

Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network results for 2018 released

The Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network released today (June 27) a report on its 2018 monitoring results, which showed the continual improvement of air quality in the Pearl River Delta (PRD) last year. Compared with 2017, the average annual concentration levels of sulphur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), respirable suspended particulates (RSP) and fine suspended particulates (FSP) in the PRD in 2018 decreased by 18 per cent, 3 per cent, 6 per cent, 4 per cent and 10 per cent respectively.

The emission reduction measures implemented by Guangdong, Hong Kong and Macao in recent years have contributed to the improvement of the overall air quality in the PRD. The monitoring network was launched in November 2005. Compared with 2006, the average annual concentration levels of SO₂ and RSP in 2018 had decreased by 81 per cent and 36 per cent respectively, while the annual concentration level of NO₂ decreased by 28 per cent within the same period. Although the other two parameters (i.e. CO and FSP) have only been covered by the monitoring network since September 2014, both their average annual concentration levels had decreased by 13 per cent in 2018 compared with 2015. However, the 2018 average annual concentration level of ozone (O₃) had increased by 21 per cent compared with 2006, indicating that further alleviation of regional photochemical pollution is required. The pollution trends of the six air pollutants since 2006 are shown in the Annex.

To continually improve regional air quality and photochemical pollution, the Hong Kong Special Administrative Region Government and the Guangdong Provincial Government have long been committed to reducing emissions of key sources of air pollutants. The two governments have launched a study on post-2020 emission reduction targets and concentration levels of regional air pollutants with a view to formulating emission reduction targets after 2020. Meanwhile, the Macao Special Administrative Region Government has also rolled out and implemented various emission reduction initiatives.

Hong Kong has implemented various control measures on marine and land transport, power plants and non-road mobile machinery in order to improve air quality on a sustainable basis. On the vehicular emissions front, Hong Kong has tightened the emission standards for newly registered vehicles to Euro VI and will continue to phase out Euro III and pre-Euro III diesel commercial vehicles; it has also conducted a trial scheme for electric buses; retrofitted franchised buses with selective catalytic reduction devices; stepped up emission control on petrol and liquefied petroleum gas vehicles by using roadside remote sensing equipment; and encouraged the use of electric vehicles through tax incentives. As regards marine emissions, Hong Kong and the Guangdong Provincial Government have jointly implemented control measures to mandate vessels to use low-sulphur fuel. Hong Kong will also increase the

use of natural gas in power generation, promote wider use of renewable energy and continue to tighten the emission caps for power plants progressively. In addition, the emission standards for non-road vehicles have been tightened to Euro VI, on a par with road vehicles.

In 2018, Guangdong Province promulgated the Regulations of Guangdong Province on Prevention and Control of Atmospheric Pollution; published and implemented a three-year action plan on pollution control and safeguarding blue sky respectively; introduced targets for improving air quality in 2020; and implemented various other air pollution control measures to upgrade industry structure, enhance energy supply structure, adjust transportation structure, deepen industries control at source, enhance control of mobile and area sources, tackle polluting weather effectively and enhance its ability to make decisions based on scientific considerations. Newly received environmental impact assessment projects (including those for the steel, petrochemical and cement industries) must comply with the specific emission standards for air pollutants. All motor vehicle petrol and diesel on sale in Guangdong must meet National VI standards. Full promotion has also been given to the electrification of public transport, implementation of control measures on polluting industries and premises, introduction of joint inspections on volatile organic compounds, and the provision of guidance to key enterprises in different places to initiate "One Enterprise One Strategy" integrated control measures.

Macao has rolled out a series of emission reduction measures to focus on reducing pollution from mobile and stationary sources in accordance with the air pollution control and management initiatives laid down in the Five-Year Development Plan of the Macao Special Administrative Region (2016-2020) and the Environmental Protection Planning of Macao (2010-2020). Such measures include promulgating the use of natural gas and the construction of relevant facilities; upgrading emission standards for newly imported vehicles to Euro VI; formulating emission standards for in-use vehicles; phasing out polluting motorcycles with two-stroke engines; promoting new energy vehicles; raising the standards of vehicle fuels to Euro V; and implementing emission standards for stationary sources such as sewage plants and the chemical and pharmaceutical industries.

The monitoring network, comprising 23 air monitoring stations located in Guangdong, Hong Kong and Macao, monitors six major air pollutants (i.e. SO₂, NO₂, O₃, RSP, FSP and CO). The Guangdong Environmental Monitoring Centre, the Environmental Protection Department of Hong Kong (HKEPD), the Macao Environmental Protection Bureau and the Macao Meteorological and Geophysical Bureau are responsible for the co-ordination, management and operation of the monitoring stations of the three sides, and will continue to release annual reports on the monitoring results and pollution trends of PRD as well as quarterly statistical monitoring results. Members of the public can visit the website of the Guangdong-Hong Kong-Macao Regional Air Quality Monitoring Information System (<http://113.108.142.147:20047>) direct, or the websites of the Department of Ecology and Environment of Guangdong Province (gdee.gd.gov.cn), the HKEPD (www.epd.gov.hk), the Macao Environmental Protection Bureau (www.dsapa.gov.mo) or the Macao Meteorological and

Geophysical Bureau (www.smg.gov.mo) to obtain the relevant annual reports and quarterly monitoring statistics.