



Environment Bureau



Environmental Protection Department

# Green Hong Kong



GREEN EVENT

December 2010 ISSUE

## World cities meet in Hong Kong to take action on climate change



← Mayors and representatives from 30 C40 cities met in Hong Kong to take action on climate change.

↓ Donald Tsang, Hong Kong Chief Executive said the Workshop provides a good platform for cities to exchange ideas on combating climate change.



learn from each other, share ideas and accelerate the rate at which we can reduce greenhouse gas emissions.”

Mr Yau then joined other C40 officials in the ‘World Cities Roundtable’ discussion.

In addition, Mr Sun Zhen,

Deputy Counsel (DDG-level) of the

Department of Climate Change, National Development and Reform Commission and the Mayor/Vice-Mayors from Changsha, Kunming and Shenzhen, held a session entitled ‘The China Perspective’, to discuss the challenges of developing a low-carbon economy in Chinese cities.

Buildings alone are responsible for around 60% of total global emissions, and there are more than 20 million vehicles in just 19 key C40 cities.

By hosting the C40 Workshop, it is hoped that public awareness on climate change issues in Hong Kong would be enhanced and a valuable platform provided for representatives and experts from cities worldwide to exchange their experience of promoting building energy efficiency and green transportation, including the strategies and opportunities in promoting the wider use of electric vehicles. Representatives from Hong Kong spoke at the workshop of their efforts in reducing emissions and promoting a low-carbon lifestyle.

C40 is an international alliance of 40 Participating Cities and a further 19 Affiliate Cities committed to reducing carbon emissions with firm action. Participating and Affiliate cities share their experience and strategies in tackling climate change. ■

Mayors and representatives from about 50 delegations from C40 and non-C40 cities, including 17 delegations from the Mainland of China, overseas experts, trades representatives, government officials and non-governmental organisations (NGOs) took part in the [C40 Hong Kong Workshop on climate change](#) between November 5 and 6. The workshop focused discussions on approaches to improve the energy efficiency of buildings and promote green transport by planning and developing towards a wider uptake of electric vehicles.

About 80 distinguished international, Mainland and local contributors were invited to speak or moderate at the Workshop. They are experienced leaders in their fields from a variety of backgrounds, including city government officials, policy-makers, experts from various industries, academics, professionals, NGO representatives and business leaders. Many of the overseas speakers took the opportunity of their visit to Hong Kong to share their insights on the subject of climate change with key members of the community, including the business, academic and cultural sectors.

The C40 Hong Kong Workshop was a two-day event fully supported by the HKSAR Government and organised by

the Environmental Campaign Committee (ECC), Civic Exchange and the C40 Cities Climate Leadership Group, with funding support from the Environment and Conservation Fund. The Workshop in Hong Kong provided a platform for cities in various stages of development to join forces in tackling climate change. The aim was to use the opportunity to foster a sense of shared purpose and offer an effective forum for cities to work together and share information. Unlike many other international climate conferences, the Workshop moved away from long, drawn out meetings and focused on exchanging individual experiences to find realistic solutions.

Present at the C40 Hong Kong Workshop opening ceremony were Donald Tsang, Chief Executive of Hong Kong; Mayor David Miller of Toronto, Chair of the C40; Mayor Michael Bloomberg of New York and Chair-Elect of the C40; Mayor Amos Masondo of Johannesburg and Edward Yau, Secretary for the Environment for Hong Kong.

“C40 cities are already involved in large-scale building retrofitting and energy efficiency projects across the world,” said Mr Tsang at the ceremony. “This week’s workshop provides us all an opportunity to



Green Knowledge

“ About half of the world’s population lives in cities, which account for about 70 per cent of greenhouse gas emissions worldwide. ”



← Chief Secretary for Administration, Henry Tang (second from left) at the handover ceremony for the C40 chairmanship. Mayor Miller (first from right) received a painting from Coco Tin, a young Hong Kong artist, after handing over the chairmanship to Mayor Bloomberg (first from left).

## New C40 Chair: 'Four-core approach is needed'

New York City's Mayor Michael Bloomberg, the new Chair of the **C40 Cities Climate Leadership Group**, has told the **C40 Hong Kong Workshop** that the world must confront global climate disruption on four core fronts.

