

# **Climate Policy Address Recommendations from WWF to the Hong Kong Special Administrative Region**

## **Introduction**

1. Last year, the second Policy Address of the Third Term Government of the Hong Kong Special Administrative Region (HKSAR) introduced for the first time the concept of a “Low Carbon Economy”.

## **Review of Commitments**

### **Low Carbon Economy**

2. In that Policy Address, entitled “Embracing New Challenges,” “Turning Crisis into Opportunities” was advocated as a progressive way to deal with the present challenges we face. Without much detailed substance as to how and when, Hong Kong SAR said we would develop the PRD Region into a Green and Quality Living Area, enhance building energy efficiency, promote notions of energy conservation, continue recycling, and consider developing some more parks.

### **Climate Threats & Opportunity**

3. As you are aware, governments of the world are now counting down to the United Nations Climate Change Conference on Dec 7-18<sup>th</sup>, and the critical negotiations which will determine whether our planet suffers, or avoids the worst impacts of climate change. To avoid the most catastrophic consequences, governments of the world need to set ambitious targets for emissions reduction and release the funds and mechanisms that will enable us to stay well within a limit of a less than 2 °C temperature rise over pre-industrial levels.
4. In Hong Kong, we may lose winter, defined by minimum temperatures of 12 °C or below by 2020, while the highest temperatures may reach 40 °C by 2050. The increasing trend in heat stress and heavy rainfall is proven and statistically significant, according to the Hong Kong Observatory.
5. Failure to adequately address climate change will have profound consequences for all, increasing basic costs for business and governments. Sea level rises and extreme weather patterns will increase in severity, pushing up insurance premiums and significantly increasing the costs of producing and delivering goods. It has been estimated that 80% of China’s GDP will come

from areas at risk of flooding by 2050, and certainly the low-lying Pearl River Delta is at risk.

6. Climate change is both a threat requiring urgent action, and an opportunity for Hong Kong. The threats are obvious, from the direct impacts to our SAR from increasing rainfall, temperature and extreme weather events, to the failure of crops and fisheries in countries that supply our food, with corresponding impacts to our health and way of life. And an opportunity - as Hong Kong is perfectly poised to ride the wave of change sweeping the world towards green economies with increased efficiency, attendant cost savings, the ability to create new jobs and stimulate our economy.
7. Everyone has a role to play in tackling climate change. We will do our part to support global efforts to reduce the greatest threat our generation has ever faced, and to maximise the opportunities for Hong Kong by placing it at the forefront of low carbon cities globally. In 2010 Hong Kong SAR should announce an ambitious plan and major funding to achieve an overall emissions reduction target, stimulating the economy as we have previously done with large infrastructure projects.

### **Emission Targets**

8. The United Kingdom legislated to reduce 80% of her GHG emissions by 2050 and Japan recently pledged to reduce Japanese GHG emissions by 25% from 1990 levels by 2020. Although not obliged to announce targets under the Kyoto Protocol, South Korea also plans this year to unveil targeted cuts in its GHG emissions by 2020 voluntarily and invest about two percent of its GDP in "green growth" during the next five years. China will cut CO<sub>2</sub> emissions per unit of GDP by a notable margin by 2020 from the 2005 level and will generate 15% of its energy from renewable sources by 2015.
9. As a developed and wealthy city, it is appropriate that Hong Kong adopts the IPCC recommendations for emission reduction targets for developed nations (25-40%) sufficient to keep below a 2 °C rise in global temperature, by setting its own target of 25% by 2020, from 1990 levels. Recognising the urgency that tackling climate change demands, the Consultancy Study of Climate Change will be released prior to the Copenhagen conference, and instigate accelerated but comprehensive public consultation on the Study results.
10. The Stern Review, conducted for the UK Government makes it clear that delaying action on climate change will only make future action more costly.

