

Carbon Neutrality Partnership

Aspects of Decarbonisation	How Your Organisation Could Help (Examples for Reference)	Your Organisation’s Target / Plan / Action <i>(for Input)</i>
Overall: Decarbonisation Target		
Setting a target for total carbon emissions	<ul style="list-style-type: none"> - set a carbon neutrality target with a timeline - set carbon emissions reduction target with a timeline 	<p>We recently completed a carbon reduction study to develop a long-term decarbonisation roadmap. Following this study, we will be setting science-based reduction targets for 2030 with the longer-term goal of achieving carbon neutrality by 2050.</p>
Green Economy		
Green procurement	<ul style="list-style-type: none"> - set green procurement policy and standards - procure energy efficient appliances (such as those with Grade 1 energy labels under the Mandatory Energy Efficiency Labelling Scheme) 	<p>MTR has established a Green Procurement Policy. https://www.mtr.com.hk/sustainability/2020/en/pdf/green-procurement-policy.pdf</p> <p>To support the green procurement practice, we have set a target of spending HK\$250M on green procurement in 2025 and rising to HK\$350M in 2030.</p> <p>We have used a wide range of energy efficient appliances in our operations, including:</p> <ul style="list-style-type: none"> • LED lights; • high energy efficient air conditioning systems for stations, depots, plant

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		<p>rooms, common areas and main lobbies;</p> <ul style="list-style-type: none"> • modernisation of lift and escalator; and • upgrade of Building Management System. <p>We are conducting a large-scale chiller replacement project to replace over 150 chillers with more energy efficient models at our stations and depots in phases by 2022/23. Upon completion of the project, electricity consumption is expected to be reduced by up to 30% compared to 2017.</p> <p>In our Headquarters, we launched a plan to gradually replace approximately 10,000 fluorescent light tubes with LED tubes.</p>
Green finance	- utilise green financing instrument to raise fund	<p>MTR is one of the pioneers in green finance in Hong Kong. We established a Green Bond Framework in 2016 to guide our green bond issuances.</p> <p>Since 2016, MTR has raised over HK\$30 billion through sustainable finance arrangements which are a key part of our financing strategy to fund railway asset replacements, energy efficiency improvements, railway service enhancements and nature conservation projects.</p> <p>Please refer to our latest Sustainable Finance Report for details. https://www.mtr.com.hk/sustainability/en/sustainable-investment.php#s4_2</p>

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Net-Zero Electricity Generation		
Developing renewable energy	<ul style="list-style-type: none"> - set a renewable energy adoption target with a timeline - install renewable energy generating equipment (e.g. solar panel, solar hot water system) where possible - participate in the Feed-in Tariff Scheme - purchase Renewable Energy Certificates 	<p>We installed a solar PV system with 189 panels at MTR Hung Hom Building in 2019 and another PV system comprising 296 solar panels with the capacity of 93.24kW at our Headquarters in 2020. To make renewable energy more viable in our railway operations, we also installed solar panels on one of our new generation Light Rail Vehicles to provide electricity for the in-compartment lighting system. We will review the effectiveness of this trial and consider possible expansion of the initiative in our light rail network. Plans are also in place to install renewable energy systems in suitable stations and depots. Hin Keng Station has been selected to pilot a solar PV system.</p> <p>To further support local renewable energy development, we have set a target of generating 1M kWh of renewable energy by 2023.</p>
Energy Saving and Green Buildings		
Energy saving targets	<ul style="list-style-type: none"> - set electricity usage reduction target with a timeline 	<p>MTR is committed to continuously reducing energy consumption and enhancing energy efficiency. We have set energy reduction targets for our railway operations and investment property portfolio.</p> <ul style="list-style-type: none"> • Railway Operations: reduce 21% of electricity consumed per passenger-

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		<p>km by 2020 in heavy railway network compared with 2008 level</p> <ul style="list-style-type: none"> Investment Property Portfolio: reduce 12% of energy use by 2023 using 2013 as the base year. <p>Energy consumption is the largest contributor to our carbon emissions. We will be setting science-based targets to reduce carbon emissions for our railway and property businesses in Hong Kong for 2030 and achieving carbon neutrality by 2050, which will be achieved by implementing a range of energy saving and carbon reduction initiatives.</p>
Enhancing energy efficiency performance of buildings	<ul style="list-style-type: none"> - target for green building certification (e.g. BEAM Plus) at Platinum level - conduct green building certification for all new buildings - select existing buildings for green building certification - achieve energy efficiency performance above the statutory requirements - procure energy efficient equipment and switch them off 	<p>MTR is committed to developing sustainable infrastructure with increased resource-use efficiency and adoption of clean and environmentally sound technologies. We have committed 100% of our future new stations and new residential development projects will attain BEAM Plus Gold or above certification.</p> <p>In 2021, our Hin Keng Station became the first railway station in Asia to achieve BREEAM certification, receiving a 'Very Good' rating under BREEAM In-Use. BREEAM is the most widely used sustainability assessment method for the built environment worldwide.</p> <p>In 2021, five properties in our property portfolio achieved Gold or Platinum</p>

