

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>-HK Electric recognise our pivotal role in Hong Kong’s carbon neutrality journey. We have been collaborating with the HKSAR Government on the best way forward to deliver carbon neutrality for the power sector before 2050, with a medium-term target to reduce our absolute carbon emissions by more than 50% compared with 2005 levels by 2035.</p> <p>-Key medium-term targets and actions are summarised as follows:</p> <ul style="list-style-type: none"> • Switching from coal to gas for power generation, phase out all coal-fired units by early 2030s; • Expanding HK Electric renewable energy generation capacity to 150MW by 2027; • Exploring new zero-carbon energy technologies and solutions to meet 2050’s carbon neutrality challenge; • Facilitating our customers to embrace energy efficiency and conservation, renewable energy and electric vehicles through a suite of funding and service schemes, known as Smart Power Services (SPS).

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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) 	<ul style="list-style-type: none"> -HK Electric is a founding member of Green Council's Sustainable Procurement Charter since 2018. - HK Electric promotes sustainable procurement practices in our daily operations. - On green procurement, we will increase the no. of "Green" items available on the Company's electronic ordering system to over 27% for general office commodity items group by 2022.
Green finance	<ul style="list-style-type: none"> - utilise green financing instrument to raise fund 	<ul style="list-style-type: none"> -Subject to the government approval of our offshore wind farm, we shall endeavor to fund the project with green financing.
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 	<ul style="list-style-type: none"> -We plan to develop an offshore wind farm of capacity not less than 150MW at the southwest of Lamma Island. Once commissioned in 2027, the project will provide up to 400 GWh of zero-carbon electricity annually or about 4% of our annual electricity output. - We have commenced the installation of additional 15 PV systems on HK Electric's substations and premises targeting for completion by 2023;

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	Certificates	<p>-We target to expand local renewable energy production through the wind and solar power systems at Lamma Power Station, and the distributed renewable energy power systems of our customers. We envisage the total output will exceed 6 GWh/year by 2023. The target total energy to be generated between 2021 to 2025 (five years) is 40 GWh or more.</p> <p>-We will continue to implement a Feed-in Tariff Scheme to incentivise our customers to install distributed renewable energy power systems (REPS) on their premises.</p> <p>-We offer sales of Renewable Energy Certificates (REC) to our customers to help them achieve decarbonisation goals. In 2021 and for the third year in a row, we have sold out all the available REC inventory (about 6 GWh was sold in 2021). To meet the increasing demands from corporate customers, we have enhanced the bulk REC purchase arrangement to develop greater flexibility in the purchase amount and subscription period.</p>
Energy saving targets	- set electricity usage reduction target with a timeline	<p>-We target to reduce the total electricity consumption in HK Electric's office premises by 5% in 2025 compared to the baseline figures in 2020.</p> <p>- We also target to improve the average Power Usage Effectiveness (PUE) of two data centres at Electric Centre and Electric Tower by 5% by 2024.</p>
Enhancing	- target for green building	-Our new Administration and Control Building at Lamma Power Station

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energy efficiency performance of buildings	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 when not in use - adopt smart building technologies to reduce electricity consumption and enhance energy efficiency (e.g. smart technology to enhance energy efficiency in air-conditioning system)	Extension has attained the rating “PLATINUM” in the provisional assessment under BEAM Plus New Buildings Version 2.0 on 7/7/2021. The knowledge gained from the aforementioned project will be applied to other building development projects in future. -We will continue to offer a suite of service and subsidy schemes through Smart Power Services to help our customers and the underprivileged to implement energy-efficiency enhancement initiatives.
Greater use of energy management	- conduct energy audit and implement identified energy management opportunities	Energy-cum-carbon audits - We target to complete 1,000 energy audits for our nonresidential customers by 2023.

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tools	- conduct retro-commissioning	<p>- We plan to complete energy audits for HK Electric's Electric Tower, Hongkong Electric Centre and Electric Centre (North Point) by 2023, following the latest version of the Energy Audit Code.</p> <p>- We have also arranged annual carbon audit for our key building premises. Currently, Hongkong Electric Centre, Electric Centre (North Point) and main buildings at Lamma Power Station are awarded with Carbon Reduction Certificates.</p> <p>Retro-commissioning (RCx)</p> <p>- In September 2020, we were honoured to receive the "Hanson Grand Retrocommissioning (RCx) (Implementation) Award" under the Government's Energy Saving Championship Scheme for our innovative energy conservation project at Electric Tower. The RCx project showcased new ways of saving energy in the built environment by adopting appropriate technologies such as AI.</p> <p>- We target to implement RCx in Hongkong Electric Centre and a building at Lamma Power Station by 2023.</p> <p>Energy saving projects</p> <p>- Through Smart Power Building Fund, we target to subsidise owners of 500 buildings to implement retrofitting, retrocommissioning and smart technology projects to enhance the energy efficiency of communal building services installations.</p>