As the Workshop came to a close on November 6, Mayor Bloomberg, who succeeds David Miller, Mayor of Toronto, as C40 head, said all cities in the world stand ready to face up to the challenges posed by climate change. He stressed that "the time for empty talk has ended" and that countries "are now ready to take affirmative action to tackle the issues" of this one common challenge facing mankind.

Based on the general principles of the C40 agenda, the mayor outlined that the four core approaches were to reduce greenhouse gas emissions with initiatives to promote buildings' energy efficiency, increase cooperation among cities, make C40 a global, influential authority to push for changes and to set high but achievable goals in the battle against climate change.

Mayor Bloomberg said that his city – New York – had achieved clear results by expanding the legal framework governing

the design and operation of buildings to include the impact of climate change.

At the handover ceremony for the new C40 chairmanship, Chief Secretary for Administration of the Hong Kong Government, Henry Tang, told Mayor Bloomberg: "We look forward to working alongside you in meeting the challenges of climate change. Under your capable leadership, and, with the commitment and support of all of you here, the C40 will continue to scale new heights for environmental protection and conservation."

Mr. Tang described the conference as "a great meeting of minds", adding that "this will help us achieve our goal of 'Low Carbon Cities for High Quality Living'."

After handing over the chairmanship, Mayor Miller said the C40 Workshop had provided a valuable opportunity for many cities to share their experiences and to work together to fight climate change. He added that the meeting had also strengthened the C40 network.

Mayor Miller said he believed he had expressed unwavering determination to reduce emissions during his two-year



↑ Lau Kin-gi, a five-year-old Hong Kong artist, gave Mayor Bloomberg his painting.

tenure. But, most importantly, he said he wanted to use creativity to find climate solutions that more actively involved people in the culture of environmental protection.

There were some poignant moments during the handover ceremony. Lau Kin-gi, a five-year-old Hong Kong schoolboy, presented Mayor Bloomberg one of his paintings in order to congratulate the new chairman of C40 on behalf of Hong Kong, while Coco Tin, a 14-year-old artist, presented Mayor Miller a piece of her work to thank him for his contribution to C40 over the previous two years. ■



# 'Low-carbon mayors' share their experience



← Mayors and deputy mayors from Copenhagen, Los Angeles, Malmo and Portland sharing views on ways to achieve low-carbon, high-quality living.

**S**enior officials and technical staff from 30 C40 cities attended the C40 Hong Kong Workshop to present and learn about some of the latest and best practices from across the C40 network.

Many C40 cities have pioneered policies to reduce GHG emissions and adapt to global climate change. By holding workshops such as the one in Hong Kong, cities can share best practice, build networks, identify collaborative projects and chart future action.

David Miller, Mayor of Toronto, C40 Chair and NYC Mayor Michael Bloomberg and C40 Chair Elect and Mayor of Johannesburg Mr Amos Masondo, joined the World Mayors' Roundtable with Edward Yau, Secretary for the Environment of Hong Kong, on November 5.

Mr Yau said that the Hong Kong Government had provided HK\$450 million funding for the retrofitting of existing buildings and 20% of the targets had so far been met. "Most of the buildings in Hong Kong will be retrofitted but not rebuilt. We can't count on new, green buildings to replace the old ones and that's why the government has funded the retrofitting of old buildings," he said.

Mayor Bloomberg described common challenges which face both NYC and Hong Kong. One of these is the issue that

major GHG comes from transportation and building, both key industries in terms of city development. Another issue, particularly when addressing the environmental retrofitting of old buildings, is who should pay the costs involved. Should it be the owners or the tenants? He also suggested implementing a new tax, which would push people into becoming less reliant on private cars and use public transport more.

Mayor Miller raised the example of the PPP renovation project in Toronto, which saw the government work with gas companies and financial institutions in raising C\$100 million to fund extensive renovation projects. More than 30 million sq feet of office space was renewed, providing 170,000 new jobs in the process. "The renovations meant we were able to keep our old buildings and offer lower carbon living," he said.

Mayor Masondo shared the experiences in finding a balance between economic development and environmental protection. He described how the introduction of the Bus Rapid Transit (BRT) project in Johannesburg solved the transportation problems of 25,000 citizens.

Another World Mayors' Roundtable took place on November 6, with mayors and deputy mayors from Copenhagen, Los Angeles, Malmo and Portland sharing views on ways to achieve low-carbon, high-quality living.