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	<p>when not in use</p> <ul style="list-style-type: none"> - adopt smart building technologies to reduce electricity consumption and enhance energy efficiency (e.g. smart technology to enhance energy efficiency in air-conditioning system) 	<p>rating under the Hong Kong Green Building Council's BEAM Plus.</p>
<p>Greater use of energy management tools</p>	<ul style="list-style-type: none"> - conduct energy audit and implement identified energy management opportunities - conduct retro-commissioning 	<p>MTR has conducted energy audit for its properties to identify energy management opportunities, including MTR malls and our office buildings. The next round of energy audit would be conducted in 2023/2024.</p> <p>We will pilot a building energy management system in our station or shopping mall in 2022 to identify energy management/saving opportunities which can be applied to other stations and malls.</p> <p>A retro-commissioning was conducted for Two IFC in 2021 as a trial. We are planning to extend the trial to two of our investment malls this year and further extend it to other office buildings and investment properties based on the trial results.</p>
<p>Construction /</p>	<ul style="list-style-type: none"> - adopt Modular Integrated 	<p>We have explored the use of Design for Manufacture and Assembly (DfMA)</p>

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Work sites	<p>Construction (MiC) as appropriate</p> <ul style="list-style-type: none"> - recycle construction wastes - electrify diesel-run equipment in construction sites or other works areas <p>adopt low carbon construction (e.g. prefabricated construction methods, low carbon construction materials)</p>	<p>elements in the design and construction of stations, viaducts and river crossing bridge for the Tuen Mun South Extension (TME) Project, including precast segments, slabs and parapets, and MEP service module.</p> <p>We have formulated Waste Management Plan for all the construction works of our designated projects, which details our waste management practices including recycling of construction wastes.</p> <p>We are exploring the adoption of low carbon construction materials for our new development projects and also encourage the use of battery storage system to replace diesel to power equipment where possible.</p> <p>100% of our future new stations and new residential development projects will attain BEAM Plus Gold or above certification.</p>
Development of district cooling system	<ul style="list-style-type: none"> - adopt high efficiency chillers 	<p>We would consider adopting district cooling system (DCS) for our new development projects in New Development Area where DCS is available.</p> <p>Currently, we are conducting a large-scale chiller replacement programme at our stations and depots to help maximise energy savings without compromising passenger comfort. This extensive replacement initiative can</p>

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		help cut our energy use and greenhouse gas emissions whilst increasing our cooling capacity for the future.
Green Transport		
Zero carbon emissions from transport	- equip parking spaces with electric vehicle charging provision, preferably with a target and a timeline	We are committed to installing at least 200 additional EV charging stations across office buildings, shopping malls and station carparks by 2025.
Phasing out of fuel-propelled and hybrid vehicles progressively	<ul style="list-style-type: none"> - electrify the corporate fleet, preferably with a target and a timeline - adopt low carbon logistics planning and delivery with technology to reduce carbon footprint 	<p>We plan to replace about half of our company vehicles (private cars) to electric vehicles from 2022 – 2027.</p> <p>We are exploring possible measures to lower carbon emissions of our feeder bus fleet. We will purchase one double-decker electric bus for trial. The tendering process of the e-bus is in progress with contract award targeted in 2022.</p>
Maintaining a public transport system with railway as the backbone	- encourage employees to use public transport	<p>We operate a low-carbon railway system serving millions of passengers every weekday along our extensive railway networks.</p> <p>We encourage our staff to travel with our railway network as far as possible.</p>

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Waste Reduction		
Promoting waste reduction and recycling	<ul style="list-style-type: none"> - support the implementation of municipal solid waste charging (e.g. not to allow bulk-purchasing “designated garbage bags” and distributing them to tenants) - promote waste separation and recycling in commercial premises and residential estates with the set-up of centralised “recycling corners” - promote food waste recycling and participate in food waste collection programme 	<p>To minimise the amount of waste generated from our operations and ultimately disposed at landfill, we have put in place a variety of initiatives to encourage waste reduction and recycling at our stations, shopping malls and managed properties.</p> <p>We have placed a set of three-colour recycling bin in the concourse of all MTR stations collecting paper, cans and plastic bottles for recycling.</p> <p>In our managed properties, we work closely with the Owners’ Committees and Incorporated Owners to promote different source separation of waste programmes to residents. Various types of recyclables such as used papers, used clothes, glass bottles are being collected through recycling facilities in our managed properties.</p> <p>In 2021, we partnered with a local environmental NGO to install three-colour waste separation machines and food waste recycling machines in Heng Fa Chuen for a two-year trial. Residents can enjoy earning electronic points and redeem gifts for recycling. Food waste collected is transported to the O·PARK1 for further processing.</p>

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		<p>We have also participated in the “Reverse Vending Machine (RVM) Pilot Scheme” rolled out by the Environmental Protection Department, including The Harbourside, Festival City, Grand Austin, Admiralty Centre, Maritime Square, Telford Plaza, The LOHAS and Paradise Mall.</p> <p>We continue to engage our food and beverage tenants through the “MTR Malls Food Waste Reduction Pledge”. Residents of our managed properties are also encouraged to join our “Central Food Waste Recycling for Improving Estate Environment” initiative to reduce their food waste through different programmes such as festive food donation.</p> <p>Composting machines are also being used in some of our managed properties to convert food waste into compost.</p>
Controlling the use of single-use plastics	<ul style="list-style-type: none"> - set a plan for minimising the use of single-use plastics, preferably with a target and a timeline - reduce the use of single-use plastic packaging - request on-site caterers and food business tenants to use 	<p>Since 2018, we have been installing free drinking water dispensers and water vending machines at different MTR stations to encourage passengers to use refillable drinking bottles to reduce the use of single-use plastic beverage containers.</p> <p>We also provide umbrella drying facilities in our office buildings and shopping malls to avoid use of disposable plastic umbrella bags.</p>

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	<p>reusable and durable cutleries and food containers for eat-in customers, and avoid distributing disposable plastic tableware for takeaways</p> <ul style="list-style-type: none"> - install filtered water dispensers to reduce the use of plastic water bottles - offer single-use toiletries on request only - avoid the use of disposable plastic umbrella bags and install umbrella drying facilities 	