

For discussion
on 2 November 2009

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Hong Kong Government's Preparation for
the United Nations Climate Change Conference 2009**

PURPOSE

This paper provides an account on the Government's latest initiatives and efforts in addressing climate change with a view to, *inter alia*, preparing for the United Nations Climate Change Conference to be held in Copenhagen in December 2009.

BACKGROUND

2. The United Nations Framework Convention on Climate Change (the Convention) is an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of greenhouse gases (GHG). The Convention entered into force in March 1994 with 194 countries having ratified. Under the Convention, governments –

- (a) gather and share information on GHG emissions, national policies and best practices;
- (b) launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and
- (c) cooperate in preparing for adaptation to the impacts of climate change.

3. The Kyoto Protocol (the Protocol) is an international agreement linked to the Convention. The Protocol commits industrialised countries to stabilize GHG emissions under the principle of “common but differentiated responsibilities.” A major feature of the Protocol is that it

sets binding targets for 37 Parties included in Annex I to the Convention (Annex I Parties)¹ and the European Community for reducing GHG emissions. Their reductions amount to an average of 5% against 1990 levels over the five-year period 2008-2012. The Protocol has not introduced any new commitments for Parties not included in Annex I to the Convention (non-Annex I Parties). The Protocol was adopted in December 1997 and entered into force in February 2005. The Protocol has been ratified by 188 Parties to date.

4. China is a Party to the Convention and the Protocol. Following consultation with the Administration, the Central People's Government notified the United Nations that the Convention and the Protocol were extended to the Hong Kong with effect from May 2003. Under the Convention and the Protocol, Hong Kong is required to work jointly with the Mainland to fulfill the obligations imposed upon China as for other non-Annex I Parties.

5. Hong Kong is committed to working closely with the international community to combat climate change. Representatives from the Administration had joined the Conferences of Parties to the Convention and the Protocol in the past as part of the Chinese Delegation.

THE UNITED NATIONS CLIMATE CHANGE CONFERENCE 2009

6. The fifteenth session of the Conference of Parties to the Convention and the fifth session of the Conference of Parties serving as the meeting of the Parties to the Protocol, collectively called the United Nations Climate Change Conference 2009 (the Conference), is scheduled to be held in Copenhagen, Denmark from 7 to 18 December 2009.

7. As the first commitment period of the Protocol which governs the GHG emissions of Annex I Parties will expire in 2012, Parties to the Convention agreed in 2007 at Bali to jointly step up international efforts to combat climate change and get to an agreed outcome in the Conference so that national governments have time to prepare for implementation beyond 2012. The Parties also agreed on the "Bali Roadmap" which provides direction on the agreed outcome of the Conference on four key

¹ Annex I Parties include the industrialized countries that were members of the Organisation for Economic Co-operation and Development in 1992, plus countries with economies in transition, including the Russian Federation, the Baltic States, and several Central and Eastern European States.

issues. The first is the clarity on the mid-term GHG emissions reduction targets that Annex I Parties will commit to. Second, there must be clarity on the nationally appropriate mitigation actions that non-Annex I Parties could undertake to limit their GHG emissions. Third, it must define stable and predictable financing to help non-Annex I Parties reduce GHG emissions and adapt to the inevitable effects of climate change. And finally, it must identify institutions that will allow technology and finance to be deployed in a way that treats non-Annex I Parties as equal partners in the decision-making process.

8. Given that the Conference is anticipated as an important milestone to determine the future international cooperation framework to address climate change, the Administration will continue our previous practice of sending representatives to participate in the Conference as part of the Chinese Delegation. The representatives will gain the first hand experience and information about the international negotiations to help the Administration to refine the climate change policy of Hong Kong.

POLICIES AND MEASURES TO ADDRESS CLIMATE CHANGE

9. The Administration attaches much importance to the issue of climate change. Though Hong Kong is a relatively small emitter and that our economic growth is driven mainly by service industries which are not energy intensive; we believe our carbon footprint may be reduced even further through the use of cleaner fuel and improved energy efficiency. The overall strategy and measures that have been adopted by the Administration had been set out in earlier submissions to this Panel on 28 May 2007, 28 January 2008, and to the Subcommittee on Improving Air Quality of this Panel on 13 January 2009. A summary is now given at **Annex A**. We are also conducting a comprehensive consultancy study to assess the impact of climate change in Hong Kong and to recommend how we could further strengthen the existing control of greenhouse gas emissions as well as climate change adaptation measures.