Frank Jensen, Lord Mayor of Copenhagen, said his city had drastically reduced emissions by nearly 20 per cent over the last decade. He explained that this was due to the fact that the city's heating system is connected to 95 per cent of households. He predicted that the system will produce zero carbon emissions by 2025.

Portland's Deputy Mayor, Tom Miller, said his city has long recognised the significant relationship between the protection of the environment and the economy. He said Portland was the first city in the United States to proactively respond to climate change when it introduced plans to curb emissions as early as 1993.

Deputy Mayor of Los Angeles, Romel Pascual, was equally determined to reduce emissions, but said his city's spread-out geography and car dependence have made it difficult to implement green transport policy. About 50 per cent of its emissions came from vehicles. He said the next big hurdle to overcome is to effectively integrate green measures while expanding the city's port facilities. LA boasts one of the biggest ports in the world.

Finally, Malmo's Mayor Ilmar Reepalu pointed out that his tiny city of 300,000 people uses a forward-thinking heating system with energy supplied by heat pumps and solar power. ■

# The China Perspective: Transforming to a low-carbon economy



← Mr. Edward Yau (first from right), together with Chinese officials and mayors, briefed C40 participants on Chinese cities' experience in low-carbon living.

**S**ecretary for the Environment Mr. Edward Yau, together with Mr. Sun Zhen, Deputy Counsel (DDG-level) at the Department of Climate Change NDRC, Mr. Zhang Jianfei, Mayor of Changsha, Mr. Tang Jie, Vice-Mayor of Shenzhen and Mr. Wang Dao-xing, Vice-Mayor of Kunming attended the China Perspective Roundtable at [C40 Hong Kong Workshop](#) on November 5 to discuss how Chinese cities can deal with the challenges of developing a low-carbon economy.

This was the first time for a C40 Workshop to include a China Perspective roundtable discussion, which showed that Hong Kong played an important role in promoting climate change talks between China and other countries.

Mr. Yau said that Hong Kong has become the largest investor in low-carbon economic development in the Greater Pearl River Delta region. Furthermore, Hong Kong is working with Guangdong to create a green and high-quality living environment in the Greater PRD region. Mr. Yau pointed out that Hong Kong, as an international city, can provide a platform to introduce overseas experiences related to low-carbon development to the mainland and vice

versa.

Mr. Sun pointed out that a low-carbon economy is consistent with and is the core focus of China's long-term economic development model. He added that China's implementation of a low-carbon economy would not in any way hinder its position in international climate change negotiations. Mr. Sun revealed that NDRC had selected in July, 5 provinces, 2 municipalities and 6 cities to launch a low-carbon development pilot scheme.

Changsha Mayor Zhang highlighted his city's experience in promoting low carbon practices at the forum. He said his government had first focused on raising public awareness through a weekly TV programme titled "The Green Homeland" to promote low-carbon living. It then took action against polluting firms, shutting down a number of

cement plants and chemical production facilities.

Vice Mayor Tang of Shenzhen went into detail about his city's economic transformation over the past decades. He said: "Shenzhen's transformation, which began some 20 years ago, has rapidly accelerated in the last decade. Today, Shenzhen's energy consumption in terms of GDP per inhabitant has reached the average European level."

Besides, he stressed that Shenzhen is China's largest production base for electric vehicles. The mayor predicted that in the next three years, about 35,000 electric vehicles including private cars, taxis and buses would appear on roads throughout Shenzhen.

Mayor Wang of Kunming said the abundant resources of sunshine and heat have helped his city develop a strong solar power and photovoltaic industry.

He explained: "To create a low-carbon city, it's important to control every pollution source and mobilise every citizen to support the government's plan." ■



↑ Mr. Sun Zhen said, in July NDRC had selected 5 provinces, 2 municipalities and 6 cities to launch a low-carbon development pilot scheme.

# Stories of Hong Kong's Green Buildings



Mrs. Carrie Lam chaired the section of "The future of new build".

**G**overnment officials and leaders from the public and private sectors shared the Hong Kong experience regarding green buildings at the [C40 Hong Kong Workshop](#). One of the main focuses of the Workshop was on improving energy efficiency of existing and new buildings. Buildings are responsible for about 60% of total global carbon emissions.

