

## PART B: DETAILED QUESTIONS FOR RESPONSE

Please indicate your preference by providing comments as appropriate. Where there is insufficient space, please attach additional pages as necessary.

- (1) The first commitment period of the Kyoto Protocol will expire in 2012. The continuity of CERs as recognized carbon emission offsetting credits under the Kyoto Protocol is subject to a new international framework for the second commitment period under negotiation with a target completion in the United Nations Climate Change Conference in Copenhagen in December this year. Meanwhile, the US appears to be committed to develop a US emission trading scheme, but the details of the scheme are subject to further announcement and the relevance of CERs is uncertain. Against this background, do you think CERs should be the core carbon emission product to pursue in Hong Kong now or in a few years' time?

Given the background of new development of existing trading mechanism, Hong Kong should treat CERs as one of the core carbon emission products to pursue now or by the expiry of Kyoto Protocol due to the following reasons and shall continue to pursue post-2012 on other developing products in the value chain of climate change:

1. CER can be held by governmental and private entities on electronic accounts by International Transaction Log (ITL) since end of 2007, The ITL is a sophisticated computerized system that ensures that emissions trading among Kyoto countries is fully consistent with the rules established under the UN Treaty. CER can be purchased from the primary market (purchased from original party that makes the reduction) or secondary market (resold from a marketplace).
  2. An increasing awareness and consensus in the world that emission reduction can be carried out through carbon credit transfer mechanism among countries.
  3. CERs requested are only slightly higher than the CERs issued to-date, while expected CERs from registered projects until end of 2012 is about 1.6 billion compared with 0.32 billion issued CERs, that indicates the demand in the coming few years.
  4. CERs are coming from CDM. Certainly trading of CERs is the simplest as they were already very cautiously verified. There are still others in the market that do need enhanced credibility. There can be credits that fall beyond the CDM credential, e.g. those from JV in China, or from Taiwan. HKEEx should encourage these trades by engaging rules and methodologies of similar severity to improve the credibility of these credits, help to maintain and increase their prices, and hence
- (2) At this stage, the global CER market is dominated by European participants connected to the EU ETS and the delivery of CERs is based on the EU standard. Mainland China is the major supplier of CERs, which focuses on clean development projects and CER origination. Under Mainland China's policy, CERs are usually engaged by foreign investors based on forward sale agreements before they are issued by the United Nations. As such, the secondary CER trading market is not developed. European participants are using CER markets in Europe

to manage their carbon emission trading needs and risk exposure. Under the existing market conditions, in what way can Hong Kong add value to the business process of the CER market and attract carbon emission trading participants to the Hong Kong marketplace? What are the success factors for Hong Kong to develop a commercially viable CER trading platform that can attract trading activities and develop trading liquidity? Do you think Hong Kong possesses the success factors? Please explain your view.

The China mechanism is perfectly sound as it ensures buyers and a minimum price of the credits. Unless HKEx can guarantee a minimum price, HKEx can do nothing to help. HKEx can however seek consensus of Central Government to list the credits in HKEx in lieu of a guaranteed buyer. Then when the price is up again, project owners may choose HKEx for higher benefits. HKEx must have a set of rules and standards that are higher and at least of similar standing as CDM.

- (3) Do you consider Hong Kong investing communities have sufficient knowledge in carbon emission trading and are they ready to participate in trading CERs products? Please explain your view.

No but coming. The pace will be depending on the potential returns and risks of this emerging market. Although there are some who bought carbon offset, business-as-usual may still be the norm in many cases, until and unless the operations of the primary and secondary market is become well-known, knowledge gaps still exist. Expert advice may be provided in the form of regular reporting for market trend and movement to facilitate higher level of market participation by investing communities.

- (4) If you are a financial intermediary, please respond to the following questions:
- (i) Do you see any potential in the asset class of carbon emissions and how would you rank the priority of carbon emission trading business among your other business initiatives? (high, medium or low)?  
[REDACTED]
  - (ii) How would you assess your clients' interest in carbon emission trading? Do you have the know-how and expertise in handling carbon emission trading related operations and providing advisory services to your clients?  
[REDACTED]
  - (iii) Are you located in Hong Kong and if so are you an Exchange Participant of Hong Kong Futures Exchange?  
[REDACTED]
- (5) Are there any other issues regarding the introduction of CER futures not mentioned in this consultation paper that we ought to consider? Please explain

your view.

