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### Climate Change Business Forum (CCBF) Nuclear Energy Statement

The Climate Change Business Forum (CCBF) convenes a cross section of Hong Kong's most astute business leaders to collaborate on tackling climate change. We believe that a healthy environment and sustainable resource use are integral to the health and welfare of Hong Kong people, as well as to the SAR's long-term competitiveness. Thus we advocate policies and business models that will progress Hong Kong's transition to a low carbon economy.

A critical element of this transition is the fuel mix used to generate our electricity. Hong Kong has long benefited from a diversified portfolio of generation fuels. This diversity reduces the risk of power disruption and price increases.

Looking forward, diversification will not be enough – especially if new environmental objectives are to be achieved. Increased demand, increasingly differentiated fuel sources, resource scarcity and grave concerns about pollution and climate change have spurred the discussion on Hong Kong's future fuel mix. The critical challenges will be (a) seeking a safe, clean and reliable mix of fuels; (b) securing fuel supplies in light of volatile pricing and availability; (c) incentivising energy conservation and (d) ensuring that the Hong Kong public is fully supportive and engaged in each of these elements.

#### Hong Kong's energy strategy

Hong Kong has historically relied heavily on coal for power generation. Coal was relatively inexpensive and easily available. Today, however, we know that burning coal also poses serious threats to both human health, through local air pollution, and to the earth's atmosphere, through the warming effects of greenhouse gases. Thus the climate change action plan proposed in September 2010 includes a shift from coal to natural gas, nuclear power and renewable energy.

A key element is de-carbonizing the fuel mix, without prejudicing the reliability of Hong Kong's energy supply. Substituting nuclear, natural gas and, where practicable, renewable energy for coal are considered steps in the right direction. We anticipate a decrease in pollution and greenhouse gas emissions, but also a rise in electricity tariffs. Such price changes could spur energy conservation. They will also have a significant impact on households and companies in Hong Kong – an outcome that can and should be addressed by public policy makers.

Last year, CCBF went on record in support of the Government's proposal to achieve a fuel mix of 50% nuclear, 40% gas, 3%-4% renewable energy and 6%-7% coal by 2020. The March 2011 earthquake and tsunami damage to the Fukushima nuclear power plant spurred a review of this position.

Following internal discussions, CCBF will support the Hong Kong Government's proposed fuel mix, on the presumptions that (a) the lessons learned from Fukushima, and elsewhere, are fully taken into account, and (b) the fuel mix is part of a comprehensive, long-term energy strategy that prioritizes human safety and protection of the environment above all else. As with any long-term plan, it must also be reviewed regularly and rigorously – particularly up to and after 2020 -- in the light of new and emerging technologies, to ensure the goals of a safe, secure and affordable energy supply are met.

The first element of the Hong Kong energy strategy must be conservation. The opportunities for conservation are manifold. To cite but one example, CCBF's *Every Building a Powerhouse* research reveals that Hong Kong buildings – which account for 89% of Hong Kong's energy use -- could be made 50% more efficient with current technologies, were sufficiently powerful policies and incentives in place to assist with the costs involved. We would like to see much more aggressive effort from the Government, in collaboration with the business community, to achieve this goal. Indeed, achieving it would substantially reduce the pressure on the power companies to secure significantly more gas and nuclear powered energy in the short to medium term.

### Nuclear Energy

Hong Kong should take advantage of the current public focus on nuclear energy. We need an informed, dynamic discussion on the health and safety, security, reliability, affordability, and environmental pros and cons of all the main fuels, to develop a future energy strategy.

CCBF recognizes that imported nuclear power has been a successful part of Hong Kong's strategy for 17 years. It can also play a more important role going forward, if the Government takes the following action:

- Public education: Only an educated, engaged public can make informed choices about Hong Kong's energy future. This particular public engagement will require a more rigorous and longer term effort than is usually made for government consultations. Discussions should take place in all districts and with citizens from all parts of society. It is the role of Government to ensure such engagement is comprehensive and meaningful and that it covers the pros and cons of each fuel type.
- Risk management: The current Hong Kong government nuclear risk management plan is virtually unknown to the public. Emergency plans that are not regularly rehearsed are of questionable value. We would urge the government to run regular emergency / disaster response exercises, *with extensive public involvement*, to build confidence in Hong Kong's

ability to respond to a disaster, nuclear or otherwise.

- Inter-Governmental Cooperation: Hong Kong is adjacent to Guangdong, where 6 nuclear reactors are operational (as of June 2011). At least 5 additional units are under construction in Guangdong, with more in the planning process. The safe operation of these reactors is critical to Hong Kong citizens. The Hong Kong Government should proactively work with Guangdong authorities to ensure that both existing and new reactors are operated to the highest level of safety attainable, with regular updates made to the community. We also recognize that China's State Council review of nuclear facilities should be completed later this year. For Hong Kong to be part of this review will be an important starting point for future direction.
- Transparency in nuclear material and waste handling. Transportation, handling and storage of nuclear material, particularly waste, constitute some of the more delicate elements of the nuclear power fuel cycle. Thoughtful planning, thorough consultation with international experts and local transparency will be key.

In summary, Hong Kong is at an important crossroads with respect to its energy policy. It cannot continue to rely on a heavily coal-based power generation mix. Neither can it rely on renewable energy for the vast majority of its power. There is no single 'perfect' fuel – each technology has its own strengths & drawbacks. We need a well-articulated, balanced, long term strategy for safe, reliable and low-carbon energy, which is fully supported by the Hong Kong people.