Secretary for Development Mrs. Carrie Lam chaired the section of "The future of new build" on November 6. She said the government would not rule out giving preferential treatment to encourage private developers to incorporate green features into their properties. For example, if developers want to receive gross floor area concessions in new buildings, all car parks would need to be EV charging enabling.

Mr. Barry Cheung, Chairman of the Urban Renewal Authority (URA), said that since last year it had been using a six-point environmental framework to guide its new build projects. For example, the [Lee Tung Street redevelopment project](#) in Wan Chai will reduce emissions by 23 per cent, which is equivalent to planting 170,000 trees or 20 per cent of the total number of trees planted in Hong Kong every year.

Mr. Cheung said Hong Kong has 42,000 buildings, which are responsible for 60 per cent of the city's carbon emissions. He also

revealed that URA is trying to refit 16,000 buildings that are more than 30 years old in order to increase their energy efficiency. Over the past six years, the authority has refitted 500 buildings and it is expected to work on 1,300 more blocks over the next two years.

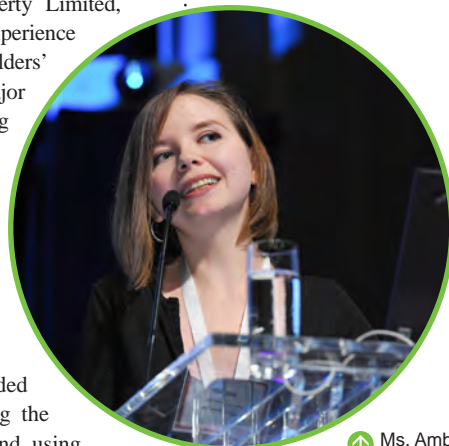
The two-day C40 Workshop during November 5-6 raised a common question: "Who should foot the bill?" Participants from both developed and developing countries shared the same concern.

Ms. Amber Marie Beard, Project Architect of China Resources Property Limited, shared the successful experience of managing stakeholders' expectations during a major retrofit project. Her refitting plan for the China Resources Building in Wan Chai not only brought many sustainable long-term benefits but also caused minimum interruption to business operations.

The project included refitting the wall, reducing the use of air conditioning and using seawater to replace fresh water for toilet flushing. The undertaking brought a variety of benefits - a 10% reduction on energy

consumption, 7.5% less GHG emissions, 40% reduction in the use of fresh water and saving HK\$1.6 million on electricity bills per year.

"We didn't reconstruct the building because we had to let tenants carry on business as usual. Another reason was we didn't want to create a large amount of construction waste," said Ms Beard, adding that the cost of the project was around HK\$10,000 per sq ft. She said the project was cost-effective because rents went up only by 15% after the retrofit project. ■



Ms. Amber Marie Beard shared the successful experience of China Resources Building retrofit project.







# Governments joining hands with industries in EV development



← An electric vehicle exhibited in the EVS25 Rally and Exhibition organised by CLP Power Hong Kong Limited and fully supported by the Hong Kong Government.

## Upcoming trial of new plug-in hybrid

The Environment Bureau has announced that it is to conduct a three-month trial of a new hybrid vehicle model, the Toyota Prius Plug-in Hybrid. A number of government departments will participate in testing the operational performance of the vehicle. The new model, known as a hybrid plug-in, will be driven principally by electric power, with a gasoline engine as a secondary power source. The Environment Bureau hopes to promote electric vehicles and encourage car makers to focus on the Hong Kong market.

### EV lease plan launched by CLP

The CLP Group recently launched an electric vehicle lease plan, inviting firms or individuals to lease one of its five Mitsubishi iMiEV models for HK\$7,500 a month. Lessees have the option to buy the vehicle when the one-year lease expires.

Secretary for the Environment, Mr Edward Yau, said the initiative would contribute to individuals or firms trying electric vehicles. If successful, he said, it would be significant for the development of the EV market in Hong Kong.

**G**reen transportation, focusing on electric vehicles (EV) was one of the hot topics at the C40 Hong Kong Workshop held on November 5-6. Representatives from different cities and industries shared their experience on EV development.

