizabeth Line, London

The **Elizabeth line** will stretch more than 60 miles from Reading and Heathrow in the west through central tunnels across to Shenfield and Abbey Wood in the east. The new railway will stop at 41 accessible stations, 10 newly built and 30 newly upgraded, and is expected to serve around 200 million people each year.

To closely communicate with our stakeholders, "Here to Help" sessions are regularly hosted at stations, libraries and schools along the Elizabeth Line. These sessions allow customers to approach us in the morning or evening peak hours and speak to us about anything, which includes questions about station upgrade works and the new Class 345 trains.



# Inter-city connectivity

Drawing on our successful experience of connecting local communities and hence contributing to economic growth, we are ambitious in bridging opportunities through our inter-city railways.

#### Express Rail Link, Hong Kong

**Express Rail Link (XRL)** is a 26km high-speed cross-boundary rail service connecting Hong Kong with Shenzhen, Guangzhou and the high-speed rail network in the Mainland of China. We believe that with enhanced connectivity between Hong Kong and the Mainland of China, economic development and cultural exchange between the two areas will be enhanced. The pillar industries of Hong Kong, such as financial services, tourism, trading and professional services, stand to benefit in particular. Other benefits include saving traveling time significantly and creating jobs in railway operation and maintenance as well as in retail, catering, station management and services at the West Kowloon Station.

The 11-hectare underground station will be located in West Kowloon next to the West Kowloon Cultural District (WKCD) and connected to the WKCD as well as MTR Kowloon Station and Austin Station, creating a synergy with this world-class integrated arts and cultural district. Provision will be made at the station to facilitate the co-location of boundary control facilities.

#### MTR Express, Stockholm

MTR Express was launched on 21 March 2015, providing premium train service between Sweden's two largest cities, the capital Stockholm on the east coast and the industrial city of Gothenburg in the west. Service on the 455km route is provided by six all-new train sets, with 90 weekly train trips in total. Our services provide convenient transportation between the two economically important cities. MTR Express has the highest punctuality on the route, beating the main competitor by around ten percentage points.



# SMART LINKS, LIVEABLE CITIES



# Sustainability Report 2017

# **Investing in Communities**

To us, transforming communities refers to both infrastructure, and human capital. Complementing the way we build infrastructure for tomorrow, as a corporate citizen, we leverage our assets, skills, and resources to connect, grow and support communities to help them thrive. In 2017, in Hong Kong our colleagues volunteered in 295 projects to serve the community while the Corporation offered other in-kind donations valued at HK\$ 24 million and invested HK\$31 million to various community activities. Through our community initiatives, we aim to create a positive and inclusive environment in which individuals and groups can thrive and enjoy a quality life.



# Community Connect

"Community Connect" is the Corporation's platform for initiatives that aims to support everyone from the young to the old while enhancing the liveability of our city. What all the programmes have in common is that they have been carefully developed to nurture the communities we serve, so that together we can grow and thrive in a sustainable Hong Kong. Specifically,



- We invest in young people as they are our customers, future leaders, innovators, and game changers supporting their development is an investment in our communities' futures.
- We contribute to making cities more connected and vibrant through staff volunteering, and collaborating with NGOs and social enterprises to address evolving community needs.
- We enhance the travelling experience through integrating art into our station architecture and facilitating artists to stage their art related activities or displays in our stations and malls.

# **Community Investment Programmes**

#### Children

- HKRep x MTR: Master of Railway Safeway
- MTR Budding Station Master Programme
- MTR Safety and Courtesy Board Game

#### Youth

- STEM Challenge
- "Train" for life's journeys
- Youth Forum
- Retired Athletes Life skills training
- Pathways to Employment Funded Projects

#### Elderly

- 18 District x MTR NP 360 Elderly Programme
- RTHK 5 Elderly Programme
- Elderly Talks

# Leveraging our Skills and Assets

- MTR shops NGO and Social Enterprise Support Programme
- Advertising space for NGOs
- More Time Reaching Community Volunteering Scheme
- Art in MTR
  - Station artworks
  - Space for art exhibitions
  - Art events in MTR Malls
  - Community Art Galleries
  - Living Art Stage
- School Talks



Selected programmes are highlighted below.

#### Children

#### MTR x Hong Kong Repertory Theatre "Railway Safety School Tour Programme"

Launched in 2011, MTR has sponsored Hong Kong Theatre Repertory (HKRep) to perform interesting plays that integrate dramatic art appreciation with the understanding of safe and courteous travel manners, as well as the benefits brought about by railway development to students of kindergartens, primary schools and special schools in Hong Kong, under the Railway Safety School Tour programme.





### Youth

#### STEM Challenge

With the goals of encouraging students to discover how things work, and increasing their desire to explore STEM (Science, Technology, Engineering, and Mathematics) subjects, MTR launched STEM Challenge in 2017. Designed and supported by Junior Achievement Hong Kong, Hong Kong EdCity and The Association for Computer Education, the programme aims to encourage secondary-school students to stay curious about the world around them, and heighten their interest in STEM subjects. Since September 2017, MTR colleagues delivered talks to 7,500 secondary schools students to explain the application of STEM knowledge in the planning, construction, and operation of a railway system. Over 300 students from 44 schools formed 57 teams to develop their vision for "Inclusive and Sustainable Communities". Workshops are held for participants who applied their 3D-Printing skills to create a model that represents their vision. The programme reflects the Corporation's commitment to nurturing future talent by sharing our knowledge and equipping the next generation with the skills necessary to further enhance our communities' quality of living.



#### 'Train' for Life's Journeys

Some 170 secondary school students enjoyed their summer break by participating in our annual summer programme "Train' for Life's Journeys". The programme aims to support students in their career and life planning, and whole-person development. Through overnight camps, workshops and job tasting at MTR, students took a step out of their comfort zones, made new friends, and strengthened their interpersonal communication and creative-thinking skills. Together with their MTR mentors, who shared their personal experiences and their careers, participants learned about the Corporation as they embarked on their journey of self-discovery. This meaningful event received positive feedback from the participants. Among them, 91% said that they learned about the Corporation's operations and 82% found the job-tasting programme inspiring.


#### Youth Forum

Established in 2015, the Youth Forum comprises a diverse group of working youth and students aged between 18 and 30 who act as the Corporation's 'youth consultants'. Forum members exchange views with management during quarterly Forum Meetings and provide us with feedback and ideas on business initiatives. During the year, Forum members learn more about the Corporation through behind-the-scene visits to our sites and facilities. Through this experience, they gain exposure to working in a business environment and benefit from professional development opportunities that have been specially created to support their growth.

Forum Members contributed to the development of the name and logo of "Rail Gen 2.0", and their ideas have also improved how we communicate, such as using humour to promote safety in our "Ride with Manners" campaign, and rejuvenating our approach on topics such as Bylaws and the Fare Adjustment Mechanism.



#### Pathways to Employment Programme

Hong Kong's competitiveness hinges on the next generation's ability to meet the demand for a highly effective and creative workforce. As one of the city's largest employers, we launched the Pathways to Employment programme in 2015 to facilitate the business and social sectors working together to bridge the gap between the skills and ambitions of Hong Kong's youth and the demands of an evolving economy.

Four of the five projects chosen by the public under this programme are running at full steam. Our implementation partners are working towards preparing young people for the transition from education to work by teaching secondary-school girls how to code, enhancing the learning environment with fellows supporting teachers, developing young people to support children's rights, and incubating artisans to be commercially viable.

### Elderly

#### 18 District x MTR Ngong Ping 360 Elderly Programme

To express gratitude to seniors for their invaluable contributions to the community, MTR launched a new programme inviting over 10,000 senior citizens, through district council members across all 18 districts to enjoy a series of relaxing journeys to Ngong Ping 360. Leveraging the occasion, the elders were invited to play interactive games conveying good travel habits and safety messages so that they can continue to travel safely and smoothly on the MTR and be more active in the community.





### Leveraging our Skills and Assets

### NGO & Social Enterprise Support Programme

The NGO & Social Enterprise Support Programme is launched to empower NGOs or social enterprises to provide caring services for the community and creating job opportunities for the socially disadvantaged. Under the programme, enterprises can apply to run their business in selected MTR shops along the West Rail Line. Qualified applicants whose projects have obtained funding from either one of the two social enterprise funding schemes, that is, the "Enhancing Self-Reliance Through District Partnership Programme" of the Home Affairs Department or the "Enhancing Employment of People with Disabilities Through Enterprise Project" of the Social Welfare Department, can enjoy a concessionary monthly licence fee of just HK\$1,500. Currently, twelve retail shops along the West Rail Line have been made available with nine of these shops already up and running.

