

PROJECT CLEAN AIR

Certification Scheme for Clean Air Charter

Final Report

For

Airport Authority Hong Kong (AA)



Prepared by



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1. INTRODUCTION

The Airport Authority Hong Kong (AA) is a statutory body with a mandate to maximize the value of Hong Kong International Airport (HKIA) for the benefit of the territory. Established in 1995 to operate and maintain HKIA, and with an emphasis on enhancing Hong Kong's status as a major centre of international and regional aviation, the AA is wholly owned by the Government of the Hong Kong Special Administrative Region (HKSAR).

The AA is governed by the Airport Authority Ordinance (Chapter 483, The Laws of Hong Kong) and its Board comprises a Chairman, CEO and between eight to 15 other members. With a management team strengthened by expertise from the commercial sector, AA's 1,100-strong staffs take an entrepreneurial approach to developing HKIA into a preferred international and regional aviation centre and an engine of economic growth for Hong Kong. Riding on Hong Kong's strategic location and HKIA's world-class facilities, the AA is extending the airport's home market to the Pearl River Delta area and beyond.

This report outlines the findings of the Business Environment Council (BEC) from a walk through audit and interview with Ms Yuyu Tse – Assistant Environmental Manager (Safety, Security, Environmental & Planning Services) and Mr. Stanley K.C. To – Electrical & Mechanical Engineer (Technical Services).

From the pre-audit questionnaire completed by AA, it was determined that AA fits into Group C category of the certification scheme, showing that the organization has comprehensive management systems and means in place to identify and verify the implementation of energy efficiency / emission reduction programmes that are in compliance with the Clean Air Charter.

The site visit was conducted at the Hong Kong International Airport and led by Ms Konnie Yu and Mr Chris Lee on 18th May 2010. The purpose of this audit was to verify AA commitments to the Clean Air Charter.

2. OBSERVATIONS AND COMPLIANCE

Based on the site meeting, AA's programmes and practices on reducing air emission were reviewed. In general, a systematic approach on addressing the Clean Air Charter's commitments has been implemented as follows:

- AA's Corporate Environmental Policy Statement focuses on adopting and encouraging practices that prevent or minimize pollution as well as the use of energy and natural resources.
- AA's management approach is to work towards continual improvement in environmental performance. They require their business partners to adopt the same responsible approach in the business and aviation related activities at the airport.
- The Environmental Section is responsible for the air emissions monitoring by real-time air quality monitoring stations and the data is interpreted periodically. The Technical Service Department in coordination with the Environmental Section is responsible for implementing and monitoring energy consumptions by regular audit and ongoing energy reduction initiatives.
- The Executive Director, Airport Operations and his subordinates are responsible to review the annual performance and setting up new objectives and targets in energy consumption reductions. The objectives and targets on reductions in energy consumption are focused on tasked-based.
- A team of environmental professionals headed by Environmental Manager is in place to develop and implement the environmental programmes and a substantial budget is allocated every year for environmental programme implementation.
- AA as the landlord of the HKIA, standard environmental clauses are included in the tenancy agreement. Regular audit and meeting programmes are established to monitor tenants' operation.

Regarding the six commitments of the Clean Air Charter, the table below summarizes the achievements of Airport Authority Hong Kong:

Commitment	Action done
<p>1) Operate to a recognized world class standard, or the standards established by the Hong Kong / Guangdong governments on emissions of air pollutants, even if it is not a requirement to do so here. (Relevant to industrial operations, power plants and business with direct emissions)</p>	<ul style="list-style-type: none"> ◆ In view of the main activities of AA, the direct emission is mainly from vehicles and emergency generators. AA operates to standards specified and required by Hong Kong legislation.
<p>2) Use continuous emissions monitors (CEMs) at significant sources, e.g. large and medium plants. (Relevant to large / medium industrial operations and power plants)</p>	<ul style="list-style-type: none"> ◆ This commitment is aimed at industrial operations or power plants, hence not applicable to AA.
<p>3) Publish information on energy and fuel use, as well as total emissions of air pollutants annually and timely, if emissions are significant.</p>	<ul style="list-style-type: none"> ◆ The diesel and petrol consumption by ground support equipment and non-registered vehicles has dropped 27% and 5.6% respectively in 2010 when comparing with 2009. ◆ Consolidated energy consumption data are presented in AA's Corporate Social Responsibility website, information leaflet and annual report. ◆ AA also provides their fuel consumption data to HKSAR government regularly.

4) Undertake to adopt energy-efficient measures in their operations.

AA has implemented a number of energy-efficient measures in their operations to reduce indirect emissions from local power plants, including:

Energy saving

- ◆ Optimization of lighting operation and lux level
- ◆ Installation of LED lighting



LED Up Light



LED Exit Signs

- ◆ Optimization of operation schedule of escalator
- ◆ System balancing and optimization of operation schedule of Chiller
- ◆ Optimization of operation schedule of Pre-conditioned Air system.

Reduce Air Pollution

- ◆ Phased replacement of AA's entire vehicle fleet with fuel efficient/hybrid vehicles.




My Car

- ◆ Provision of biodiesel (B5) in the airport for AA's diesel vehicles.
- ◆ Provision of LPG in the airport



LPG Station

- ◆ Implementation of vehicle idling engine shutdown since 1 June 2008.
- ◆ Increased the use of fixed ground power (FGP) at-gate.

	 <p style="text-align: center;"><i>Fixed Ground Power (FGP)</i></p>
<p>5) Identify and encourage business-relevant measures to be taken on days when air pollution is high.</p>	<ul style="list-style-type: none"> ◆ When air pollution level is high in Hong Kong, the Air Pollution Index (API) will be announced via emails and staff will be reminded for the precautionary actions.
<p>6) Share air quality expertise in business with others.</p>	<ul style="list-style-type: none"> ◆ Technical visits are organized regularly to share air quality expertise. ◆ Updated environmental issues are published in bi-monthly “HKIA News” which is distributed to all staff working at the airport.

3. CONCLUSION

Airport Authority Hong Kong has demonstrated their commitments towards the Clean Air Charter’s commitments and is recommended to be certified under the Clean Air Charter.