During the session 'Electric Mobility in the Low Carbon, High Quality City', Deputy Secretary for the Environment, Ms Vivian Lau, said that as of September there were a total of around 80 electric vehicles in Hong Kong, owned by firms or privately. To encourage EV development, the Environment Bureau will apply to the Legislative Council for a \$300 million Green Transport Fund to subsidise cooperative research and development between the transportation and EV industries, and proposed that in order for developers to receive gross floor area concessions in new buildings, all car parks would need to be EV charging enabling.

At the C40 Hong Kong Workshop sessions, representatives from other cities also shared their experiences. A UK representative said that London will shortly launch the 'Source London' plan with the aim to build 1,300 EV charging stations before 2013. A representative from Copenhagen said the government there encouraged EV ownership by providing

incentives such as free town parking for electric vehicles, and remission of a registration tax. A spokesman from BYD Auto, the manufacturer of the world's first mass-produced, plug-in hybrid vehicle, said the Shenzhen-based firm had launched a pilot project for a high-speed charging station aimed at solving the problem of long battery charge time.

Finally, a representative from Germany said that standardisation is essential for electric vehicle development since currents and voltages were different among manufacturers in Europe, the US, China and Japan, with different systems based around direct current, alternating current, high-speed charge and low-speed charge. ■



↑ Mr Edward Yau, Secretary for the Environment had a test-ride in the Toyota Prius Plug-in Hybrid.



# Youth exchange views on climate change and low-carbon living at GIG Youth Summit

**“B**EWARE OF MUTATED FISH”! “BLOCKED BY TRASH”! A series of warning road signs, which are designed in exaggerating and striking style technique by four local undergraduates, aims at reminding people to pay attention to environmental and climate change issues. This work finally won judges’ praise and got the 18-25 years Grand Prize Winner of “Get It Green” (GIG) at GIG Youth Summit.

GIG Youth Summit as the climax of the GIG Competition, was held at the Hong Kong Academy of Performing Arts on November 7. 13 finalists showcased their innovative ideas to combat climate change to win over judges. And over 200 environment-concerned youths participated in the Summit to exchange views on climate change and low carbon living.

The Secretary for the Environment, Mr Edward Yau, said: "As the finale for a series of activities to promote higher awareness for climate change, GIG gets our young people to focus on the impact of climate change on the new generation. I am sure participants have gained new inspirations from their involvement in GIG as to how they could



Secretary for the Environment Mr Edward Yau at the GIG Youth Summit.

help combat climate change by leading a low carbon lifestyle."

At the Summit, Mr Robert Swan, a world renowned explorer who is the first-ever person to walk to both Poles unassisted, made

a keynote presentation on threats facing the planet from climate change, and reminded youth the South Pole does not belong to any single country but all human beings and penguins. ■

## Council for Sustainable Development welcomes Government's response

**“T**he Council for Sustainable Development welcomed the Government's prompt response, on October 13, 2010 to the Council's report on "Building Design to Foster a Quality and Sustainable Built Environment". The Council submitted the report on June 25, 2010 which contained 51 recommendations.”

Government introduced some notable changes to the current building regulatory regime, concerning aspects like Sustainable Building Design Guideline, Gross Floor Area Concessions, Building Energy Efficiency, Bay window, and Transparency of the Property Market.

### Sustainable Development and SDC's Work

Sustainable development (SD) means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Accordingly, a change of mindset to bring about full integration of the needs for economic and social development with that for environment conservation is required. The SDC advises the Government on the priority areas that it should address in formulating an SD strategy for Hong Kong, and promote public awareness, understanding and practice of the principles of SD. SDC has designed and implemented a bottom-up, open, inclusive and stakeholder-led engagement model to harness public opinions on key sustainability issues and make recommendations to the Government. ■



Mr. Bernard Chan (left), Chairman of Council for Sustainable Development welcomed the Government's positive response to the Council's report.