### Art in MTR

The "Art in MTR" initiative aims to enhance MTR journeys and offer inspiration in customers' life journeys. Incorporating stimulating and attractive artwork in station concourses and platforms creates a more vibrant and vivid travelling experience for everyone to enjoy. The programme has expanded to all MTR railway lines. At present, 74 works by established local and international artists from Australia, Mainland of China, Japan, Malaysia, New Zealand, South Korea, Taiwan, the UK and the USA serve as memorable focal points in various stations around Hong Kong.

We also provide space for art exhibitions at Central Station, Sheung Wan and Sai Wan Ho stations to display the outstanding artworks of amateur artists, schools and non-profit-making organisations in many different forms ranging from drawing and calligraphy to weaving, photography and hand-crafted artworks. This initiative also encourages the enjoyment of art among the public and builds appreciation for local artistic talents.

62 community art galleries throughout the MTR railway system provide highly popular venues for people from different walks of life to display their artworks and creative talents to the community at large.

#### More Time Reaching Community Volunteering Scheme

As an integral part of Hong Kong society, MTR is committed to contribute to the development of the communities in which we operate. Besides holding and supporting various community and charitable programmes, our employees have also contributed their own time to organise and participate in volunteer activities since 1993. To further strengthen our commitment to the community, the More Time Reaching Community Scheme was launched in 2005 to provide various forms of support for our staff volunteers.

In 2017, a total of 295 community projects were initiated and organised by our staff and retiree volunteers, a 12% increase from 2016, involving more than 6,800 participating volunteer headcount including staff's family members and friends. The projects mainly benefited the elderly, individuals with mental and physical challenges, children, youth and underprivileged families. We also held our first "MTR Volunteering Month" in November 2017 with active participation of new volunteers to serve different segments of the society. We are glad that More Time Reaching Community won the 7th Hong Kong Volunteer Award from the Agency for Volunteer Service. For the third consecutive year, MTR was awarded the "10 Years Plus Caring Company Logo" for our commitment to caring for the community, our employees and the environment.





**6,800** Number of staff and retiree volunteer participant headcount in 2017



94,238 Number of beneficiaries in 2017

# 🛞 MTR

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# Initiatives from Other Operations

### MTR Stockholm - My Dream Now

MTR Stockholm has collaborated with My Dream Now since 2014 with an aim to inspire and motivate teenagers to find their dream job. Our employees have been mentoring high school students, organising field trips at facilities and visiting classes in selected schools.

### **MTR Shenzhen**

To encourage green travel, MTR Shenzhen organised a relay race competition on 19 September 2017. Participants were only allowed to use bicycle, MTR and walking as the means of transportation. The destination was set at MTR Shenzhen Headquarters via Longhua Line. There was a Q & A session during the cycling session to promote awareness of environmental protection. The activity received positive feedback and when asked, participants were now more encouraged to use green transportation than before.



## Fundraising and Donations

Our employees are professional in delivering efficient and caring services and also actively participate in volunteering and fundraising activities. In 2017, our employees raised over HK\$368,000 for donation to charitable organisations. In addition, the Corporation and employees jointly donated a total sum of HK\$7 million to those injured and hospitalised in the arson incident in Tsim Sha Tsui Station which occurred on 10 February, 2017.

In addition, we offered free use of our advertising spaces to over 60 organisations supporting causes ranging from community volunteering to elderly care services. We hope to raise awareness on important issues affecting our society, as well as promoting these organisations to the wider community.

## Metro Trains Melbourne - The SMART Metro - Scratch Space Challenge

To get the next generation of transport leaders inspired about how a digitally enabled rail network can benefit the community, MTM held The SMART Metro – Scratch Space Challenge for 60 tertiary students, challenging them to find innovative solutions to manage the disruption to passengers during a period of significant capital works.

### MTR Crossrail

At MTR Crossrail, we regularly invite our Station Adopters to help us plant and maintain flowers in the flowerbeds at the Seven Kings and Goodmayes stations. The Partnership encourages community members to keep their area clean and tidy, and also help with station gardening. Due to positive feedback received by our Station Adopter, we are looking to launch Community Rail Partnerships within our wider communities. This will allow more members of the community to take an active role in maintaining their local station/our railway.

We have designated eight members of front line staff as "Community Champions" who supported in organising events within their local community near one of our stations. Organised events include those at the Manor Park and Forest Gate Festivals and the Ilford Hospital Chapel. Since our involvement, visitor numbers to the Chapel have increased by 20%. The increase in visitor numbers has allowed the chapel to maintain its funding from The English National heritage. All funds generated through open days are being used to make vital repairs on the building for many more generations to enjoy.



# BUILDING A SUSTAINABLE FUTURE

MTR provides reliable and convenient rail services to link people with the communities that are important to them. We also continuously improve the facilities and surrounding environment to enhance user experiences.





# SMART LINKS, LIVEABLE CITIES

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# MTR

### Operating in an increasingly diverse and volatile environment, we conducted a foresight study in 2016 to understand the trends shaping our operating environments in the time horizon leading up to 2030. We focused on the strategic trends affecting the future of transport and property globally, identified implications and priorities, and developed actions to better prepare the Corporation. We recognise the following megatrends:

### • Ageing Population

We foresee that the percentage of ageing population will increase considerably by 2030 and beyond. The impact on the operations of our railway network, property business and our workplace need to be considered in light of these demographic changes.

### • System Resilience for Climate Change

With the expected adverse effects of climate change in the future, our services will be increasingly affected by extreme weather events. Our railway system design needs to be more resilient and adaptive to accommodate the impacts brought about by climate change; as well as the need to be more "tuned in" to the changing environment.

#### • Digital Transformation

The expansion of digital technology will continue to facilitate the transformation of a broad range of sectors. Riding on the advancement of technology, there will be more opportunities to enhance our services and to engage with our customers, to develop new business models, and enhance the efficiency of our workforce.

### **Financial Sustainability**

Safety

Staff

**Environment and** 

Natural Resources

We recognise that we must balance the expectations of shareholders to receive reasonable investment returns with the needs of other stakeholders to maintain train fares at affordable levels while investing in safe, comfortable and convenient journeys. Understanding that new property development projects are a significant source of income, in order to ensure the continued success of our Rail plus Property model, we are working to identify untapped opportunities within our existing portfolio of businesses.

We have also taken note of the June 2017 report of the Taskforce on Climate Related Financial Disclosures ('TCFD') which recommends that large companies, such as MTR, evaluate how their businesses may be affected in short, medium and long term by both the physical risks and transition risks. Physical risks include acute issues such as an increased incidence of heatwaves or severe typhoons; chronic risks include issues The Partnership encourages community members to keep their area clean and tidy, and also help with station gardening. sea level rise and long term changes in temperatures and rainfall patterns. Transition risks include the impact of technology and government policy changes. We are reviewing TCFD's recommendations internally and will report progress in our future reports.

As new joiners replace more experienced employees who are approaching retirement, we must address the risks that will inevitably arise at our workplaces. We must also respond to changing passenger demographics, especially an increase in the number of elderly passengers and visitors to Hong Kong who are not familiar with our network, both of which may pose challenges for customer safety in the future. We have improved accessibility as well as directional signage in stations to address this challenge.

Among other significant environmental challenges such as waste management, we are mitigating emissions of greenhouse gases that increase the threat of climate change by using energy and other resources more efficiently. We have conducted climate adaptation assessments for Hong Kong and overseas businesses and are also developing an infrastructure strategy and design guide for our assets to adapt to direct impacts from climate change and enhance system resilience.

As we are responding to changing customer demographics resulting from an ageing society, we must also address the impacts of this trend on our own employee profile. As some of the more experienced members of our workforce are retiring, we face the risk of losing the skills and expertise gained through years of experience and knowledge development. We are actively promoting knowledge transfer between experienced employees and new joiners and junior employees. We are also stepping up training and development opportunities to further equip new joiners and promotees with the knowledge and skills that they need to perform their duties.

As we face a maturing workforce, we are also searching for opportunities of using automation to relieve the workload on our employees, and enhance work efficiency and flexibility in providing customer service. Meanwhile, we aim to attract young talent through a number of graduate trainee and apprenticeship programmes. We recognise that the younger generation of employees may have different expectations of the workplace and as such, we are working on strengthening cross-generational communication and engagement, improving training and development for digital skills and capabilities, and enhancing work-life balance.

