

## Submission to Legco Panel on Environmental Affairs

20th July 2007

Subject: The environmental impacts arising from the proposed construction of a Liquefied Natural Gas Receiving Terminal at South Soko Island.

Below is Clear the Air's position on the subject. We propose to review the alleged need for an LNG terminal in Hong Kong in arguing that such terminal isn't necessary to improve Hong Kong air quality. In the same way, you do not need to acquire a bus company to take the bus from point A to point B.

## Summary:

- 1. Following claims that the gas reserve at Yacheng wasn't as high as anticipated, Exxon Mobil / CLP has been burning coal at the Castle Peak power station causing these last 2 years, the rapid deterioration of Hong Kong's air quality resulting in the high level emissions of Sulphur Dioxide (SO2) and Nitrogen oxide (NOx). Then, demands by CLP's management have been made to build an LNG terminal to supply Hong Kong with gas.
- 2. In order to improve Hong Kong' air quality it is Clear The Air position that such LNG terminal isn't necessary. The mandated installation of Flue Gas Desulfurization (FGD) equipment combined with the installation electrostatic precipitators (for Respirable Suspended Particulates) are key features to greatly reduce the emissions of the key pollutants: over 90% of SO2, and 80% of Nox. This phased installation is scheduled to last until 2011.
- 3. In order to ascertain the objective of meeting the 2010 emission standards, other measures have to be also implemented such as:
  - speeding up the present installation
  - developing more stringent campaigns to reduce electricity consumption and production, since 25% of electricity goes in waste
  - reducing power supply to the Mainland
  - replacing some coal-fired units with gas-fired turbines
- 4. It is important to mention that such (FGD) technology has now been widely in use all over the world, for instance **The Large Combustion Plant Directive** largely adhered to by the British electricity industry is mainly through the adoption of FGD technology. In Germany, domestic law pre-dating the English directive by 5 yerars, has put German firms manufacturing FGD units well ahead to sell on overseas markets. In Guangdong, all generation units of capacity above 125MW is currently being retrofitted with FGD equipment.
- 5. Argumentations on installations costs to be passed on to the consumers should also be dismissed as it rests on CLP's responsibility to absorb



these costs following the last decades of fat profits still guarranted by the current Scheme of Control.

6. It is equally our view that the provisions of the current Scheme of Control are the very reason why we are gathering here today since it is the profit to be derived from the construction of the gas terminal that initially drives the move to the Sokos, and not the improvement of Hong Kong's air quality.

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Although HK isn't obliged to limit its GHG emissions under the Kyoto Protocol, for the sake of public health in the SAR and in the PRD, drastic measures could be taken here which would have sizeable effects in the region, in showing what can be achieved and how.

These measures include:

For the power sector:



## Demand side Management and energy conservation for the electricty market:

**DSM** in 2007 is a must for any highly developed economies however however since 2005, there is no clear sign that the 2 power companies are implementing it effectively - the process consist of managing the consumption of energy, generally to optimize available and planned generation resources - it includes:

Automated Demand Response, Price Response, Smart thermostat, Advanced Meter Reading, Advanced Meters, Load Response, Automated Meter Reading, Energy Management Control Systems, Building Automation Systems, Controls Engineering and Locational Marginal Pricing - when and where have we heard of this in our media?

Air-conditioning represents 30% of HK electricity needs, however there is no sign either that the Govt's campaign of setting the thermostat to 25.5 degree on a voluntary basis has made any difference. Because on these new issues, voluntary measures fail to work.

The reasons why these measures aren't given the attention they deserve are due to the present scheme of control - which authorizes our main power producer to sell to China the electricity in excess unsold in HK - making the difference in air pollution: NIL. under the present conditions energy saving is unfortunately useless.

unit sold to GD by CLP: 600 u. in 1997. : 4,500 u. in 2005.

Estimates by our energy specialists have revealed that the adoption of demand side management as it exists in other countries like Japan, should result in a reduction of electricity consumption in HK not of 6% but of 18 to 22% - there is scope here for very lucrative business in thorough energy saving appliances across the board and all over Hong Kong - and our power companies would then have to adapt to this new deal, not in selling more electricity but in selling less and in a cleaner way with a reformed scheme of control.

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