

# Government to further reduce emissions from power plants

The Government published today (October 25) in the Gazette the Eighth Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences (the Eighth Technical Memorandum), which aims to further reduce the emissions of air pollutants from power plants from 2024 onwards. This will help to improve air quality in both Hong Kong and the Pearl River Delta (PRD) region.

The new technical memorandum (TM), which was issued under the Air Pollution Control Ordinance (APCO), caps the annual emissions of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and respirable suspended particulates (RSPs) from the power generation sector from 2024 onwards at 3 150 tonnes, 12 430 tonnes and 391 tonnes respectively. As compared with the emission allowances for 2022 set under the Seventh TM, the proposed Eighth TM will further tighten the emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSPs by 40 per cent, 29 per cent and 20 per cent respectively for the electricity sector.

A spokesperson for the Environmental Protection Department (EPD) said, "In setting the new emission caps, we have taken into account factors including the progress of the two power companies in increasing local gas generation to around 57 per cent of the total fuel mix for electricity generation by 2024, the progress in upgrading existing gas-fired units for improving their NO<sub>x</sub> emission performance and thermal efficiency, the projected electricity intake from renewable energy (RE) sources and the projected electricity consumption etc."

The Hongkong Electric Company, Limited (HEC) is building a new gas-fired generating unit for operation in 2023 while three existing coal-fired generation units will be decommissioned in succession. The increase in gas generation ratio and reduction in forecast electricity demand for 2024 and 2025 by the HEC will allow room for further reduction of its emission allowances.

CLP Power Hong Kong Limited (CLP) is also building a new gas-fired generating unit at its Black Point Power Station for expected commencement of operation in 2023. At its Castle Peak Power Station, two existing coal-fired generating units will be decommissioned in succession. CLP has completed upgrading three gas-fired generating units and will upgrade the remaining five units by 2023, which will further reduce its NO<sub>x</sub> emissions. Furthermore, CLP also forecasts a reduction in electricity demand for 2024 and 2025.

"As emissions from the power generation sector accounted for 43 per cent, 27 per cent and 16 per cent of the territory-wide emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSPs respectively in 2017, the tightened emission allowances will help improve the air quality in Hong Kong and the PRD", the spokesperson said.

"For any new electricity works, we will allocate emission allowances

based on the emission performance of a new gas-fired generating unit adopting the latest technology for emission reduction. The Eighth TM will continue to retain the mechanism in the Seventh TM to cater for the intake of RE. The EPD will review the TM again not later than 2021 to enable a timely revision of the emission allowances."

To improve air quality and reduce carbon emission, the Government is making a great effort to improve the fuel mix for local electricity generation in the past few years and will continue to use more natural gas to replace coal in electricity generation. Furthermore, the Government is committed to promoting the local development of RE and is taking the lead in enhancing RE by earmarking \$2 billion to implement various projects at government premises. The Government is also making great efforts to develop waste-to-energy plants and will install solar generation systems of a larger scale at suitable reservoir and landfill locations. The Government has also introduced Feed-in Tariff in collaboration with the power companies to encourage the private sector and the community to invest in distributed RE systems.

The new TM will be tabled at the Legislative Council on October 30 for commencement by the end of 2019. In accordance with the APCO, the new set of emission allowances will come into effect on January 1, 2024.