

PROJECT CLEAN AIR

Verification Service on Clean Air Charter Certification

Final Report

For

Hong Kong Air Cargo Terminals Limited (Hactl)



Prepared by



7th June 2016

1. INTRODUCTION

Founded in 1971, Hong Kong Air Cargo Terminals Limited (Hactl) has been an integral part of Hong Kong and an active contributor to our city's economic development for the past four decades. With the terminal started its operation in 1976 to meet demand for a consolidated air cargo service in Hong Kong's manufacturing economy, Hactl's SuperTerminal 1, one of the most advanced air cargo facilities in the world since 1998, is capable of handling 3.5 million tonnes of cargo per annum.

Based on the findings from the pre-audit questionnaire completed by Hactl in May 2016, it was determined that Hactl fits into Group C category of the certification scheme, showing that the organisation 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 requirements of the Clean Air Charter (CAC).







This report outlines the findings of the Business Environment Council Limited 商界環保協會有限公司 (BEC) from a walk through audit and interview with Hactl's representative, Mr. Sam So, Senior Quality & Safety Officer. The site visit was conducted in the Hactl office located at SuperTerminal 1 of the Hong Kong International Airport by Ms. Annie Yeung and Ms. Mo Pang on 12th May 2016. The purpose of this audit was to verify Hactl's commitments to the CAC.

2. OBSERVATIONS AND COMPLIANCE

Based on the site meeting, Hactl's programmes and practices on reducing air emissions were reviewed. In general, a systematic approach on addressing the CAC's commitments has been implemented as follows:



- Its top management had committed to establish and implement its environmental management system (EMS) which has been certified with ISO 14001:2004 since March 2012. Maintaining the CAC certification is one of objectives in Environmental Plan 2016 approved by the top management.
- The Executive Director (Operation Services), who also acts as the chief coordinator, and all department heads take part in the annual management review on the EMS and OHSAS 18001 systems whenever objectives and targets are reviewed and set.
- Objectives and targets on air emissions and energy reduction are well defined and documented through its corporate Environmental Policy and Energy Policy.
- In compliance with its Environment, Health and Safety (EHS) system, its EHS Committee with members representing different functional units, Environmental & Management (E&M) Team and Quality & Safety (QS) team are responsible for monitoring and implementing the air emissions and energy consumptions during its operation regularly.
- Hactl has established and implemented the Energy Management System (EnMS) which meets the standard and all relevant requirements of ISO 50001:2011 for its operations since July 2013.
- North Office Building, South Office Block and 3/F and 4/F Cargo Handling (Workstations) Areas in the premises have been awarded with IAQ Certificates of Excellent Class, Good Class and Good Class, respectively since 2015.
- Environmental news and information have been disseminated to its staff members through the company's magazine "Hactlink", staff induction course and its television channel.
- Hactl has joined the Hong Kong International Airport's Carbon Reduction Programme since 2010, assisting the airport to reduce airport-wide carbon emissions by 25% per workload unit by 2015 from 2008 levels.


Regarding the 6 commitments of the CAC, the table below summarizes the achievements of Hactl:

Commitments	Actions 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. (Relevant to industrial operations, power plants and business with direct emissions).</p>	<ul style="list-style-type: none"> Hactl has established, maintained and implemented EMS and EnMS for its cargo handling related operations and other daily operations (with well-defined Environmental Policy and Energy Policy). Hactl is committed to take part in Hong Kong Airport Authority's carbon reduction programme for reducing airport-wide carbon emissions by 25% by 2015 from 2008 levels.
<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"> The commitment is aimed at industrial operation or power plants, hence not applicable to Hactl. Hactl has reviewed its overall emissions in compliance with ISO 14001 and ISO 50001 requirements to monitor and evaluate its environmental and energy performance, respectively. Hactl conducts Energy Review Report annually to analyze its energy use and consumption annually. <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="542 1318 961 1835" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-size: small;">Certificate No. CC 213</p> <p style="text-align: center; font-size: x-small;">This is to certify that the Environmental Management System of 香港空運貨站有限公司 Hong Kong Air Cargo Terminals Ltd. 香港國際機場超級一號貨站辦公大樓六樓 6/F North Office Block, SuperTerminal 1, Hong Kong International Airport, Hong Kong</p> <p style="text-align: center; font-size: x-small;">complies with the requirements of ISO 14001:2004 environmental management system standard</p> <div style="text-align: center;">  <p style="font-size: x-small;">Applicable to: 提供空運貨物處理服務 Provision of air cargo handling services</p> </div> <p style="text-align: center; font-size: x-small;">Signed for and on behalf of HONG KONG CERTIFICATION SERVICES INTERNATIONAL LIMITED</p> <div style="display: flex; justify-content: space-around; font-size: x-small;"> <div style="text-align: center;">  Secretary </div> <div style="text-align: center;">  Council Member </div> </div> <p style="font-size: x-small;">In accordance with the Hong Kong Certification Services International Limited (HKCST) Regulations, the HKCST certifies the ability or responsibility for any service supplied in accordance with the requirements of this Certificate Scheme. The certificate shall include HKCST accordance to request of some services of HKCST control and registration number 07. This certificate remains the property of HKCST and shall be returned when requested by HKCST. Registered address: Room 1611, 16/F, Austin House, 22-26 Hysan Avenue, Tsim Sha Tsui, Kowloon, Hong Kong Tel: (852) 2777 6162 Fax: (852) 2777 6168 Email: hkcert@hkcert.com</p> <p style="font-size: x-small;">Original Certificate 14 March 2012 Amended 17 July 2013 Expiry 18 July 2016</p> </div> <div data-bbox="987 1318 1406 1835" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-size: small;">Certificate No. CC 418</p> <p style="text-align: center; font-size: x-small;">This is to certify that the Energy Management System of 香港空運貨站有限公司 Hong Kong Air Cargo Terminals Ltd. 香港國際機場超級一號貨站辦公大樓六樓 6/F North Office Block, SuperTerminal 1, Hong Kong International Airport, Hong Kong</p> <p style="text-align: center; font-size: x-small;">complies with the requirements of ISO 50001:2011 Energy Management System - Requirements</p> <div style="text-align: center;">  <p style="font-size: x-small;">Applicable to: 提供空運貨物處理服務 Provision of air cargo handling services</p> </div> <p style="text-align: center; font-size: x-small;">Signed for and on behalf of HONG KONG CERTIFICATION SERVICES INTERNATIONAL LIMITED</p> <div style="display: flex; justify-content: space-around; font-size: x-small;"> <div style="text-align: center;">  Secretary </div> <div style="text-align: center;">  Council Member </div> </div> <p style="font-size: x-small;">In accordance with the Hong Kong Certification Services International Limited (HKCST) Regulations, the HKCST certifies the ability or responsibility for any service supplied in accordance with the requirements of this Certificate Scheme. The certificate remains the property of HKCST and shall be returned when requested by HKCST. Registered address: Room 1611, 16/F, Austin House, 22-26 Hysan Avenue, Tsim Sha Tsui, Kowloon, Hong Kong Tel: (852) 2777 6162 Fax: (852) 2777 6168 Email: hkcert@hkcert.com</p> <p style="font-size: x-small;">Original Certificate 17 July 2013 Expiry 18 July 2016</p> </div> </div> <p style="text-align: center; font-weight: bold; margin-top: 10px;">Photos of ISO 14001 and ISO 50001 certificates of Hactl</p> <ul style="list-style-type: none"> Hactl has continuously monitored its indoor air quality (IAQ) and

Commitments	Actions done
	<p>obtained Excellent Class of Indoor Air Quality Certificate for its North office building and Good Class for 3/F and 4/F cargo handling areas and South office block since 2015.</p> <div data-bbox="776 380 1224 1003" data-label="Image"> </div> <p style="text-align: center;"><i>Photo of IAQ certificate</i></p>
<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"> Hactl has publicised its environmental measures to staff members, tenants, corporate partners and the public through its magazine “Hactlink” twice a year. <div data-bbox="786 1234 1219 1822" data-label="Image"> </div> <p style="text-align: center;"><i>Photo of Hactlink</i></p>