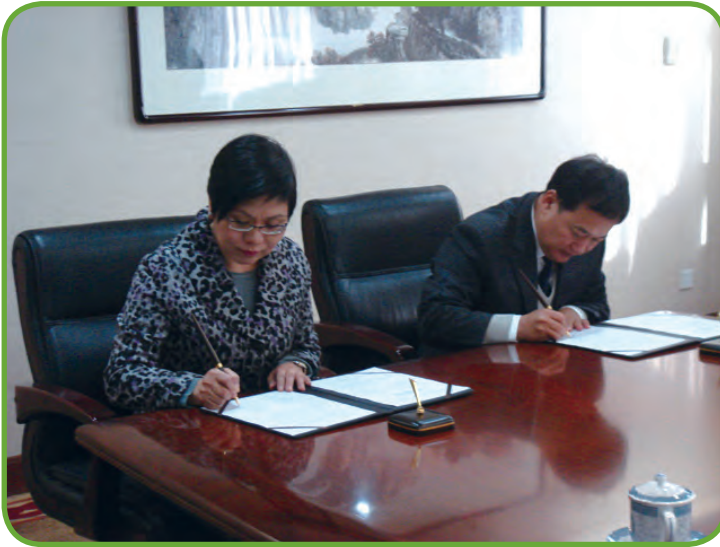
# Mainland and HK sign co-operation arrangement to tackle air pollution

The Ministry of Environmental Protection (MEP) and the Environment Bureau/ Environmental Protection Department (ENB/EPD) of the Hong Kong Special Administrative Region (HKSAR) signed a new co-operation arrangement (CA) on tackling air pollution on October 26.

Signing the agreement were the Director of the Hong Kong and Macau Affairs Office of the MEP, Mr Xu Qinghua, and the Permanent Secretary for the Environment, Ms Anissa Wong. Ms Wong said: "The MEP and EPD have, over the years, established a close collaboration for sharing experience and professional knowledge in air pollution control. The new CA builds on this strong foundation and clearly sets out areas of co-operation between the two parties over the next five years, i.e., between 2011 and 2015."

The MEP and EPD, together with the Hong Kong Polytechnic University, have jointly held several workshops involving experts and participants from overseas on controlling vehicle emissions, a key air pollution concern among cities worldwide. The two parties have also held meetings to exchange views on specific air pollution control issues.

Under the new CA, both sides will draw up annual co-operation plans alongside a five-year work agenda. The main areas will cover: emissions control in both new and in-use vehicles; controls on motor vehicle fuels; traffic management measures such as labeling of green vehicles, setting up of low-emission zones; vehicle emission modeling and compilation of vehicle emission inventory; control of volatile organic carbon emissions and photochemical pollution; a storm dust notification system. ■



↑ Director of the Hong Kong and Macau Affairs Office of the MEP, Mr Xu Qinghua (right), and the Permanent Secretary for the Environment, Ms Anissa Wong (left) Signed the new Co-operation Arrangement.

# Second batch of enterprises recognised as 'cleaner production partners'

A total of 91 Hong Kong-owned manufacturing enterprises, four sourcing enterprises and 20 environmental technology service providers have been recognised as [Hong Kong - Guangdong Cleaner Production Partners](#) at a presentation ceremony held in Hong Kong on November 4.

Officiating at the Hong Kong - Guangdong Cleaner Production Partners Recognition Scheme ceremony, the Secretary for the Environment, Mr Edward Yau, said: "Promoting cleaner production to enterprises is one of the key initiatives of Hong Kong - Guangdong co-operation on improving the environment in the region. Over the past few years, both sides have spared no effort in deepening their collaboration to implement the Agreement on Co-operation to Promote Energy Efficiency, Cleaner Production and

Comprehensive Utilisation of Resources to Enterprises in Hong Kong and Guangdong."

Also attending the ceremony were the Vice-Director of GDEIC, Ms Bi Zhi Jian and about 300 representatives from government, trade and industry in Hong Kong and Guangdong.

Ms Jian said that the Hong Kong - Guangdong Cleaner Production Partners Recognition Scheme is an achievement which sets a good example to enterprises in both areas in their bid to pursue cleaner production.

So far, more than 900 funding applications have been approved and more than 170 awareness promotion activities organised under the Cleaner Production Partnership Programme. ■



↑ The Secretary for the Environment, Mr Edward Yau, (second right, front row), the Vice-Director of the Economic and Information Commission of Guangdong Province, Ms Bi Zhijian (second left, first row) and the Under Secretary for the Environment, Dr Kitty Poon (left, front row) awarded the commendation "Hong Kong - Guangdong Cleaner Production Partners" to winners at the presentation ceremony.