10. Furthermore, with a view to transforming Hong Kong into a low carbon economy, the Administration has announced a number of new initiatives in the 2009/10 Budget (e.g. promoting the use of electric vehicles, allocating about \$450 million to carry out minor works in government buildings to incorporate energy efficient systems and installation) and the latest Policy Address. A list of new initiatives included in the latter is at **Annex B** and their details have been included in our submission to this Panel on 16 October 2009.

ADVICE SOUGHT

11. Members are invited to note the contents of this paper for information.

**Environmental Protection Department
October 2009**

Annex A

Summary of Existing GHG Reduction Measures in Hong Kong

Categories	Measures
Overall Target	To achieve a reduction in energy intensity of at least 25% between 2005 and 2030.
Cleaner Fuel in Electricity Generation	Banned construction of coal-fired power generating units since 1997.
	Provided financial incentives to encourage power companies to maximize the use of natural gas for power generation.
	Signed on 28 August 2008 with the National Energy Administration a Memorandum of Understanding on the continuous supply of nuclear electricity and natural gas to Hong Kong in the next two decades.
	Approved, in September 2009, CLP Power Hong Kong Limited to extend the contract for the supply of nuclear electricity from Daya Bay Nuclear Power Station for another term of 20 years to May 2034.
Renewable Energy	To have 1-2% of the local power needs met by renewable energies by 2012.
	Provided necessary incentives under the Scheme of Control Agreements (SCA) with the two power companies to actively promote wider application of renewable energy. A higher rate of return for their investment in renewable energy facilities (11%), and a bonus in the range of 0.01 to 0.05 percentage point in permitted return depending on the extent of renewable energy usage in their electricity generation.
	To continue the Administration's on-going efforts in promoting the use of renewable energy in public works projects. A number of pilot projects have been implemented.
	To facilitate customers with embedded renewable generation to connect to power grid.
Electricity Demand Side Management	Provided in the SCA a maximum award of 0.02 percentage point in the permitted return of the power companies depending on their performance on the number of energy audits performed for customers and the actual energy saved.
	Agreed with the two power companies under the SCA to set up loan funds amounting up to a total of \$187.5 million over a five-year period. The funds are to provide loans to non-Government customers to implement energy saving initiatives identified in energy audits.

Categories	Measures
Building Energy Efficiency and Carbon Auditing	Implemented the voluntary Energy Efficiency Registration Scheme for Buildings since 1998 to promote the application of the Building Energy Codes covering lighting, air conditioning, electrical and lift & escalator installations.
	Provided \$450 million under the Environment and Conservation Fund (ECF) to implemented “Buildings Energy Efficiency Funding Scheme” in April 2009. Subsidies are provided to eligible applicants to conduct energy-cum-carbon audits and energy efficiency improvement projects in buildings.
	To require all works departments to apply energy efficient features in new Government buildings and retrofit projects where feasible. Guidelines are provided to bureaux and departments in adopting energy efficient measures in their operations.
	Launched in July 2008 a set of carbon audit guidelines for buildings in Hong Kong.
	Embarked upon a “Green Hong Kong • Carbon Audit” campaign. So far, more than 130 organisations from different sectors of the community have become the “Carbon Audit • Green Partners” to undertake to conduct carbon audits and to initiate carbon reduction programmes for more than 120 buildings.
	Implemented a comprehensive target-based green performance framework for new and existing government buildings since April 2009 to continue promoting environmental protection and energy conservation in government buildings.
	To implement energy efficiency demonstration projects to demonstrate state-of-the-art energy efficient designs and technologies.
	To review the scope of application of the Building (Energy Efficiency) Regulation and the overall thermal transfer value standard of buildings, with a view to improving the energy performance of buildings.
Energy Efficiency and Conservation	To implement the mandatory Energy Efficiency Labelling Scheme. The initial phase of the scheme covers room air conditioners, refrigerating appliances and compact fluorescent lamps.
	Agreed with the two power companies under the SCA to set up an education fund for promoting energy efficiency, etc.