# SMART LINKS, LIVEABLE CITIES



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In response to the risks and opportunities arising from these megatrends and to ensure that MTR continues to serve the community for many decades to come, we actively prepare for the future in different ways including those shared in this Report.

We are committed to playing a key role for the development of a sustainable and liveable city in Hong Kong as well as other locations where we operate. Growing patronage combined with a maturing and expanding network will place greater strain on our assets and on our ability to continue to surpass the important safety and service criteria in our transport operations in the future; with this in mind, we are carefully planning measures to meet the long-term needs of stakeholders as well as our business. For more details of our business outlook, please refer to our **Annual Report 2017**.

#### Customers

Continued growth of our patronage places increasing demands on our services. In addition to maintaining world-class levels of train service performance amidst the various asset upgrades and replacement projects, and relieving congestion on our network, we must address the needs of an ageing population, not only by improving barrier-free access and enhancing directional signage in our facilities, but also by exploring new business opportunities leveraging on our integrated transport and property systems.

A cross divisional taskforce has been set up to pay attention to the needs of the ageing population. The taskforce meets biannually to develop initiatives to address the elderly's needs.





More Auto-doors to enhance elderly accessibility

Implementing larger Exit Codes at station exits

Technology advances have brought risks and also opened up possibilities for more personalised customer services and engagement. As customers are exposed to unverified or inaccurate information about our services online, we may face increased scrutiny and higher expectations for responsiveness. At the same time, better data analytics also helps to reveal customers' behavioural patterns, which in turn helps us to improve services or develop new businesses. We have introduced a number of mobile apps to help us provide real time information and tailored services to address our customer needs. We continue to explore future opportunities that arise from digitisation.

#### Supply Chain

The quality of the service we provide depends on that of our suppliers. We also recognise our impact reaches beyond our own premises and operations. Therefore we continually monitor the sustainability risks in our suppliers, and encourage sustainable practices throughout our value chain, including our suppliers, contractors, tenants and passengers.

#### Community

As the aspirations of the community evolve, we will continue to invest in the communities we serve, looking for innovative ways to increase engagement with our stakeholders and to work with partners to support the development of a socially sustainable city in Hong Kong as well as other locations where we operate.



# MTR

# PERFORMANCE METRICS





This section provides consolidated information about our sustainability performance and data management, including definitions for key terms and the basis of calculation for Key Performance Indicators (KPIs).





# **INTRODUCTION**

This section provides consolidated information about our sustainability performance and data management, including definitions for key terms and the basis of calculation for Key Performance Indicators (KPIs). Please refer to **CoMET Benchmarking Results 2016** to learn how our operations compare with other metros globally.

This section is also available in Traditional Chinese, however for any differences in definition in the translation, the English version will prevail.

### Content Index

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. We have provided a GRI Content Index, which includes crossreferences to the International Association of Public Transport (UITP) Sustainability Charter Reporting Guide 1.0. We have also provided a HKEx ESG Content Index in order to demonstrate our current level of compliance with the 2015 Revision of the Hong Kong Stock Exchange Environmental, Social and Governance Reporting Guide.

Please refer to Content Index For Sustainability Reporting Guidelines.

### Learn more...

The **Global Reporting Initiative** promotes sustainability reporting as a way for organisations to become more sustainable and contribute to sustainable development.

Hong Kong Exchanges and Clearing Limited (HKEx) has published the revised **Environmental, Social and Governance Reporting Guide**. This guide outlines the currently recommended practice for listed companies and has been updated to include several changes to the **guide**.

UITP is a non-profit international association that brings together all public transport stakeholders and sustainable transport modes in a worldwide network. The **UITP Charter on Sustainable Development** is available from the association's website.

### Data Management

The following components of our robust data management system ensure the integrity of data disclosed in this sustainability report:

- The Audit Committee of the Board of Directors monitors the integrity of all financial information, and the Company has engaged KPMG as its External Auditor.
- Our Human Resources Management system contains all data relating to our staff.
- Our centralised sustainability data collection system provides an audit trail and helps to identify errors or data gaps for other quantitative data.
- Regular assessments and internal monitoring programmes ensure compliance in accordance with our Corporate Guideline and Instruction (CGI) on Compliance with Statutes and Regulations.
- Deloitte Touche Tohmatsu (Deloitte) provides independent limited assurance for other selected quantitative data (see page 82). The assured data have been marked with "#" in Performance Data Tables.

For the scope of the KPIs in Hong Kong and our Mainland of China and international businesses, please refer to **Scope Of Key Performance Indicators**.



# **INDEPENDENT ASSURANCE REPORT**

Deloitte Touche Tohmatsu (Deloitte) has provided independent limited assurance for selected quantitative data. The Assurance Report is presented in English only. If there is any inconsistency or ambiguity between the English version and the Chinese version of the Sustainability Report, the English version shall prevail as the limited assured content of Deloitte. This Assurance Report is presented in the following pages.

# **Deloitte.** 德勤

### To the Board of Directors of MTR Corporation Limited

We have been engaged by the Directors of MTR Corporation Limited (the "Company") to perform a limited assurance engagement in relation to certain sustainability performance data (the "Subject Matter") for the year ended 31 December 2017 (the "Reporting Period") and contained in its Sustainability Report 2017 (the "Sustainability Report"), as set out below.

### Subject Matter

The details of the Subject Matter selected by the Company are as follows:

### Hong Kong

#### **Environmental Performance**

GHG Emission Inventory

- Total GHG Emissions (tonnes CO<sub>2</sub>e)
  - Scope 1 (tonnes CO<sub>2</sub>e)
  - Scope 2 (tonnes CO<sub>2</sub>e)
  - Scope 3 (tonnes CO<sub>2</sub>e)
- GHG Emissions Corporate Support Functions and Main Office Buildings (tonnes CO<sub>2</sub>e)
- GHG Emissions Transport Operations (tonnes CO<sub>2</sub>e)
  - Scope 1 (tonnes CO<sub>2</sub>e)
  - Scope 2 (tonnes CO<sub>2</sub>e)
  - Scope 3 (tonnes CO<sub>2</sub>e)

- GHG Emissions Network Expansion (tonnes CO<sub>2</sub>e)
- GHG Emissions Properties and Other Businesses (tonnes CO<sub>2</sub>e)
  - Scope 1 (tonnes CO<sub>2</sub>e)
  - Scope 2 (tonnes CO<sub>2</sub>e)
  - Scope 3 (tonnes CO<sub>2</sub>e)

Waste Management

- Metals recycled from railway operations (tonnes)
- Total hazardous waste (tonnes)
- Total hazardous waste in liquid (litres)

#### Social Performance

- Total employees in Hong Kong (number)
- Voluntary staff turnover rate (%)
- Vacant posts filled internally either by promotion or transfer (%)
- Percentage of employees trained by management (%)
- Training days per employee (days)
- Training days per employee by gender (days)
- Training days per employee by management (days)
- Total staff training days (man-day)

### Supply Chain Management

• Number of suppliers by geographical region (number)

#### Safety Performance

- Passenger and Public Safety Fatality performance
  - Heavy Rail
  - Light Rail
  - Bus
- Passenger and Public Safety Number of injuries requiring hospitalisation per 100 million passenger journeys performance
  - Heavy Rail
  - Light Rail
  - Bus
- Staff Safety Fatality performance
- Corporate support functions
- Operations division
- Projects division
- Property division



- Staff Safety Lost time injuries per 100,000 man-hour performance
  - Corporate support functions
  - Operations division
  - Projects division
  - Property division
- Contractor Safety Fatality performance
  - Corporate support functions
  - Operations railway
  - Hong Kong property development and investment projects
  - Hong Kong investment property
  - Hong Kong management property
  - Hong Kong project construction railway extension projects
  - Hong Kong project construction network improvement projects
- Contractor Safety Reportable accidents per 100,000 man-hour performance
  - Corporate support functions
  - Operations railway
  - Hong Kong property development and investment projects
  - Hong Kong investment property
  - Hong Kong management property
  - Hong Kong project construction railway extension projects
  - Hong Kong project construction network improvement projects

# Mainland of China and International Business

(The Subject Matter, presented as follows, applies to

- Shenzhen Metro Line 4, managed by MTR Corporation (Shenzhen) Limited ("MTR(SZ)");
- Stockholm Metro, with operations and/or maintenance works being performed by MTR Tunnelbanan AB and MTR Tech AB; and Stockholms Pendeltåg, with operations being performed by MTR Pendeltågen AB (collectively named as "MTR Stockholm");
- Melbourne's metropolitan rail services, managed by Metro Trains Melbourne Pty. Ltd. ("MTM"); and
- TfL Rail Elizabeth Line, managed by MTR Corporation (Crossrail) Limited ("MTR Crossrail"), unless otherwise specified.)

