



Hong Kong Green Strategy Alliance  
香港綠色策略聯盟

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7 November 2017

Clerk to Subcommittee on Seventh Technical Memorandum for Allocation of  
Emission Allowances in Respect of Specified Licences  
Legislative Council Secretariat  
Legislative Council Complex  
1 Legislative Council Road  
Central, Hong Kong

Dear Sir/Madam,

**Submission on the Seventh Technical Memorandum for Allocation of  
Emission Allowances in Respect of Specified Licences**

The Hong Kong Green Strategy Alliance (HKGSA) would like to share our views and comments regarding the Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences. Our detailed submission is attached as Appendix A.

HKGSA is a non-profit making organization founded in 2012 by a group of professionals and stakeholders who are visionary and wish to undertake the responsibility on the issues of environmental protection and sustainable development. Through active participation, discussions and exchange of views in green issues, projects and technologies etc., members of HKGSA offer our professional opinions and solutions to tackle green issues in Hong Kong and neighbouring region.

Should you need any further information, please feel free to contact me at 2788 5647 /  
[REDACTED]@gmail.com).

Yours faithfully,

Ir Kenny Wong  
Honorary Secretary, Hong Kong Green Strategy Alliance

Encl.

## **Submission on the Seventh Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences**

### General

The power sector is one of the major local sources of air emission. As one of the regulatory measures to reduce the emissions from power stations in Hong Kong, the Air Pollution Control Ordinance (APCO) was amended in 2008 to empower the Authority to cap the emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSP from power plants by allocating to the respective power plants emissions allowances stipulated in the Technical Memorandum (TM) issued under the APCO. This 7<sup>th</sup> TM sets out the quantities of said emission allowances for two power companies for each and every emission year from 1 January 2022. The Hong Kong Green Strategy Alliance (HKGSA) welcomes the approach along with the mechanism of existing Scheme of Control Agreements, which is capable of effectively reducing emissions from Hong Kong over the past decade. It is projected that these encouraging emission trends will continue in the coming years.

### Successful implementation of TMs

For the past seven years, the Authority has comprehensively reviewed the TM with power plants taking into account the application of new effective emissions abatement technologies, operation and maintenance of the facilities while simultaneously providing reliable, safe and affordable electricity supply for Hong Kong. Since 2008, six TMs have been successfully issued in 2008, 2010, 2012, 2014, 2015 and 2016 respectively, gradually tightening the emission abatement requirements on the power plants. We are pleased to see that with the successful implementation of TMs, as compared with 2010, the emissions of SO<sub>2</sub>, NO<sub>x</sub> and RSP from power plants in 2016 have been significantly reduced by up to 50%. This really makes contribution to the review of the current Air Quality Objective which is due in 2019.

### Review frequency of TM

The TM is subject to the minimum review frequency of once every two years by the Authority under the Air Pollution Control Ordinance. The Authority shall notify the two power companies the results of the updating of allocated emission allowances no less than four years before it comes into effect. It is clearly noted that the recent 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> TMs were all reviewed at higher frequency of once per year whenever either one of power companies had a plan to put the new gas fired unit in service in the respective year. It is well understood that review of each TM unavoidably involves significant resources from the community. HKGSA is of the view that an interval of 2 years for the review as per the requirement of APCO is appropriate to clear uncertainties in the future with due consideration of the following:-

- a. Emission allowances have been significantly tightened and further screwing up emissions caps in a significant way seems not possible;
- b. Teething problems of new machines, if any, will normally require one to two years to resolve.

Through the regulatory reviews including Mid-term Review, Development Plan Review, Auditing Review and Tariff Review, the Government effectively monitors the environmental and operational performances of two power companies. In case of failure to meet the allocation emission allowances, the two power companies are liable to penalty under the Specified Process licence. The saved resources could be spent on other environment-related aspects.

#### Co-benefit of the TM to reduce CO2 Emissions

The promulgation of the Seventh TM at the end of 2017 will further reduce the allowed emissions of power plants from 2022 onwards and then improving local air quality which necessitates the adoption of new facility and technology. With the commissioning of the new gas-fired units in 2020 & 2022 coupled with NOx abatement facility, namely Selective Catalytic Reduction (SCR), the gas proportion in Hong Kong's fuel mix would be increased to about 50% from the current level of about 30%. While the SCR will help significantly reduce NOx emissions by up to 90% from new gas fired units, the increase in the use of natural gas can also benefit the reduction of carbon emissions, helping to achieve the target of 65% - 70% reduction of carbon intensity by 2030 set in the Hong Kong's Climate Action Plan 2030+. HKGSA welcomes the pragmatic approach that really "kills two birds with one stone".

#### Early Approval of EIA study on FSRU

The existing coal-fired units at both CLP and HK Electric are due to retire in the next decade. Replacing those generating capacity by new gas fired units is the consensus of the community to tackle climate change challenges. This will drive the unprecedented demand for natural gas. In this connection, an infrastructure that can secure reliable and price competitive supply of natural gas is of paramount importance for providing the city with clean and reliable energy to power its economy. Both power companies join hand to undertake an Environmental Impact Assessment (EIA) in 2016 for the construction of an offshore liquefied natural gas (LNG) terminal using floating storage and regasification unit (FSRU) technology planning for completion by 2020 or 2021. The FSRU will provide direct access to and enhance bargaining power in the international market for gas supplies. It will not only support the Government's long term goal to increase the use of natural gas for power generation which in turn will help decarbonize Hong Kong's economy, but also allow the two power companies to enhance the security and reliability of gas supply. HKGSA urges the Government to process and approve the EIA study soonest possible as long as there are no surmountable issues identified from the study.

Other measures to improve local and regional air quality as a whole

HKGSA holds the view that the existing policy measures provide effective means to reduce air emissions from power stations under the regulatory regime and put Hong Kong in the right track to improve its air quality. While the promulgation of the 7<sup>th</sup> TM will contribute to achieving a better air quality as well as our low carbon initiatives, control of emission is brought in among various sectors and more should be done on roadside with due consideration that the distance between vehicles' exhausts and the breathing zone of people is short and it affects everyone in the city directly. Expanding mass transport system, encouraging the replacement of old diesel commercial vehicles, curbing the increase of vehicles and promoting the use of EV in private cars, buses and even trucks are effective measures to consider. Similar to those for the power sector, the Government is suggested to formulate the emission caps for the road transport sector for the coming years.

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7 November 2017