- 5.1 The relevancy of the Regulatory Structure at the national level in People's Republic of China (PRC) in regulating and overseeing the future China nationwide carbon market.
- 5.2 The relevancy of international, national as well as Hong Kong-based Accounting Standards for carbon allowance allocation. Nicholas Institute for Environmental Policy Solutions at Duke University of U.S. has published a working paper entitled "U.S. Carbon Market Design: Regulating Emission Allowances as Financial Instruments" (Working Paper Serial No.: CCPP 09-01) dedicated a whole section (Part VI of the pp. 23-24) in discussing
- 5.3 Criteria for Eligible Market Participants of the emissions trading markets in Hong Kong?
- 5.4 If the trading membership structure is similar to other carbon trading markets such as Europe Climate Exchange (ECX) in European Union, what would be the proposed membership fee structure?
- 5.5 For reference: ECX has the following membership fee structure (as at July 2009)

	Annual Subscriptions		Application fees (one-off)		Total year 1 fees for trading ECX products
Participant	ICE Membership	Emissions Trading Privilege	ICE Membership	Emissions Trading Privilege	
General	£6,000	€2,500	£2,500	€2,500	£8,500 + €5,000
Trade	£2,500	€2,500	£2,500	€2,500	£5,000 + €5,000

- 5.6 There is no mention in the paper on how HKEx can guarantee something that is not occurring in the future, how double counting can be avoided, how credits can change hands and be retired, etc.
- (6) Do you have any other comments in relation to the overall development of emissions or pollutants trading markets in Hong Kong?

6.1 The nature of carbon markets as compared with traditional commodities markets:

According to the Nicholas Institute working paper, the carbon market is fundamentally different from traditional commodities markets in at least two key aspects:

- (a) The supply (i.e. the emission cap) will be fixed at the start of the trading program and decline steadily over time. Market participants will not be able to increase the supply or allowances to increase the supply or allowances to respond to the high prices and/or increase demand for the product.
- (b) Unlike traditional commodities such as corns, soybeans, or petroleum, there will be no cost for storing carbon allowances for sale at a later date.

As such, these two key characteristics of carbon market “raise additional concerns about the ability to manipulate the market ... and therefore highlight the importance of appropriate market regulation at the outset.” (see Monast, Anda and Profeta 2009, p. 15)

6.2 The overall regulatory design for the emissions or pollutants trading markets in Hong Kong:

Regulatory options for increasing transparency and/or oversight in the Hong Kong carbon trading markets may include:

- Regulating carbon exchanges via either a single electronic market for allowance-based instruments, or via a membership requirements for brokers under the HKEx.
- Creating a separate registered carbon derivative exchanges approved by the government regulators, which is set up solely for the trading of futures and other possible carbon derivative products such as options, swaps.

6.3 Are the following guiding principles for designing carbon markets as proposed by the Duke University working paper applicable to our consideration of setting up the CER market in Hong Kong?

- (a) The price of carbon should accurately reflect the expected marginal costs of abatement. To the extent that prices are accurate, consumption and investment decisions will be made in the most efficient manner possible.
- (b) The market should provide enough information to market participants and observers to minimize trading costs and uncertainty about market activity. To the extent that prices, trade volumes, and current bids and offers are transparent (in real time), the accuracy of prices will be enhanced, thus minimizing trading costs and uncertainty.
- (c) The market should be fair to market participants and the consumers and businesses affected by it. To the extent that the market cannot be manipulated or distorted, it can best be used for the purpose it was created – to minimize the cost of reducing GHG emissions.

6.4 Apart from trading in CERs, HKEx can also consider trading in Certified Energy Units.

References:

Monast, Jonas, Jon Anda and Tim Profeta (2009), "U.S. Carbon Market Design: Regulating Emission Allowances as Financial Instruments", Nicholas Institute for Environmental Policy Solutions Working Paper Series (No. CCPP 09-01), Duke University, February 2009. 33 pages.