### **Environmental Performance**

GHG Emission Inventory

- Total GHG Emissions (tonnes CO<sub>2</sub>e)
  - Scope 1 (tonnes CO<sub>2</sub>e) (only applicable to MTR(SZ), MTR Stockholm and MTM)
  - Scope 2 (tonnes CO<sub>2</sub>e)
- Total electricity consumption heavy rail (MWh)
- Total water consumption from railway operation (m $^3$ ) (only applicable to MTR(SZ) and MTM)

Waste Management

- Metals recycled from railway operations (tonnes) (only applicable to MTR(SZ), MTR Stockholm and MTM)
- Total hazardous waste (tonnes) (only applicable to MTR(SZ) and MTR Stockholm)
- Total hazardous waste in liquid (litres) (only applicable to MTR(SZ) and MTR Stockholm)
- Total commercial waste (tonnes) (only applicable to MTR Crossrail)

### Social Performance

- Total employees (number)
- Total workforce by gender (number)
- Total workforce by age (number)
- Total workforce by employment type (number)
- Voluntary staff turnover rate (%)
- Voluntary staff turnover rate by age (%)
- Voluntary staff turnover rate by gender (%)
- Percentage of employees trained by gender (%) (only applicable to MTR(SZ), MTR Stockholm and MTR Crossrail)
- Percentage of employees trained by management (%) (only applicable to MTR(SZ), MTR Stockholm and MTR Crossrail)
- Training days per employee (days)
- Training days per employee by gender (days)
- Training days per employee by management (days)

## Safety Performance

- Passenger and Public Safety Fatality performance
- Passenger and Public Safety Number of injuries per million passenger journeys performance
- Staff Safety Fatality performance
- Staff Safety Lost time injuries per 100,000 man-hour performance
- Contractor Safety Fatality performance (only applicable to MTR(SZ), MTM and MTR Crossrail)
- Contractor Safety Lost time injuries per 100,000 man-hour performance (only applicable to MTR(SZ), MTM and MTR Crossrail)

## Train Service Performance

- Train punctuality (%)
- Train reliability (revenue car-km/incident) (only applicable to MTR(SZ), MTR Stockholm and MTM)
- Train service delivery (%)

## Supply Chain Management

• Number of suppliers by geographical region



### **Reporting criteria**

The Subject Matter is presented in accordance with the "Performance Metrics" and "Data Management" set out on Page 77 and in the Appendix II of the Company's Sustainability Report which is contained in its website (in PDF) respectively (the "Reporting Criteria").

### Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Hong Kong Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Responsibilities

#### Deloitte Touche Tohmatsu

It is our responsibility to express a conclusion on the Subject Matter based on our work performed and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement and for no other purpose. We do not assume responsibility or accept liability to any other person for the contents of this report.

#### MTR Corporation Limited

The Directors are responsible for the preparation and presentation of the Subject Matter in accordance with the Reporting Criteria. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation and presentation of the Subject Matter, applying an appropriate basis of preparation, making estimates that are reasonable in the circumstances and ensuring the accuracy and completeness of the Subject Matter.

### **Reporting Framework**

We conducted our work in accordance with the International Standard on Assurance Engagements 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information, and the International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements (the "Standards"), issued by the International Auditing and Assurance Standards Board. The Standards require that we comply with ethical requirements, and plan and perform the engagement to obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the Subject Matter does not comply in all material respects with the Reporting Criteria.

### **Objectives**

The overall objectives of our procedures were to assess:

- Whether the Subject Matter was prepared, in all material respects, in accordance with the Reporting Criteria;
- The consistency of the information presented with the findings of our work.

### Procedures performed

Our work comprised the following limited procedures:

- Interviews with relevant management and personnel involved in providing information relating to the Subject Matter for inclusion in the Sustainability Report;
- Sample testing of documentary evidence at the Company's corporate-level and subsidiary-level;
- Analytical procedures; and,
- Recalculation.

We have not performed any procedures in relation to other data included in the Sustainability Report. In addition, our work performed is not for the purposes of expressing an opinion on the effectiveness of the Company's internal controls.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

#### Inherent Limitations

Non-financial performance information, including the Subject Matter, is subject to more inherent limitations than financial information given both its nature and the methods used for determining, calculating, sampling and estimating such information. This could have a material impact on comparability. Qualitative interpretations of relevance, materiality and the accuracy of such information are subject to individual assumptions and judgements.

### Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that caused us to believe that: 1) the Subject Matter has not been prepared, in all material respects, in accordance with the Reporting Criteria, and 2) that relevant sections in the Sustainability Report relating to the Subject Matter are not consistent with the findings of our work.

#### Deloitte Touche Tohmatsu

Certified Public Accountants Hong Kong 8 May 2018



# **PERFORMANCE DATA TABLES**

### Hong Kong Environmental Performance

КРІ	Unit	Links	2013	2014	2015	2016	2017
Energy Use							
Total electricity purchased for Railway Operations	MWh		1,424,953	1,471,301	1,541,108	1,542,581	1,628,344
Heavy rail	MWh		1,371,918	1,417,339	1,486,014	1,487,354	1,573,174
Light rail and bus	MWh		53,035	53,962	55,094	55,227	55,170
Electricity consumption per revenue car-km	kWh per revenue car-km	-	4.70	4.78	4.84	4.79	4.85
Heavy rail	kWh per revenue car-km	Energy	4.69	4.77	4.83	4.78	4.84
Light rail and bus	kWh per revenue car-km	le	5.03	5.03	4.99	4.95	4.95
Total electricity purchased for managed and investment properties	MWh		407,966	410,168	413,785	405,840	395,323
Water Consumption							
Water consumption from railway operations	m <sup>3</sup>		846,709	851,639	870,630	754,541	768,302
Total water consumption from station cooling towers (2016 onward)	m <sup>3</sup>	Water	n/a	n/a	n/a	187,952	223,237
Water consumption from managed and investment properties	m <sup>3</sup>		1,214,050	1,108,946	1,152,486	1,124,603	1,147,940
Waste Management							
# Metals recycled from railway operations	tonnes		2,843	3,034	3,724	3,247	3,598
# Total hazardous wastes (2015 onward)	tonnes		n/a	n/a	223	186	238
# Total hazardous wastes in liquid (2015 onward)	litres	Waste	n/a	n/a	98,104	96,599	75,609
General wastes from railway extension projects	tonnes		58,967	187,831	83,091	89,022	53,608
Total construction wastes recycled (2014 onward)	tonnes		n/a	6,288,912	5,656,010	14,030,460	1,040,668
Climate Change Management							
Annual review of climate change - risks assessment and continuous risk management action	Text	<u>Climate Change</u>	Completed	Completed	Completed	Completed	Completed



# Hong Kong Environmental Performance

K	PI	Unit	Links	2013	2014	2015	2016	2017
	GHG Emission Inventory							
#	Total GHG emissions	tonnes CO <sub>2</sub> e		1,359,996	1,497,435	1,343,723	1,355,381	1,334,394
#	Scope 1	tonnes CO <sub>2</sub> e		51,963	58,342	51,752	48,141	48,924
#	Scope 2	tonnes CO <sub>2</sub> e	Links	1,242,449	1,354,625	1,258,826	1,263,952	1,257,664
#	Scope 3	tonnes CO <sub>2</sub> e		65,584	84,468	33,145	43,288	27,806
	Corporate Functions and Main Office Buildings							
#	Total	tonnes CO <sub>2</sub> e		21,059	21,493	18,900	20,243	20,212
	Scope 1	tonnes CO <sub>2</sub> e		2,943	2,895	2,943	3,145	3,799
	Scope 2	tonnes CO <sub>2</sub> e		16,268	16,645	14,029	14,585	13,679
	Scope 3	tonnes CO <sub>2</sub> e		1,847	1,953	1,928	2,513	2,734
	Transport Operations							
#	Total	tonnes CO <sub>2</sub> e		991,629	1,103,799	1,034,102	1,043,268	1,055,126
#	Scope 1	tonnes CO <sub>2</sub> e		41,183	47,116	39,311	38,082	38,495
#	Scope 2	tonnes CO <sub>2</sub> e		949,969	1,056,204	994,316	1,004,663	1,016,074
#	Scope 3	tonnes CO <sub>2</sub> e		476	479	475	523	556
	Network Expansion							
#	Total	tonnes CO <sub>2</sub> e		67,113	86,457	35,043	42,789	25,871
	Scope 1	tonnes CO <sub>2</sub> e		433	278	274	244	206
	Scope 2	tonnes CO <sub>2</sub> e		4,143	4,804	4,705	2,959	1,842
	Scope 3	tonnes CO <sub>2</sub> e		62,537	81,375	30,064	39,586	23,823
	Properties and other Businesses							
#	Total	tonnes CO <sub>2</sub> e		280,196	285,686	255,678	249,081	233,185
#	Scope 1	tonnes CO <sub>2</sub> e		7,404	8,053	9,224	6,670	6,424
#	Scope 2	tonnes CO <sub>2</sub> e		272,069	276,972	245,776	241,745	226,068
#	Scope 3	tonnes CO <sub>2</sub> e		724	661	678	666	693

#### Notes

# these KPIs have been assured by Deloitte.

'n/a' represent it is not applicable under the KPI in this context.



