



Hong Kong Green Strategy Alliance

香港綠色策略聯盟

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Transport Department  
Room 3926, 39/F,  
Immigration Tower  
7 Gloucester Road,  
Wan Chai, Hong Kong

Email: [info@erphk.hk](mailto:info@erphk.hk)

Dear Sir/Madam,

**Response to the Electronic Road Pricing Pilot Scheme**

Hong Kong Green Strategy Alliance (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., HKGSA would offer our professional opinions and solutions to tackle green issues in Hong Kong and neighbouring region.

HKGSA would like to submit views related to the Electronic Road Pricing Pilot Scheme. Please find enclosed our submission in Appendix for your perusal.

Should you have any queries, please feel free to contact me at 9032 3816 (drwklo@gmail.com) or our Honorary Secretary Ir Kenny Wong at 2788 5647 / 9482 3227 (irkennywong@gmail.com).

Yours sincerely,

Ir Dr. Hon LO Wai Kwok, SBS, JP  
Chairman, Hong Kong Green Strategy Alliance  
Encl.

**Response to the Electronic Road Pricing Pilot Scheme**

**HKGSA supports the Electronic Road Pricing (“ERP”) Pilot Scheme in Central Areas**

1. **HKGSA supports the Electronic Road Pricing (“ERP”) Pilot Scheme in Central Areas** to address the issue of traffic congestion and air pollution in Central Areas of Hong Kong. This is also considered as one of the effective measures to improve air quality, reduce carbon emission and improve energy efficiency of public transport system in order to combat climate changes and extreme weather as well as increasing the operational efficiency of Hong Kong.

**The results of ERP can help contribute to make Hong Kong smart and sustainable in terms of competitiveness**

2. Our public transport system including MTR and franchised bus is comfortable and efficient.

Emissions from vehicles are the major culprits for worsening roadside air quality.

**The results of ERP can help contribute to make Hong Kong smart and sustainable in terms of competitiveness**, etc. in view of the numerous successful experiences obtained in overseas countries and cities like Singapore and London in the past decades.

However, we should carefully consider in the pilot scheme of ERP aiming to cope with the particular contexts of Hong Kong of the issues including but not be limited to the following:

- A. Under “User Pay” and “Polluter Pay” Principles
- B. Encouragement of EV’s and erection of more EV charging stations
- C. No charge for low emission buses for public transport
- D. No charge for emergency vehicles like fire ambulance
- E. Central Area and then further extended to other congestion affected areas
- F. Differential pricing according to vehicle size and pollution impacts
- G. Evaluation of the results through the ambient data (i.e. NO<sub>x</sub>, O<sub>3</sub>, SO<sub>2</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>) collected at the roadside monitoring station at Central.
- H. Parameters like average travel time, vehicle hours, and vehicle kilometers in the testing zone should be collected and reviewed.

- I. Illegal Parking fine in Central Areas may be considered to be increased above the fine in other non-Central Areas

### **Charging Model and Mechanism**

3. An area-based EPR system would appear an easier and effective tool to implement with the following considerations:
  - A. Different charges will be levied in different time-zones in a day and different days in a week like weekend and public holidays that should be considered free of charge in entering Central Areas;
  - B. As to facilitate the entry of vehicles into Central Areas, no toll booth is allowed and all vehicles entering the Central Areas must have equipped with pre-stalled mobile charging facilities like Auto-Toll being used in Cross Harbour Tunnels.
  - C. Initial charging fees should be set at a level effective enough to alleviate traffic congestion problems and these charges should be subject to regular reviews to ensure the objectives are met.

### **Boundary of the Central District ERP Pilot Scheme**

4. The boundary of the Central District ERP Pilot Scheme is preferably to start with a focus area within the Central District only due to the following considerations:
  - A. Possible adverse impact could be limited to a minimum magnitude and be controllable under effective management, if there is;
  - B. When HK residents become familiar with the scheme and find to be successful in the accomplishment of the objectives, the boundary of the pilot scheme could be adjusted or expanded gradually; and
  - C. Technically, the Scheme could be designed and implemented in a modular structure that other nearby regions like Sheung Wan and Admiralty could be included in the scheme step by step.

### **ERP charge is levied on a per pass basis**

5. ERP charge is recommended to be levied on a per pass basis (charging at each and every charging point) together with special illegal parking fine which will maximize the effectiveness of the scheme.

### **Technology and Data Privacy**

6. As data privacy has increasingly become a major concern for the public and the business community, dedicated short-range radio communication (“DSRC”) would therefore be preferable over automatic number plate recognition (“ANPR”). ANPR, which relies mainly on capturing car plate numbers for payment settlement, requires manual checking and verification of car plates. Although DSRC requires the installation of in-vehicle units (“IVUs”) in vehicles, payment is made on an anonymous basis. It is less likely to give rise to concerns about the capture and storage of car plate images, and is therefore a less costly and intrusive system to implement.

### **Benchmarks of effectiveness of Central District ERP pilot scheme**

7. The following benchmarks are suggested to evaluate the effectiveness of Central District ERP pilot scheme:
  - A. Environmental data like various air pollutants indexes inside the pilot scheme area
  - B. Environmental data like various air pollutants indexes outside the pilot scheme area but in neighbouring regions around the pilot scheme area; and
  - C. Average time to reaching the destination to Central by vehicle versus that without the pilot scheme;

### **Charging level shall be reviewed regularly**

8. The charging level shall be reviewed regularly and adjusted where necessary in order to maintain the effectiveness of the Central District ERP pilot scheme subject to the acceptance by the public.

### **Implementation of the Central District ERP pilot scheme**

9. In view of the past successful experience of deploying PPP model for infrastructure projects, it is suggested to consider the feasibility of adopting PPP for this ERP pilot scheme.