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		<p>- Internally, we will follow up with the energy management opportunities as recommended in energy audit reports of HK Electric's Electric Tower, Electric Centre and Lamma Power Station.</p>
Construction / Work sites	<ul style="list-style-type: none"> - adopt Modular Integrated Construction (MiC) as appropriate - recycle construction wastes - electrify diesel-run equipment in construction sites or other works areas adopt low carbon construction (e.g. prefabricated construction methods, low carbon construction materials) 	<p>-In support of the Government's pledge to achieve carbon neutrality before 2050, HK Electric provides a one-stop Smart Power for Construction Site service to help our customers receive timely grid electricity supply for construction sites. The initiative will displace the use of diesel and thus reduce carbon emissions, air and noise pollution throughout the construction life cycle.</p> <p>- To reduce exhaust gases and greenhouse gases generated on the work sites during civil construction and roadworks, HK Electric has motivated the contractors to adopt electric air compressors to replace diesel generator/ air compressor in civil work contracts of transmission projects. Furthermore, battery power supply for application at two tower cranes has been adopted on the construction site of the new gas-fired unit L12.</p> <p>-We have procured nine portable electrical power stations and made use of retired EV batteries to develop two home-grown mobile electrical power stations to reduce the usage of portable power generators on site.</p>
Development of district cooling system	<ul style="list-style-type: none"> - adopt high efficiency chillers 	<p>-We have upgraded the chiller plants in HK Electric's Electric Tower, Hongkong Electric Centre, Electric Centre (North Point) and Lamma Power Station with more energy efficient models.</p>

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Zero carbon emissions from transport	<ul style="list-style-type: none"> - equip parking spaces with electric vehicle charging provision, preferably with a target and a timeline 	<ul style="list-style-type: none"> -HK Electric has been operating 12 EV charging stations on Hong Kong Island which are open to the public for free use in 2022. -As of end 2021, over 50% of parking spaces within HK Electric's premises have been equipped with EV chargers. We target to increase the number of EV chargers from 188 (medium) and 8 (fast) in 2020, to 210 (medium) and 18 (fast) by 2025. -HK Electric has launched Smart Power EV Charging Solution to assist our customers in applying for the Government's "EV-charging at Home Subsidy Scheme". We have so far issued about 400 power supply capacity confirmation letters covering about 50,000 parking spaces. - We also provided consultancy to Hong Kong's public bus and ferry operators on providing charging facilities for EVs.
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 	<ul style="list-style-type: none"> -We have achieved 100% EV/Hybrid adoption in operational sedan cars for daily operational activities. Our trenching contractors also adopt electric vehicles for making special site patrols. In Lamma Power Station, EV accounted for 37% (or 45 in total) of the station's fleet. - We target to increase the proportion of EVs in our corporate fleet from 50% in 2020 to 53% by 2025.
Maintaining a public transport	<ul style="list-style-type: none"> - encourage employees to use public transport 	<ul style="list-style-type: none"> -We strive to raise awareness of environmental concerns by encouraging our employees to support a range of green campaigns. For example, in support of

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system with railway as the backbone		the United Nations’ World Environment Day every year in June, we encourage our employees and their families to make green pledges, including the use of public transport, to reduce carbon footprints in their daily lives.
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>In 2020, we launched a Waste Management Campaign at our Head Office to raise awareness of waste reduction and recycling in collaboration with the Hong Kong Productivity Council and funded by the Environment and Conservation Fund. The campaign included a waste charging trial that took place between May and September to help our employees to familiarise with the new municipal solid waste charging scheme.</p> <ul style="list-style-type: none"> - To engage our employees for preparation of the Municipal Solid Waste Charging Scheme, a waste management talk will be conducted in the first half of 2022 to facilitate waste reduction and transformation to low-carbon living. We participate in the Government’s programme on source separation for commercial and industrial wastes and other NGO’s various recycling programmes across the communities. Our efforts were recognized with Waste wi\$e certificates under the Hong Kong Green Organisation Certification scheme. - Our canteens make use of an advance meal booking system to reduce food waste. We give our employees food-saving tips, practicing waste separation

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		and use food-waste eliminators to minimize the volume of food waste that is disposed to landfill sites.
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 reusable and durable cutleries and food containers for eat-in customers, and avoid distributing disposable plastic tableware for takeaways - 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 	<p>-We target to reduce the total waste generation from HK Electric's office premises by 10% in 2025 compared to the baseline figures in 2020.</p> <p>-We have eliminated disposable tableware, plastic straws and utensils, as well as plastic beverage containers from vending machines within our premises and staff canteens. No plastic straws and plastic bags would be provided, and plastic spoons and stirrers have been replaced by metallic ones. All plastic bottles are collected for recycling.</p> <p>-Water dispensers have been installed at HK Electric's Electric Tower, Hongkong Electric Centre, Electric Centre (North Point) and Lamma Power Station to provide drinking water for employees and visitors.</p> <p>-Plastic water bottles are largely eliminated at corporate events and participants are reminded to bring their own water.</p> <p>-Umbrella drying facilities are installed at the lobby of our main office buildings to avoid use of disposable plastic umbrella bag.</p> <p>-Plastic packaging used in corporate events will be sent to recycling centers for handling.</p>

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