КРІ	Unit	Links	2013	2014	2015	2016	2017
Total number of passenger trips	Weekday average in million	<u>Our Customers</u>	5.25	5.46	5.56	5.59	5.76
Total number of passenger trips - Hong Kong passenger services	million		1,819	1,900	1,934	1,949	2,000
Share of franchised public transport in Hong Kong	%	About MTR	46.9	48.1	48.5	48.4	49.1
Total Workforce							
# Total employees	number		16,158	16,624	17,127	17,639	17,524
Total workforce by age							
Aged below 30	number		n/a	3,103	3,335	3,595	3,593
Aged 30-below 50	number		n/a	8,561	8,635	8,676	8,531
Aged 50 & above	number		n/a	4,960	5,157	5,368	5,400
Total workforce by gender							
Female	number	Our People	n/a	3,375	3,465	3,631	3,606
Male	number		n/a	13,249	13,662	14,008	13,918
Total workforce by employment type							
# Full time	number		n/a	16,624	17,127	17,639	17,524
Part time	number		n/a	2,507	2,698	3,010	1,960
Persons with disabilities employed	number		223	256	271	300	346
Persons with disabilities employed (%)	%		1.4	1.6	1.6	1.7	2.0
Women employees	%		20.3	20.3	20.2	20.6	20.6
Women on the Board	%	<u>About MTR</u>	27	25	21	21	20





KF	21	Unit	Links	2013	2014	2015	2016	2017
١	/oluntary Staff Turnover							
# -	Fotal voluntary staff turnover rate	%	_	4.2	4.4	3.7	3.5	4.5
	Voluntary staff turnover rate by age (2015 onward)							
	Aged below 30	%		n/a	n/a	8.2	7.6	9.7
	Aged 30-below 50	%		n/a	n/a	3.3	3.5	4.3
	Aged 50 & above	%	_	n/a	n/a	1.6	0.9	1.2
	Voluntary staff turnover rate by gender (2015 onwar	-d)						
	Female	%		n/a	n/a	5.6	4.5	6.2
	Male	%		n/a	n/a	3.2	3.2	4.0
	/acant posts filled internally either by promotion or transfer	%	<u>Our People</u>	49	59	59	67	57
	New Employee Hires							
	New employee hires rate by age							
	Aged below 30	%		n/a	n/a	n/a	35.4	30.5
	Aged 30-below 50	%		n/a	n/a	n/a	5.2	4.6
	Aged 50 & above	%		n/a	n/a	n/a	1.3	1.3
	New employee hires rate by gender							
	Female	%		n/a	n/a	n/a	14.3	10.7
	Male	%		n/a	n/a	n/a	9.1	8.4
	Employee Training							
	Percentage of employees trained (2015 onward)							
	Percentage of employees trained by gender							
	Female	%		n/a	n/a	80.3	82.6	88.7
	Male	%		n/a	n/a	90.6	88.1	91.7
	Percentage of employees trained by management		Training and Development					
#	Managers	%		n/a	n/a	92.9	76.8	75.1
#	Non-managers	%		n/a	n/a	88.0	88.3	93.0



K	PI	Unit	Links	2013	2014	2015	2016	2017
	Employee training days							
#	Total staff training days	man-day		103,517	112,831	111,296	122,680	121,742
	Management training	man-day		22,133	18,784	17,384	18,484	18,474
	Operations training	man-day		81,384	94,047	93,912	104,196	103,268
#	Training days per employee (overall)	days	Training and Development   Investing in Communities   Fair and Ethical Business	6.5	6.9	6.6	7.1	7.1
	Training days per employee by gender (2015 c	onward)	Training and Development					
#	Female	days	Training and Development	n/a	n/a	4.8	5.2	5.0
#	Male	days		n/a	n/a	7.1	7.5	7.6
	Training days per employee by management (	2015 onward)						
#	Managers	days		n/a	n/a	2.4	2.3	1.9
#	Non-managers	days		n/a	n/a	7.2	7.7	7.7
	Charitable Contributions							
	Cash donations	HK\$ '000		6,700	15,400	8,200	13,500	21,800
	Gifts in kind	HK\$ '000		27,520	20,490	19,100	22,000	24,000
	Employee fundraising	HK\$ '000	Investing in Communities	398	274	515	362	368
	Employee volunteering (number of projects)	number	<u></u>	239	245	255	263	295
	Employee volunteering (number of participating headcounts)	number		6,000	6,000	6,069	6,292	3,954
	Legal Compliance (Number of Convicted Cases)							
	Cases of corruption	number		0	0	0	0	0
	Cases involving health and safety	number		n/a	1	0	2	0
	Cases involving labor standards	number		n/a	0	0	0	<b>1</b> <sup>[1]</sup>
	Cases involving product responsibility (including customer privacy)	number	Fair and Ethical Business	n/a	0	0	0	0
	Cases involving working conditions	number		n/a	0	0	0	0
	Cases involving environmental regulations							
	MTR Corporation	number		0	2	0	0	0
	Main contractors	number		4	1	2	2	<b>3</b> <sup>[2]</sup>



КРІ	Unit	Links	2013	2014	2015	2016	2017
Customer Service Pledge items achieved							
Train service delivery							
Island, Kwun Tong, Tseung Kwan O, Tsuen Wan, South Island (since 2016), Tung Chung and Disney Resort lines and Airport Express	%		99.9	99.9	99.9	99.9	99.9
East Rail Line (including Ma On Shan Line)	%		99.9	99.9	99.9	99.9	99.9
West Rail Line	%		99.9	99.9	99.9	99.9	99.9
Light Rail	%		99.9	99.9	99.9	99.9	99.9
Passenger journeys on time							
Island, Kwun Tong, Tseung Kwan O, Tsuen Wan, South Island (since 2016), Tung Chung and Disney Resort lines	%		99.9	99.9	99.9	99.9	99.9
Airport Express	%		99.9	99.9	99.9	99.9	99.9
East Rail Line (including Ma On Shan Line)	%		99.9	99.8	99.9	99.9	99.9
West Rail Line	%		99.9	99.9	99.9	99.9	99.9
Train punctuality		<u>About MTR</u>					
Island, Kwun Tong, Tseung Kwan O, Tsuen Wan, South Island (since 2016), Tung Chung and Disney Resort lines	%		99.8	99.7	99.8	99.7	99.7
Airport Express	%		99.9	99.9	99.9	99.9	99.9
East Rail Line (including Ma On Shan Line)	%		99.9	99.9	99.9	99.9	99.9
West Rail Line	%		99.9	99.9	99.9	99.9	99.9
Light Rail	%		99.9	99.9	99.9	99.9	99.9
Train reliability							
East Rail Line (including Ma On Shan Line) and West Rail line	revenue car-km/ incident		4,412,228	4,747,878	7,386,248	7,327,371	8,158,284
Island, Kwun Tong, Tseung Kwan O, Tsuen Wan, South Island (since 2016), Tung Chung and Disney Resort lines and Airport Express	revenue car-km/ incident		3,474,269	3,585,340	2,861,014	3,964,527	5,202,676



### Hong Kong Social Performance

K	PI	Unit	Links	2013	2014	2015	2016	2017
	Temperature and ventilation							
	Trains, except Light Rail: to maintain a cool, pleasant and comfortable train environment generally at or below 26°C	%		99.9	99.9	99.9	99.9	99.9
	Light Rail: on-train air-conditioning failures per month	times		0	0	0	0	0
	Stations: to maintain a cool, pleasant and comfortable environment generally at or below 27°C for platforms and 29°C for station concourses, except on very hot days	%	<u>Our Suppliers</u>	99.7	99.9	99.9	99.9	99.8
	Northwest transit service area bus service							
	Service Delivery	%		99.5	99.7	99.7	99.7	99.0
	Supply Chain							
	By continent (2015 onward)							
#	Number of suppliers in Africa	number		n/a	n/a	0	0	0
#	Number of suppliers in Asia	number		n/a	n/a	1,865	1,792	1,667
#	Number of suppliers in Europe	number		n/a	n/a	154	143	145
#	Number of suppliers in North America	number	<u>About MTR</u>	n/a	n/a	29	29	21
#	Number of suppliers in Oceania	number		n/a	n/a	26	24	26
#	Number of suppliers in South America	number		n/a	n/a	0	0	0

#### Notes

[1] A Competent Person ("CP") of a Contractor was prosecuted for contravening Section 31(1) of the Electricity Ordinance by carrying out the electrical work without being a registered electrical worker. The CP pleaded guilty and was fined HK\$ 5,000.