## **Low Carbon City Planning and Green Buildings**

11. A low carbon economy must come with a solid low carbon city plan. Government should apply Urban Climatic Maps for future urban planning. In line with international practice, especially in Europe and in Japan, Urban Climatic Maps allow better planning as to building density, floor area ratio, air paths, non-building areas, open spaces and greenery by taking urban air ventilation and ventilation into account. Better planned urban environments will use less energy, reducing greenhouse gas emissions.
12. With government's great effort, the percentage of greenery coverage, especially in public housing hasn't increased but declined from some 24% in 80's to around 13% in 90's. Therefore, we suggest setting targets for the provision of greenery in urban areas for at least 30% in order to catch up. This will help to lower the ambient temperature by 2 – 3 °C in urban area. We will also promote green roofs and walls with haste. The combined effect of these features could result in 10 – 20% reduction in cooling demand.
13. As a next step, we suggest investigating to set up a green plot ratio: (Total Leaf Area (m<sup>2</sup>) / Total Site Area (m<sup>2</sup>)) in order to grasp a more holistic view of greenery coverage.
14. A quality urban environment leads to a better indoor environment in terms of improved indoor ventilation, health and comfort. We suggest standardizing the methodology for air ventilation assessment and make it mandatory to not only government projects but also to those of industry. Rate all buildings in Hong Kong using an Air Ventilation Index.
15. As buildings contribute 89% of Hong Kong's total electricity use, the Government is committed to improving energy efficiency in buildings. The public consultation on a proposed mandatory implementation of the Building Energy Codes (BEC) was completed last year and was positively received, Hong Kong SAR will present the bill to Legco in the near future.

## **Energy Labelling**

16. The Government recognises that energy labelling is an effective way to improve energy efficiency in appliances. Therefore, we have applied the mandatory scheme to three categories of three electrical appliances some 14 years after the introduction of the voluntary scheme. Recently, Hong Kong SAR proposed two more categories. We expect this as a significant step towards mandatory labelling covering the 10 most energy-consuming household appliances by 2012, and removal of the most energy inefficient appliances from

sale by 2015. We suggest starting to phase out the sale of incandescent light bulbs in 2010, and complete the process by 2011.

## **Power Generation**

17. Over 60% of Hong Kong's electricity is generated by coal-fired power stations. Natural gas has an important transitional role to play in reducing carbon emissions and other pollutants, as Hong Kong shifts from coal to an increased proportion of renewable and other less-polluting energy sources. In the coming year Hong Kong SAR should work with the power utilities to come up with a timetable to gradually increase the use of natural gas for power generation from the current 28 percent to 50 percent.

18. To promote renewable energy, Hong Kong SAR should set a target of 5-10% generated in Hong Kong by 2020. We recognise that achieving such a target will require an active role from the administration, and Hong Kong SAR should initiate discussions with industry on the most cost-effective approaches to meeting the target, and commit resources to support it. Suitable technologies and solutions already exist. For example, the conversion of all rooftops of governmental building and commercial building to solar panel rooftop would help produce almost 1% of Hong Kong's energy needs. Hong Kong SAR should promote Building Integrated Photovaltics (BIPV) to increase the share of decentralized renewable energy generation.

## **Green Procurement**

19. Deforestation is responsible for 19% of global CO<sub>2</sub> emissions. The most credible sustainable forest certification scheme is that of the Forest Stewardship Council (FSC), and HK SAR should initiate sustainable procurement policies for all Government bodies to promote the procurement of certified sustainable timber products (including paper) in order to support sustainable forest management. Green procurement has been identified by the Taskforce on Economic Challenges as a priority area for development.

## **Green Jobs**

20. Overseas studies have found that green stimulus programmes are far more effective at creating jobs, in equivalent spending, than more traditional industries and that green stimulus initiatives generate about three to four times

as many jobs, per dollar, as do tax cuts. In addition, the Stern Review anticipates that low-carbon energy products, which have the potential to be a strong area of growth for Hong Kong, are likely to be worth over US\$500 million per year by 2050.