Commitments	Actions done
4) Adopt energy-efficient measures in their operations.	<p>Super Terminal 1 (ST1) of Hactl reduced 12% of carbon emission in 2013 when compared with its baseline in 2011.</p> <div data-bbox="802 348 1166 852" data-label="Image">A certificate from the Business Environment Council (BEC) of Hong Kong, certifying a 12% carbon reduction for Hactl's SuperTerminal 1. The certificate is issued for the period from 1 January 2013 to 31 December 2013. It is signed by Mr. Lam Chi-ting, Chairman of the Environmental Campaign Committee. The certificate number is CL-1314-0332.</div> <p><i>Photo of Carbon Redution 12 % Certificate of Hactl</i></p> <p>Hactl has implemented a number of energy saving measures during its operations to reduce emissions, including:</p> <ul style="list-style-type: none">• Hactl has performed chiller plant monitoring and optimization work that saved 145,833 kWh and 194,300 kWh of electricity in 2014 and 2015 respectively.• Hactl has replaced traditional light bulbs with energy-saving alternatives, such as LED lights, at office area and exit signs of the warehouse to reduce 182,340 kWh of electricity consumption. <div data-bbox="821 1251 1240 1656" data-label="Image">A photograph showing a long office hallway with modern LED lighting fixtures installed in the ceiling. The hallway is well-lit, and a person is visible in the distance.</div> <p><i>Photo of LED lights at office area</i></p>

Commitments	Actions done
	 <p data-bbox="764 772 1305 806"><i>6-watt LED bollard at roof garden of Hactl</i></p> <ul data-bbox="550 821 1468 1268" style="list-style-type: none">• Hactl has retrofitted lighting in warehouse, North office block and outdoor area to reduce 1,088,000 kWh of energy.• De-lamping of unnecessary lighting devices in the warehouse, office and outdoor area was adopted by Hactl in 2015, saving 194,300 kWh of energy.• Another 52,800 kWh of energy were reduced by shutting down passenger lifts with low utilization rate in the warehouse of Hactl's main building;• Hactl has increased the number of electric forklifts to replace those driven by liquefied petroleum gas (LPG) such that the electric forklifts reached 62% of the entire fleet of forklifts as of May 2016.  <p data-bbox="865 1885 1166 1919"><i>Photo of electric forklift</i></p>

Commitments	Actions done
	<ul style="list-style-type: none"> Hactl has increased the number of electric vehicles from 3 units to 5 units since 2013.  <p style="text-align: center;"><i>Photo of electric vehicles at the entrance of Hactl</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"> Hactl has reminded vulnerable staff members to reduce outdoor activities during high Air Quality Health Index (AQHI) days as far as possible.
<p>6) Share air quality expertise in business with others.</p>	<ul style="list-style-type: none"> Hactl has shared its environmental commitments with its staff members through regular internal events (particularly the “Green Lunch”), and press releases online.

Commitments	Actions done
	<div data-bbox="672 310 1390 789"></div> <p data-bbox="889 810 1179 842"><i>Photo of Green Lunch</i></p> <ul data-bbox="526 869 1468 1052" style="list-style-type: none">• Hactl has shared its experience in environmental protection particularly on carbon reduction with its business partners in its industry during the sharing seminar in the Central Government Complex and site visit of the Hong Kong Awards for Environmental Excellence (HKAEE) 2016. <div data-bbox="696 1073 1365 1572"></div> <p data-bbox="675 1593 1393 1625"><i>Photo of Hactl's sharing at the seminar of HKAEE 2016</i></p>

3. CONCLUSION

Hong Kong Air Cargo Terminals Limited has demonstrated their commitments towards the CAC's commitments, and is recommended to be certified under the CAC.