[2] One case related to water pollution control involving a contractor of the Shatin-to-Central Link, who was fined HK\$ 180,000. Another case related to dumping at sea involving a contractor of the Shatin-to-Central Link, who was fined HK\$ 200,000. The other case related to noise control ordinance involving contractor and an excavator operator at Whampoa Station were fined HK\$ 12,000 and HK\$ 10,000 respectively. The Corporation has continued to remind all contractors of the importance of observing applicable Ordinances, and has stepped up site monitoring and site inspections to help prevent recurrence.

# these KPIs have been assured by Deloitte.

'n/a' represent it is not applicable under the KPI in this context.



K	2	Unit	Links	2013	2014	2015	2016	2017
I	Passenger and public safety							
	Fatality							
	Heavy rail							
	Target	number		0	0	0	0	0
#	Performance	number		2	0	1	0	0
	Light rail							
	Target	number	<u>Customer</u> Safety	0	0	0	0	0
#	Performance	number	ourery	0	0	1	1	0
	Bus							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	1	0
	No. of injuries requiring hospitalisation per 100 mil	llion passenger journeys						
	Heavy rail							
	Target	number		9.72	10.02	9.72	9.48	9.29
#	Performance	number		10.25	8.12	7.91	8.39	7.30
	Light rail							
	Target	number	<u>Customer</u> Safety	11.50	12.08	12.67	13.66	13.66
#	Performance	number	<u></u>	15.73	8.61	14.76	14.55	9.52
	Bus							
	Target	number		9.12	8.66	7.48	6.88	6.88
#	Performance	number		4.91	4.68	0.00	6.29	9.44



KP	1	Unit	Links	2013	2014	2015	2016	2017
S	itaff safety							
	Fatality							
	Corporate support functions							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	0	0
	Operations Division							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	0	1 <sup>[3]</sup>
	Projects Division		Staff and					
	Target	number	Contractor	0	0	0	0	0
#	Performance	number	<u>Safety</u>	0	0	0	0	0
	Property Division							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	0	0
	China and International Business Division (up to 2015)							
	Target	number		0	0	0	n/a <sup>[4]</sup>	n/a <sup>[4]</sup>
	Performance	number		0	0	0	n/a <sup>[4]</sup>	n/a <sup>[4]</sup>



KP		Unit	Links	2013	2014	2015	2016	2017
	Lost time injuries per 100,000 man hours							
	Corporate support functions							
	Target	number		0.14	0.13	0.13	0.15	0.15
#	Performance	number		0.23	0.17	0.17	0.09	0.06
	Operations Division							
	Target	number		0.49	0.50	0.45	0.44	0.44
#	Performance	number		0.67	0.40	0.56	0.47	0.42
	Projects Division		Staff and					
	Target	number	Contractor	0.10	0.10	0.10	0.10	0.10
#	Performance	number	<u>Safety</u>	0.08	0.11	0.11	0.25	0.20
	Property Division							
	Target	number		0.30	0.30	0.30	0.30	0.30
#	Performance	number		0.29	0.10	0.14	0.09	0.09
	China and International Business Division (up to 2015)							
	Target	number		0.00	0.00	0.00	n/a [4]	n/a [4]
	Performance	number		0.00	0.00	0.00	n/a [4]	n/a [4]



K	PI	Unit	Links	2013	2014	2015	2016	2017
	Contractor Safety							
	Fatality							
	Corporate support functions							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	0	0
	Operating railway							
	Target	number		0	0	0	0	0
#	Performance	number		0	0	0	0	0
	Hong Kong property development and investment projects							
	Target	number		0	0	0	0	0
#	Performance	number		1	1	0	0	1 [2]
	Hong Kong investment property							
	Target	number		0	0	0	0	0
#	Performance	number	<u>Staff and</u> <u>Contractor</u>	1	0	0	0	0
	Hong Kong management property		Safety					
	Target	number		0	0	0	0	0
#	Performance	number		0	0	1	0	0
	Hong Kong project construction - railway extension projects							
	Target	number		0	0	0	0	0
#	Performance	number		2	1	2	1	0
	Hong Kong project construction - network improvement projects [6]							
	Target	number		n/a	n/a	n/a	n/a	0
#	Performance	number		n/a	n/a	n/a	n/a	1 [7]
	China and International Business Division (up to 2015)							
	Target	number		0	0	0	n/a [4]	n/a [4]
	Performance	number		0	0	0	n/a [4]	n/a [4]



### Hong Kong Safety Performance

KP		Unit	Links	2013	2014	2015	2016	2017
	Reportable accidents per 100,000 man-hour							
	Corporate support functions							
	Target	number		0.18	0.17	0.23	0.15	0.15
#	Performance	number		0.17	0.08	0.15	0.22	0.21
	Operating railway							
	Target	number		0.21	0.21	0.21	0.21	0.21
#	Performance	number		0.24	0.16	0.16	0.16	0.18
	Hong Kong project construction - railway extension projects							
	Target	number		0.30	0.30	0.30	0.30	0.30
#	Performance	number		0.56	0.57	0.48	0.49	0.32
	Hong Kong project construction - network improvement projects [6]							
	Target	number		n/a	n/a	n/a	n/a	0.30
#	Performance	number	Staff and	n/a	n/a	n/a	n/a	0.22
	Hong Kong property development and investment projects		<u>Contractor</u> Safety					
	Target	number		0.38	0.35	0.30	0.30	0.30
#	Performance	number		0.04	0.06	0.06	0.03	0.03
	Hong Kong investment property							
	Target	number		0.22	0.22	0.22	0.22	0.22
#	Performance	number		0.16	0.15	0.08	0.05	0.26
	Hong Kong management property							
	Target	number		0.22	0.22	0.22	0.22	0.22
#	Performance	number		0.13	0.13	0.15	0.12	0.18
	China and International Business Division (up to 2015)							
	Target	number		0.00	n/a	0.00	n/a [6]	n/a [4]
	Performance	number		0.00	n/a	0.00	n/a [6]	n/a <sup>[4]</sup>

#### Notes

[3] A maintenance technician during track maintenance was found lying unconscious on the tracks near Tai Wai Depot and was pronounced dead at the scene.

[4] Due to the change of the organisation structure, this KPI is not reported separately.

[5] At LOHAS Park construction site, a worker fell from a height and was later certified dead.

[6] Contractor safety performance for network improvement projects were partially reported in operating railway in previous reporting years. The figure is reportedly separately beginning in 2017.

[7] At Siu Ho Wan Depot, a worker fell from height from a metal platform under construction and was later certified dead.

# these KPIs have been assured by Deloitte.

'n/a' represent it is not applicable under the KPI in this context.