Lenczowski, Mark (2009), "Derivatives and Carbon Market Design" (Powerpoint Presentation by the author on June 26, 2009. The author was Managing Director and Associate General Counsel, JP Morgan Chase).

European Climate Exchange (2009), *The Carbon Market: How to Trade ECX Emissions Contracts*. [www.ecx.eu](http://www.ecx.eu). Publication date: July 2009.

ICE Futures Europe (2009), *ICE ECX Contracts: EUAs and CERs – Getting Started*. [www.theice.com](http://www.theice.com). July 2009.

UNFCCC (2007), *UN Climate Change Secretariat puts cornerstone of Kyoto Protocol's electronic emissions trading system in place (corrected)*. November 2007.

Appendix A: A Generic Comparison of Contract Design among ICE ECX Carbon Allowance-based Futures and Potential Futures Contract by Hong Kong Stock Exchange

	<b>ICE ECX EUA Futures Contract</b>	<b>ICE ECX CER Futures Contract</b>	<b>Potential Contract Design for CER Futures at HKEx</b>
Underlying Instruments	EUAs	CERs	Certified Emission Reduction Units (CERs) issued under Article 12 of the Kyoto Protocol. Each CER represents an entitlement for one metric tonne of carbon dioxide (CO2) emission.
Unit of Trading / Contract Multiplier	One lot of 1,000 emission allowances (i.e. 1,000 tonnes of CO2)	One lot of 1,000 emission allowances (i.e. 1,000 tonnes of CO2)	1,000 units of CERs
Quotation	Euro (€) and Euro cent (c) per metric tonne	Euro (€) and Euro cent (c) per metric tonne	Price per unit of CER
Min Price Fluctuation	€0.01	€0.01	?
Contract Months	Contracts are listed on a quarterly expiry cycle such that March, June, September and December contract months are listed up to December 2012 and annual contracts with December expires for 2013 and 2014.	Contracts are listed on a quarterly expiry cycle such that March, June, September and December contract months are listed up to December 2012 and annual contracts with December expires for 2013 and 2014.	December contract months up to 2012 (Introduction of any further contract months will be decided by the HKFE Chief Executive).
Contract Security	ICE CLEAR EUROPE guarantees the financial performance of ICE futures Europe contracts registered in the name of its members.	ICE CLEAR EUROPE guarantees the financial performance of ICE futures Europe contracts registered in the name of its members.	?
Trading System	Trading will occur on the	Trading will occur on the	n.a.

	<b>ICE ECX EUA Futures Contract</b>	<b>ICE ECX CER Futures Contract</b>	<b>Potential Contract Design for CER Futures at HKEx</b>
	ICE Futures Europe Platform accessible via Web ICE, or through a conformed Independent Software Vendor.	ICE Futures Europe Platform accessible via Web ICE, or through a conformed Independent Software Vendor.	
Trading Model / Hours	Continuous trading between 07:00 hours to 17:00 hours UK local time.	Continuous trading between 07:00 hours to 17:00 hours UK local time.	08:30 to 17:00 (Asian time zone)
Last Trading Day (LTD)	n.a.	n.a.	The first Hong Kong Business Day of the Contract Month.
Final Settlement Day	n.a.	n.a.	The third Hong Kong Business Day after the Last Trading Day.
Settlement prices	Trade weighted average during the daily closing period with Quoted Settlement Prices if low liquidity.	Trade weighted average during the daily closing period with Quoted Settlement Prices if low liquidity.	Final Settlement Price (FSP): The volume-weighted average trade price of all trades in the expiring contract month executed during the 15-minute interval on the Last Trading Day in which the last trade in the expiring contract month was executed. If no trade in the Contract Month is executed on the Last Trading Day, the FSP shall be determined based on the last available spot price of the underlying market at or before the close of futures trading on the Last Trading Day.
Delivery	The Contracts are physically deliverable by the transfer of emission allowances. There is a delivery period of 3 days after the last trading days.	The Contracts are physically deliverable by the transfer of emission allowances. There is a delivery period of 3 days after the last trading days.	CER units issued pursuant to Article 12 of the Kyoto Protocol with the exception of allowances generated by hydroelectric projects with a generating capacity exceeding 20MW, activities relating to land use, land-use change and forestry and nuclear facilities.

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