

**PROJECT CLEAN AIR**  
**Certification Scheme for Clean Air Charter**  
**Final Report**  
**For**  
**Shell Hong Kong Limited**



**Prepared by**



**September 2010**

## 1. INTRODUCTION

The business of Shell Hong Kong Limited comprises a range of activities including distribution of oil, gas and chemicals from their Tsing Yi Installation and fuels and LPG through a transit depot at Apleichau. Their retail network consists of 44 retail filling and service stations, and commercially they are the fuel and lubricants supplier for key industries. More than 30 LPG showrooms supply the LPG brand "Shell Gas" and they provide aviation fuel for Hong Kong International Airport. Shell is the supplier of petrochemical products to major industries and marine vessels.

From the pre-audit questionnaire completed by Shell, it was determined that Shell 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 Shell office and led by Mr. Benny Au on 24<sup>th</sup> November 2009. The purpose of this audit was to verify Shell's commitments to the Clean Air Charter.

## 2. OBSERVATIONS AND COMPLIANCE

Based on the site meeting, Shell'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:

- ISO14001 for the main plant of Tsing Yi Installation has been acquired since 1998.
- Shell Hong Kong HSSE Committee is chaired by the Director and members are representing management and employees and contractors from different departments. The committee convenes on a quarterly basis to discuss the HSSE related issues, make recommendations and endorse action plans.
- In-house CO<sub>2</sub> saving campaign was organised in 2009 and the winners were received with cash reward.
- "Energy Challenge @ Work" and training toolbox "CO<sub>2</sub> Better Blueprint" were distributed to employee recommending practices in saving energy and air emission during everyday work.
- Electronic Delivery Record (EDR) system was introduced since 2008. Fuel-dispensing transaction data is stored in an organised structure. Using machine identification device, little labour is needed for recording delivery volume and individual machine consumption, helping in achieving higher efficiency.
- Employees in Shell were informed about Clean Air Charter through distribution of internal circular.

Regarding the six commitments of the Clean Air Charter, the table below summarizes the achievements of the Shell Hong Kong Ltd.:

Commitment	Action done
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)	<ul style="list-style-type: none"> <li>◆ VOC is the main air pollution generated during their business operation. Shell is monitoring their direct air emission based on local regulations and their HSSE and SP control framework established in-house.</li> <li>◆ Installation of Vapour Recovery Unit (VRU) in Tsing Yi plants, which are used to remove and recover vapours from storage tanks. A quarterly on-site assessment and VRU calibration is conducted by a consultant from Environmental Management Division of Hong Kong Productivity Council in order to avoid VOC emission.</li> </ul>
2) Use continuous emissions monitors (CEMs) at significant sources, e.g. large and medium plants. (Relevant to large / medium industrial	<ul style="list-style-type: none"> <li>◆ There is no legal CEM requirement on their production. However, Shell conduct air samples to ensure no pollution to the surroundings.</li> </ul>

Commitment	Action done
operations and power plants)	
3) Publish information on energy and fuel use, as well as total emissions of air pollutants annually and timely, if emissions are significant.	<ul style="list-style-type: none"> <li>◆ Shell China and Hong Kong issued sustainability report with green house gas emission data included. In the 2009 report, 0.03 gigajoul (GJ) for every ton of hydrocarbon were saved in a project compared with that in 2008. This is equivalent to an annual saving of around 2,500 tons of standard coal</li> </ul>
4) Undertake to adopt energy-efficient measures in their operations.	<p>Shell has introduced a number of energy-efficient measures in their operations to reduce emissions, including:</p> <ul style="list-style-type: none"> <li>◆ Green roof was built on top of the Shell Building at Tsing Yi in 2008. The benefits include reducing roof temperature, reducing room temperature so as to save energy consumption of air-conditioner, providing green space for people, etc.</li> <li>◆ Shell Hong Kong has launched a “Energy-save Site” project to all Shell service stations in Hong Kong since August 2009. Energy efficient measures including motion sensor for lighting, LED lightings and DC inverter type air-conditioners.</li> <li>◆ Existing fluorescent lightings in LPG plant were replaced by T5 lights in June 2009. Approximately 50% saving of energy consumption has been recorded.</li> </ul>
5) Identify and encourage business-relevant measures to be taken on days when air pollution is high.	<ul style="list-style-type: none"> <li>◆ All employers are advised to reduce physical exertion and outdoor activities when the outdoor air pollution index reaches “Severe” level. In addition, Employees with existing heart or respiratory illness are advised to reduce physical exertion and outdoor activities when the outdoor air pollution index reaches “Very High” level.</li> </ul>
6) Share air quality expertise in business with others.	<ul style="list-style-type: none"> <li>◆ Shell China and Hong Kong publish sustainability report every year which is available on their website.</li> <li>◆ Their Commercial Department also promotes fuel save tips to customers through seminars and leaflets.</li> </ul>

### 3. CONCLUSION

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