		Shenzhen Metro Line 4				Melbourne's Metropolitan Rail Services			Stockholm Metro			Stockholms Pendeltåg		TfL Rail/Elizabeth Line		
			MTR(SZ)		MTM		MTRS <sup>[8]</sup>			MTR Pendeltågen		MTR Crossrail		il		
K	PI	Unit	2015	2016	2017	2015	2016	2017	2015	2016	2017	2016	2017	2015	2016	2017
E	nvironmental Perfo	rmance														
C	otal electricity onsumption Heavy rail	MWh	89,879	88,768	91,427	450,867	452,093	460,203	188,147	159,891	169,733	n/a	183,322	n/a	43,769	43,205
C	otal water onsumption from ailway operation	m <sup>3</sup>	185,935	195,709	202,514	171,078	207,249	235,918	n/a	n/a	n/a [9]	n/a	n/a <sup>[9]</sup>	n/a	n/a	n/a [9]
# N	letals recycled	tonnes	9.4	29.2	18.0	45.0	53.6	2,075.8	365.0	309.0	266.0	n/a	114.5	n/a	n/a	n/a [9]
Ŵ	otal hazardous rastes 2015 onward)	tonnes	18.1	28.8	51.2	n/a	n/a	n/a [9]	46.2	49.0	48.5	n/a	48.0	n/a	n/a	n/a <sup>[9]</sup>
Ŵ	otal hazardous vastes in liquid 2015 onward)	litres	n/a	6.5	11.6 [10]	n/a	n/a	n/a [9]	236	145	<b>91.5</b> <sup>[11]</sup>	n/a	353.7 [11]	n/a	n/a	n/a [9]
# то	otal GHG emissions	tonnes CO <sub>2</sub> e	85,601	84,542	87,118	520,975	507,072	504,996	264 <sup>[12]</sup>	190	11,476	n/a	11,962	n/a	19,284	15,189
#	Scope 1 emissions	tonnes CO,e	315	310	362	464	5,204	5,690	264 <sup>[12]</sup>	190	158	n/a	9	n/a	62	n/a [9]
#	Scope 2 emissions	tonnes CO <sub>s</sub> e	85,286	84,232	86,755	520,511	501,868	499,306	n/a	n/a	11,318	n/a	11,953	n/a	19,222	15,189
	ocial Performance	2													-	
	Total Workforce															
#	Total employees	number	1,347	1,358	1,415	4,784	5,116	<b>5,466</b> <sup>[13]</sup>	2,718	3,160	3,192 [14]	n/a	1,323 [14]	n/a	859	725
	Total workforce b	y gender														
#	Female	number	396	383	381	950	1,104	1,234 <sup>[13]</sup>	807	877	<b>897</b> <sup>[14]</sup>	n/a	<b>417</b> <sup>[14]</sup>	n/a	78	145
#	Male	number	951	975	1,034	3,834	4,012	<b>4,232</b> <sup>[13]</sup>	1,911	2,283	2,295 [14]	n/a	<b>906</b> <sup>[14]</sup>	n/a	209	580
	Unspecified	number	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	44	n/a
	Total workforce b	y age														
#	Aged below 30	number	828	774	749	534	619	553 <sup>[13]</sup>	499	558	<b>584</b> <sup>[14]</sup>	n/a	<b>210</b> <sup>[14]</sup>	n/a	n/a	119
#	Aged 30 - below 50	number	515	579	660	2,317	2,508	2,522 <sup>[13]</sup>	1,214	1,379	1,375 <sup>[14]</sup>	n/a	<b>639</b> <sup>[14]</sup>	n/a	n/a	449
#	Aged 50 & above	number	4	5	6	1,933	1,989	1,819 <sup>[13]</sup>	1,005	1,223	1,233 [14]	n/a	<b>474</b> <sup>[14]</sup>	n/a	n/a	157
	Total workforce b	y employm														
#	Full time	number	1,347	1,358	1,415	4,260	4,431	4,894	1,805	2,252	2,335	n/a	1,200	n/a	n/a	705
#	Part time	number	0	0	0	524	576	572	913	908	857	n/a	123	n/a	n/a	20



			Shenzl	nen Metro I	Line 4		ne's Metro ail Service		Sto	ckholm Me	tro	Stocki Pende		TfL Ra	il/Elizabetl	h Line
			MTR(SZ)			MTM		MTRS <sup>[8]</sup>		MTR Pendeltågen		MTR Crossrail		il		
	KPI	Unit	2015	2016	2017	2015	2016	2017	2015	2016	2017	2016	2017	2015	2016	2017
	Voluntary Staff Tur	nover														
#	Total voluntary staff turnover rate	%	11.4	11.9	12.0	n/a	5.1	5.6	5.0	3.6	5.2	n/a	5.8	n/a	n/a	3.7
	Voluntary staff tu	irnover rat	e by age (20	16 onward	)											
#	Aged below 30	%	n/a	16.7	15.2	n/a	4.9	0.4	n/a	8.5	9.7	n/a	12.2	n/a	n/a	8.3
#	Aged 30 - below 50	%	n/a	5.4	7.7	n/a	5.2	2.6	n/a	4.5	6.6	n/a	5.3	n/a	n/a	2.9
#	Aged 50 & above	%	n/a	0	0	n/a	5.1	2.5	n/a	1.7	2.8	n/a	4.3	n/a	n/a	3.3
	Voluntary staff tu	irnover rat	e by gender	(2016 onw	ard)											
#	Female	%	n/a	9.7	6.8	n/a	5.3	1.4	n/a	3.4	7.0	n/a	6.1	n/a	n/a	5.2
#	Male	%	n/a	12.6	13.4	n/a	5.1	4.0	n/a	3.7	4.6	n/a	5.7	n/a	n/a	3.7
	Vacant posts filled internally either by promotion or transfer	%	28.6	22.1	24.9	n/a	33.5	n/a	n/a	17.0	6.5	n/a	5.8	n/a	n/a	23.3
	Employee Training															
	Percentage of em	nployees tr	ained by ge	nder (2016	onward)											
#	Female	%	n/a	96.9	88.7	n/a	n/a	n/a [9]	n/a	54.3	88.5	n/a	87.8	n/a	n/a	82.1
#	Male	%	n/a	96.9	95.4	n/a	n/a	n/a [9]	n/a	55.8	92.1	n/a	91.7	n/a	n/a	79.7
	Percentage of em	nployee tra	ined by mar	agement (	2016 onwa	rd)										
#	Managers	%	n/a	96.4	96.6	n/a	n/a	n/a [9]	n/a	84.8	96.9	n/a	97.9	n/a	n/a	91.9
#	Non-managers	%	n/a	96.9	93.4	n/a	n/a	n/a [9]	n/a	54.0	90.7	n/a	90.3	n/a	n/a	78.0
#	Training days per employee	days	1.8	8.9	8.1	13.8	6.2	8.9	3.0	2.4	1.8	n/a	2.8	n/a	n/a	24.0
	Training days per	r employee	by gender (	2016 onwa	rd)											
#	Female	days	n/a	5.4	5.1	n/a	6.2	8.9	n/a	2.5	1.7	n/a	2.6	n/a	n/a	15.0
#	Male	days	n/a	10.3	9.2	n/a	6.2	8.9	n/a	2.4	1.8	n/a	2.8	n/a	n/a	26.8
	Training days per	employee	by manage	ment (2016	onward)											
#	Managers	days	n/a	6.2	6.2	n/a	2.0	4.0	n/a	3.2	2.4	n/a	2.7	n/a	n/a	2.1
#	Non-managers	days	n/a	9.0	8.1	n/a	7.1	9.4	n/a	2.4	1.8	n/a	2.8	n/a	n/a	28.5



			Shenz	hen Metro	Line 4		ne's Metro ail Service		Sto	ckholm Me	tro	Stocki Pend		TfL Ra	il/ElizabetI	n Line
			MTR(SZ)		MTM		MTRS <sup>[8]</sup>		MTR Pendeltågen		MTR Crossrail		il			
	KPI	Unit	2015	2016	2017	2015	2016	2017	2015	2016	2017	2016	2017	2015	2016	2017
	<b>Operations Perfor</b>	mance														
	Total number of passenger trips	million	189	199	210	230	233	241	338	349	353	n/a	95	n/a	n/a	43
	Passenger journeys on time	%	99.99	99.99	99.99	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
#	Train punctuality	%	99.91	99.95	99.95	92.51	91.99	91.82	97.70	97.70	97.80	n/a	89.50	n/a	94.10	94.23
#	Train reliability	revenue car-km/ incident	19,565,412	4,986,119	10,149,775	69,738	27,688	33,001	52,562 <sup>[12]</sup>	51,939	54,528	n/a	45,386	n/a	n/a	n/a <sup>[9]</sup>
#	Train service delivery	%	99.95	99.96	99.97	98.75	98.61	98.89	99.40	99.40	99.36	n/a	96.90	n/a	96.90	97.36
	Charitable Contrib	utions														
	Cash donations	HK\$ '000	0	0	0	184,190	61,972	119,816	115	116	0	n/a	0	n/a	n/a	18,465
	Legal Compliance	(Number of	f Convicted	Cases)												
	Cases of corruption	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Cases involving health and safety	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Cases involving labor standards	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Cases involving product responsibility (including customer privacy)	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Cases involving working conditions	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Cases involving e	environmen	ntal regulat	ions												
	MTR subsidiary	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Main contractors	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	n/a	n/a