Categories	Measures
	To actively promote the use of water-cooled air-conditioning systems. A Code of Practice for Water-cooled Air Conditioning System was published in July 2006, covering guidelines for cooling tower design, installation, testing, commissioning, operation and maintenance.
	To implement energy saving programmes within the Administration, e.g. conducting energy audits and re-audits at Government venues, maintaining air-conditioned room temperature of government offices at 25.5°C in summer months.
	Supported the Clean Air Charter initiative led by the business sector.
	To implement a district cooling system to provide energy-efficient air-conditioning services for public and private non-domestic developments at the new Kai Tak Development.
	To replace all conventional traffic signal at 1,900 signalised junctions in Hong Kong with LED traffic signals by phases.
Land Transport	To continue to extend the coverage of the public transport system, in particular the railway network.
	To promote the use of electric vehicles.
	To promote the use of cleaner vehicles under the “Tax Incentives Scheme for Environment-friendly Petrol Private Cars”, i.e. reducing the First Registration Tax by 30%, subject to a cap of HK\$50,000 per car.
	To encourage early replacement of diesel taxis and light buses with liquefied petroleum gas ones by providing financial incentives.
	To promote the use of biodiesel as motor vehicle fuel.
Landfill Gas Utilization	To maximise utilisation of landfill gas from all 3 operating and 13 closed restored landfills as fuel substitutes. With the completion of the facilities to transport landfill gas from the North East New Territories Landfill to Towngas production plant in Tai Po in January 2009, around 50% of the collected landfill gas is utilized either by on-site facilities or for off-site towngas production.
Greening	To carry out tree plantation programmes.
	To implement green roof projects for new Government buildings as far as practicable. To explore further plantation opportunities like retrofitting green roofs to existing Government buildings and installing vertical green panels.

Categories	Measures
Clean Development Mechanism	Announced the “Arrangements for the Implementation of Clean Development Mechanism Projects in the Hong Kong Special Administrative Region” in June 2008.
Research and Studies	To complete a comprehensive study on climate change by early 2010.
	To conduct studies on phasing out incandescent light bulbs and replacing them with more energy-efficient lighting products, as well as on issue of energy wastage of external lighting.
	To continue and support scientific research related to climate change.
Public Awareness and Education	To raise public awareness and enhance the community’s understanding of climate change and the important role that individuals could play in tackling the problem through lifestyle and behavioural changes, notably in respect of energy conservation. e.g. through organizing “I love Hong Kong I love Green” campaign, “Hong Kong Energy Efficiency Award”, production and distribution of an educational package on climate change to schools; organizing thematic talks and seminars; and encouraging public to set air-conditioned room temperature at 25.5°C in summer months, etc.
	Introduced the Carbon“Less” Certificates scheme in the 2009 Hong Kong Awards for Environmental Excellence to encourage and recognise the efforts made in buildings and by organisations in reducing their carbon footprint.
International Cooperation	Joined C40 Cities Climate Leadership Group to work closely with other participating cities on combating climate change.
Institutional Arrangement	Established the Inter-departmental Working Group on Climate Change in 2007 to strengthen co-ordination of efforts in tackling climate change amongst the relevant bureaux and departments.

Annex B

**New Initiatives to Address Climate Change
in 2009-10 Policy Address and Policy Agenda**

- To introduce a bill for the mandatory implementation of the Building Energy Codes to the Legislative Council in 2009.
- To introduce amendments to the Energy Efficiency (Labelling of Products) Ordinance to the Legislative Council in 2009 for the second phase of the Mandatory Energy Efficiency Labelling Scheme.
- To promote the replacement of incandescent light bulbs by compact fluorescent lamps through various means.
- To formulate and promulgate the specific arrangements for Hong Kong enterprises' participation in Clean Development Mechanism projects in the Mainland.
- To expand green procurement in the Government by proactively applying the green specifications developed for some 60 products commonly procured by Government departments.
- To make preparation for introducing regulatory control on motor vehicle biodiesel.