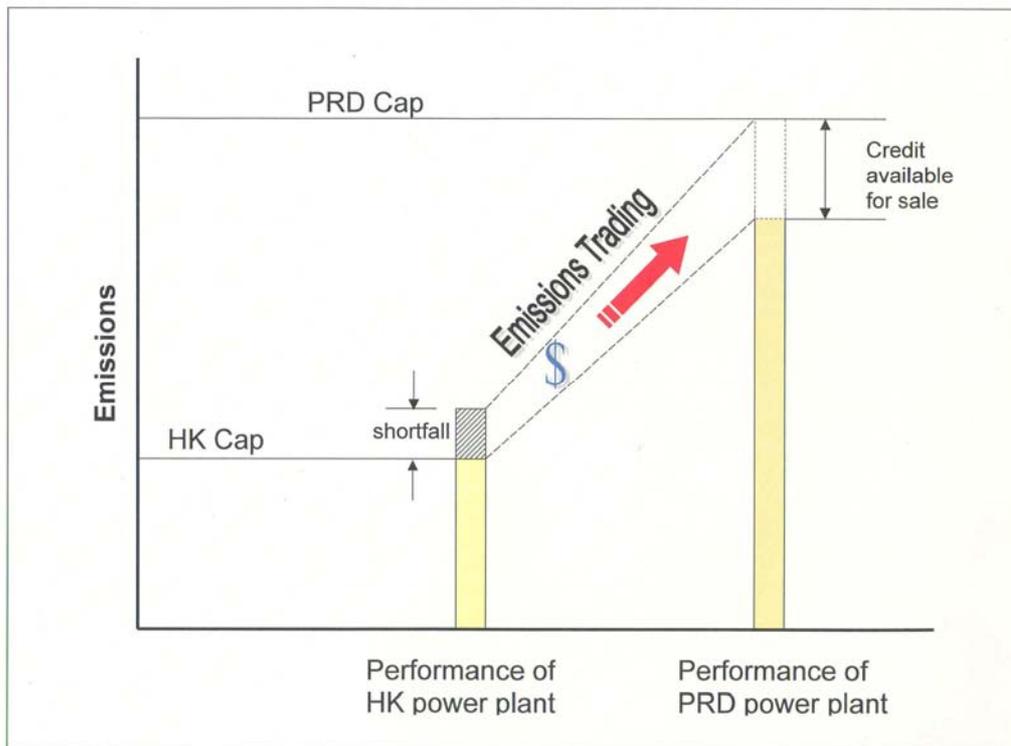


**The Views of the Association of Engineering Professionals in Society (AES)
on the Emissions Trading Pilot Scheme for Thermal Power Plants
in the Pearl River Delta (PRD) Region
at the Panel on Environmental Affairs - Special Meeting on 28 March 2007**

1. The AES welcomes every government initiative for the improvement of air quality in Hong Kong, and the reduction of air pollution in the PRD Region. We, therefore, support the trial of an emissions trading scheme for thermal power plants in the PRD Region.
2. There are many emissions trading schemes tried and implemented in different parts of the world. One of them is the SO₂ trading system under the framework of the Acid Rain Program of the 1990 Clean Air Act in the USA, where SO₂ emissions are expected to be reduced by 50% during the period of 1980 to 2010, and the "cap and trade" system of SO₂ emissions reduction cut down the cost of controlling acid rain by as much as 80% versus source-by-source reduction. It appears that by making use of market forces, emissions trading could provide the industry with flexibility in achieving government's emissions reduction goals in a cost-effective manner. Whilst the overall air quality of the Region could then be improved benefiting the community of the Region as a whole, the aggregate emissions of Hong Kong may not be reduced.
3. The Pilot Scheme now as proposed by the government follows the national pilot programme on sulphur dioxide emissions trading and has the support of the State Environmental Protection Administration. It is different from many existing emissions trading schemes in other parts of the world in that the Pilot Scheme involves two government authorities (the HKSAR Government and Guangdong Provincial Government) in the setting of emissions caps and granting of credits on different bases. It is probably the first of its kind and demonstrates close partnership between Hong Kong and the Mainland under the principle of the "One Country Two Systems". Details of the emissions trading scheme can then be developed to help resolve the issue of reducing air pollutant emissions in the PRD Region.
4. Because of the many uncertainties of the emissions trading scheme and teething issues related to business considerations of the power plants, the AES is supportive of the voluntary participation approach of the Pilot Scheme. However, active promotion and assistance by both governments, close monitoring and review of the Pilot Scheme are needed to enable sufficient incentives for trading to take place.
5. The Pilot Scheme is intended to support emissions trading of sulphur dioxide (SO₂), nitrogen oxides (NO_x) and respirable suspended particulates (RSP). With the increasing concern of global warming, we are keen to see that the Pilot Scheme could also include carbon dioxide (CO₂) emissions.
6. It is noted from Appendix 2 of the LegCo Paper CB(1) 972/06-07(05) that credits in the PRD can be allocated under the current total emissions control and permitting systems. It would be beneficial to know how these systems work. In addition, it appears that the emissions caps set for the PRD power plants look more relaxed when compared with those for their Hong Kong counterparts (see Figure below). It is important that fair treatment should be applied to power plants of both sides. Due to this possible discrepancy, it is most likely that PRD power plants would have credits to sell, but not the Hong Kong power plants. Depending on the prices of the emissions credits which may vary, Hong Kong power plants would either purchase credits or reduce their emissions to meet the cap requirements. This would be a one-way process and we have to develop an evaluation methodology in the Pilot Scheme to examine carefully if the money spent is worthwhile for the purpose of achieving the objective of improving our air quality.



7. Another critical part of a successful emissions trading scheme is enforcement. Success of the management of the Pilot Scheme depends very much on the environmental protection agencies of both governments. This type of direct management scheme would be quite expensive to enforce and the burden will fall on the agencies, which may then need to collect special taxes/revenues. Moreover, there could exist procedures easily leading to corruption. We should implement with due care and examine the results of the Pilot Scheme with an aim to developing a fair, equitable and transparent scheme, and to avoiding the creation of a poorly financed or corrupt regulatory regime.
8. The Pilot Scheme can also investigate the option of employment of a third party agency with professionals possessing MHKIE (Environmental), R.P.E.(Environmental) or equivalent qualifications, certified or licensed by the governments for the management of an emissions trading scheme. Inspection of the certificates can be performed in some automated fashion by the regulators, perhaps over the Internet, or as part of tax collection. The regulators then audit licensed facilities chosen at random to verify that certifying agencies are acting correctly. This approach is far less expensive, placing most of the cost of regulation on the private sector. The transparency of this process helps to act as a safeguard against corruption.
9. The AES opines that emissions trading serves as an interim measure to help accelerate emissions reduction of the Region and is uncertain if there will be significant improvement brought about to the air quality of Hong Kong. We still need to take the most reliable and effective technical approach by undertaking direct emissions reduction measures. These measures include acceleration of emissions reduction projects at the existing power plants, increasing the use of ultra-low sulphur coal, using more natural gas for power generation including the construction of a LNG terminal in Hong Kong, development of renewable energy, using ultra-low sulphur diesel in industrial and commercial sectors, reduction of emissions from ships and vehicles, legislation to require switching off vehicle engines whilst waiting, etc.