			Shenzl	nen Metro	Line 4		ne's Metro ail Service		Sto	ckholm Me	tro	Stocki Pend		TfL Ra	il/Elizabetl	n Line
				MTR(SZ)			MTM			MTRS <sup>[8]</sup>		MTR Pen	deltågen		TR Crossra	il
K	PI	Unit	2015	2016	2017	2015	2016	2017	2015	2016	2017	2016	2017	2015	2016	2017
	Supply Chain															
	By continent (20	16 onward)														
#	Number of suppliers in Africa	number	n/a	0	0	n/a	0	0	n/a	0	0	n/a	n/a	n/a	n/a	0
#	Number of suppliers in Asia	number	n/a	547	337	n/a	1	5	n/a	1	1	n/a	n/a	n/a	n/a	0
#	Number of suppliers in Europe	number	n/a	0	0	n/a	12	19	n/a	290	323	n/a	n/a	n/a	n/a	257
#	Number of suppliers in North America	number	n/a	0	0	n/a	4	2	n/a	1	1	n/a	n/a	n/a	n/a	0
#	Number of suppliers in Oceania	number	n/a	0	0	n/a	990	1,164	n/a	0	0	n/a	n/a	n/a	n/a	0
#	Number of suppliers in South America	number	n/a	0	0	n/a	0	0	n/a	0	0	n/a	n/a	n/a	n/a	0
Sa	afety Targets and	Performance	•													
	Passenger and Pu	ıblic Safety														
	Fatality															
	Target	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
#	Performance	number	0	0	0	2	5	0	3	0	<b>3</b> <sup>[15]</sup>	n/a	0	n/a	0	0
	No. of injuries p	er million pa	assenger jo	urneys												
	Target	number	1.47	1.47	1.47	2.00	2.00	2.00	1.40	1.35	1.35	n/a	1.35	n/a	3.03	2.80
#	Performance	number	1.11	1.21	1.12	2.07	1.01	0.76	1.47	1.15	1.08	n/a	0.74	n/a	2.75	3.03



### Mainland of China and International Business

			Shenzh	nen Metro I	Line 4		rne's Metro ail Service		Sto	ckholm Me	tro	Stocki Pend		TfL Ra	il/Elizabetl	h Line
				MTR(SZ)			MTM			MTRS <sup>[8]</sup>		MTR Pen	deltågen	M	TR Crossra	il
K	(PI	Unit	2015	2016	2017	2015	2016	2017	2015	2016	2017	2016	2017	2015	2016	2017
	Staff Safety															
	Fatality															
	Target	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
#	Performance	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
	Lost time injuri	es per 100,00	)0 man-hou	r												
	Target	number	0.26	0.25	0.25	0.50	0.50	0.50	0.60	0.60	0.60	n/a	0.60	n/a	0.70	0.70
#	Performance	number	0.21	0.08	0.17	0.52	0.35	0.49	0.32	0.29	0.29	n/a	0.21	n/a	0.86	0.37
	Contractor Safety	/														
	Fatality															
	Target	number	0	0	0	0	0	0	0	0	0	n/a	0	n/a	0	0
#	Performance	number	0	0	0	0	0	0	0	0	n/a	n/a	n/a	n/a	0	0
	Lost time injuri	es per 100,00	)0 man-hou	r												
	Target	number	0.44	0.42	0.42	0.40	0.40	0.40	n/a	n/a	n/a	n/a	n/a	n/a	n/a <sup>[16]</sup>	n/a <sup>[16]</sup>
#	Performance	number	0.12	0.23	0.12	0.22	0.08	0.03	n/a	n/a <sup>[17]</sup>	n/a <sup>[17]</sup>	n/a	n/a <sup>[17]</sup>	n/a	0.33	0.31

#### Notes

[8] Environmental KPIs include the activities in MTR Tunnelbanan AB and MTR Tech AB of the reporting year; KPIs relate to human resources, comprising staff numbers, staff training and staff safety are the aggregated staff number in MTR Tunnelbanan AB, MTR Tech and MTR Nordic AB; KPIs relate to service performance, comprising train punctuality, train reliatbility and train service delivery reflect the performance of Stockholm Metro which is operated by MTR Tunnelbannan AB.

[9] These KPIs are not assured by Deloitte.

[10] This KPI is presented in tonnes.

[11] This KPI is presented in tonnes. Conversion based on original weight in kg assured by Deloitte using conversion factor with justification.

[12] Figures are restated.

[13] The KPI includes both full-time and part-time employees.

[14] The KPI includes full-time, part-time employees and contractors.

[15] Two cases were caused by passenger falling onto track when the train was arriving. One case involved a passenger struck by a running train after falling from platform.

[16] MTR Crossrail does not set target for contractor injuries at the moment.

[17] MTRS does not monitor contractor injuries because this KPI is not relevant to its business nature needs.

# these KPIs have been assured by Deloitte.

'n/a' represent it is not applicable under the KPI in this context.

# NP360 ESG Performance

KPI	Unit	2016	2017
Total Workforce			
Total employees	number	378	<b>285</b> <sup>[18]</sup>
Total workforce (full-time) by age			
Aged below 30	number	95	94
Aged 30-below 50	number	165	459
Aged 50 & above	number	32	32
Total workforce (full-time) by gender			
Female	number	124	123
Male	number	168	162
Total workforce by employment type			
Full-time	number	292	285
Part-time	number	86	74
Operation Performance			
Cable car system reliability	%	99.87	99.91

КРІ	Unit	2016	2017
Safety Targets and Performance			
Customer Safety			
Fatality			
Target	number	0	0
Performance	number	0	0
Number of injuries per 100,000 visits	;		
Target	number	0.31	0.31
Performance	number	0.12	0.00
Staff Safety			
Fatality			
Target	number	0	0
Performance	number	0	0
Number of injuries per 100,000 manl	nours		
Target	number	1.79	0.99
Performance	number	0.99	1.52
Contractor Safety			
Fatality			
Target	number	0	0
Performance	number	0	0
Number of injuries per 100,000 manl	nours		
Target	number	1.64	1.64
Performance	number	2.35	0.79

#### Notes

[18] The KPI includes both full-time and part-time employees.



# **COMET BENCHMARKING RESULTS 2016**

The Community of Metros (CoMET) programme collects data from large metro system operators around the world in order to compare performance and improve standards across the industry. The 2017 benchmarking exercise assessed data for 2016 for 17 metro systems from 16 cities including Beijing, Berlin, Delhi, Guangzhou, Hong Kong, London, Mexico City, Madrid, Moscow, New York, Paris, Santiago, Singapore, Shanghai, São Paolo and Taipei. Performance is measured across six categories, including growth and learning, customers, internal processes, safety and security, financial performance and environmental performance.

We have participated in the CoMET programme for years to benchmark our railway performance and seek further improvement.

#### Learn more...

CoMET and Nova are metro benchmarking groups currently comprising 32 large and medium-sized metro systems from 30 cities. The groups are jointly owned and steered by their members, and are facilitated by the Railway and Transport Strategy Centre (RTSC) at Imperial College London.

### Safety

# DEATHS FROM ACCIDENTS PER BILLION PASSENGER JOURNEYS\* — a measure of passenger safety



\*Please note that this KPI is slightly different from Fatalities per billion passenger journeys, which is the KPI that we reported in previous years.

#### Staff



### Financial performance

**MTR** 













### **Customer service**

**MTR** 



### % TRAIN TRIPS ON TIME

— a measure of service performance





### Definitions

**Passenger journeys** — the total number of passenger trips on our trains during the year

**Passenger km** — the total number of kilometres travelled by passengers on our trains during the year

**Car km** — the total number of kilometres which were operated by our trains in revenue (passenger carrying) service during the year



### Environment







# **APPENDICES**

Please access the follow documents online for details:

- Appendix I Content Index For Sustainability Reporting Guidelines
- Appendix II Scope Of Key Performance Indicators
- Appendix III Our Sustainability Materiality Methodology
- Appendix IV Our Stakeholder Engagement Channels
- Appendix V MTR External Charters And Memberships

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