21. A WWF study “Green Jobs for Europe” found that at least 3.4 million European jobs are directly related to renewable energy, sustainable transport and energy efficient goods and services. This compares with 2.8 million jobs in polluting industries, such as mining, electricity, gas, cement, iron and steel.
22. US President Barack Obama announced a US\$900 billion stimulus package to generate 5 million “green-collar” jobs. South Korea, which is losing jobs for the first time in more than five years, also plans to invest US\$38 billion in green jobs and employ people to clean up four major rivers, reduce disaster risks by building embankments and water-treatment facilities, eco-friendly transport networks and hundreds of kilometres of bicycle tracks. Japan, Britain and China have also adopted similar measures to create jobs and new opportunities.
23. According to WWF, there is huge potential for Hong Kong to develop new climate-related business opportunities within its own boundary and across the border with other mainland Chinese cities. These new industries include inspection, verification, testing and certification services of climate-related standards, carbon audits, energy management consulting, retrofitting services, research and development of fuel types, energy efficiency and renewable energy technologies. Testing and certification has been identified by the Taskforce on Economic Challenges as a priority area for development.
24. Hong Kong SAR will continue our commitment to keep the unemployment rate low. In our proposed six key priority industries, environmental services as well as certification are two key areas to focus on. The new job opportunities from carbon and energy audits not only help us to create jobs for citizens but also ultimately help corporations to save energy and money, as well as reducing carbon emissions.
25. Stimulate the economy through new significant financial stimulus aimed at turning Hong Kong into a low carbon city, creating a win-win situation. This approach has already been adopted by United States, Europe, China and South Korea who lead global "green" spending plans after committing around US \$420 billion to boost low carbon technologies and protect the environment, under wider plans to boost the global economy.

## **Integration with Mainland China**

26. Hong Kong SAR is aware of the advancements the National Government has made in tackling climate change and Hong Kong SAR should be determined to match this pace. Hong Kong SAR should work closely with Guangdong and share expertise, ideas and experiences to achieve emission reductions.
27. Hong Kong business owns around 55,000 factories in the Pearl River Delta and we have a responsibility to address the carbon footprint generated from the economic activities we invest and profit from in the region. New funding will be provided for Hong Kong companies to conduct carbon audits and start retrofitting their facilities over the border to reduce emissions, making the supply chains more attractive to overseas buyers which are increasingly concerned about carbon emissions. Low carbon manufacturing also helps improve the region's air quality.

### **Corporate and Individual Responsibility**

28. The commercial sector's energy consumption is 37% and the largest of all sectors, followed by transportation (36%) and residential (19%). In December, 2008 a HK\$450 million scheme of Carbon audit and energy efficiency project was launched. This scheme received more than 800 applications. However, the scheme covers only communal areas in the building meaning tenants staying inside are not eligible to participate to reduce energy and carbon footprint through the scheme. Hong Kong SAR should plan to expand the scope of this scheme this year. There are more than 290,000 companies (under 100 employees), including SME in Hong Kong. The conversion of all offices in Hong Kong to low carbon offices, can play an important contribution to reducing emissions. Government should investigate a simple scheme - a straightforward and practical tool enabling companies to measure, track and reduce office operation-generated carbon footprint. Hong Kong SAR should remain committed to providing audit guidelines and awards to recognise companies' effort.
29. To reduce 25% of Hong Kong's carbon emissions by 2020 requires collective efforts from our citizens. A 25% reduction equals to about 18 million tonnes of emissions. Hong Kong's per capita carbon emission is 6.7 tonnes per year (excluding aviation and food), and if each of us reduce 10% of our basic carbon footprint, we can aggregate a saving of 4.7 million tonnes of emissions by such actions alone. We will look for new ways to promote awareness on climate change, and incentives to encourage communities to move towards a low carbon lifestyle.