# Sludge treatment facility in Tuen Mun turns waste into energy

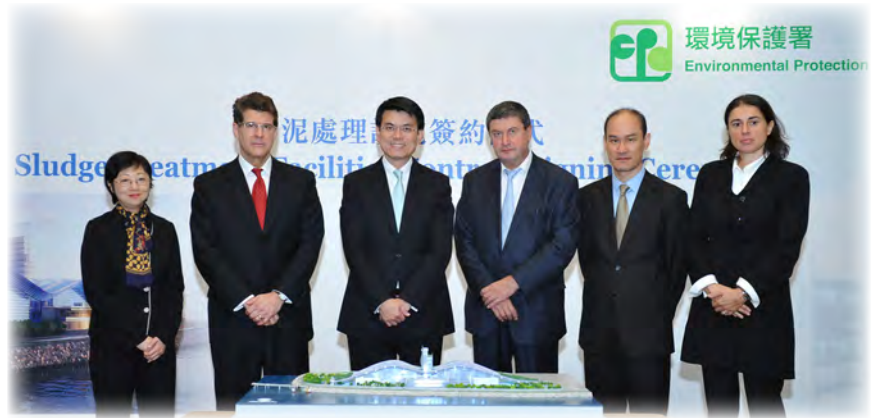
**A** high-tech, low-emission major treatment facility which transforms sludge into energy is to be built at Tsang Tsui, in Tuen Mun. After going through an open tender procedure, the Environmental Protection Department (EPD) awarded a contract to design, build and operate the sludge treatment facility to VW-VES (HK) Limited, a subsidiary of Veolia Environnement. Representatives of the two sides signed contracts on October 27.

In addition to offering the treatment facility, the plant will provide additional leisure, educational and landscaped facilities for the public.

At the signing ceremony, the Secretary for the Environment, Mr Edward Yau said: "The facility can turn waste into energy, enabling us to reduce greenhouse gas emissions by avoiding disposal of sludge at landfills. It is estimated that it will be able to reduce 260,000 tonnes of greenhouse gas emissions per year."

One of its features is the incorporation of architectural and landscape elements. The streamlined design of the main building, which has incorporated the Tuen Mun District Council's views, will reflect and integrate the sea view in front, and ridge lines at the back, so that the plant will blend well with the surrounding scenery. Upon completion, it will become a unique landmark in the district.

The plant's landscaped and ecological gardens will provide visitors with a green open space and a natural environment, as well as providing a habitat for water birds.



↑ Mr Edward Yau (third from left) witnessed the contract signing ceremony.

The building will also house an Environmental Education Centre (EEC) with an exhibition room, an internet/interactive area, a lecture theatre and a conference room. Visitors will be able to view the operation of the plant through a dedicated visitors' gallery with information on sustainable waste management at the EEC.

This green facility will adopt state-of-the-art thermal incineration technology to ensure that the sludge treatment meets the highest environmental protection requirements and the strictest emission standards. Thermal energy generated from incineration will be turned into electricity to fully meet the energy needs of the facility, including the operation of the EEC, a seawater desalination plant that

will produce potable water, and indoor heated pools. Surplus electricity will be exported to the power grid.

Design and construction of the plant, which has already begun, is also expected to create about 600 jobs during the construction period and 60 permanent staff will be required when it comes into operation. Priority for employment will be given to Tuen Mun residents.

When completed, the facility will process sludge generated from the Harbour Area Treatment Scheme and ten other regional sewage treatment works, reducing the load on landfills.

Upon completion of the Harbour Area Treatment Scheme Stage 2A and the extension and upgrading of existing sewage treatment works, the total amount of sludge generated in Hong Kong will substantially increase from the current 800 tonnes per day to about 1,500 tonnes per day by 2014. ■



↑ The design of the sludge treatment facility





# Geopark Festival opens the door to the world of rock appreciation

The Hong Kong National Geopark has unique landforms and geological heritage. Many are also near country trails or in close proximity to urban areas and therefore easily accessible. Indeed, the public does not need to go overseas, and can still appreciate these world class geological features in the territory. The Geopark Festival, which will run from October 2010 to February 2011, is organised by the Agriculture, Fisheries and Conservation Department (AFCD) together with the Home Affairs Department, North, Sai Kung and Tai Po District Councils and local conservation groups. It will feature an array of activities, including booth games, exhibitions, a photo competition, paper-cutting workshops and a poll for the best geo-tour route.

One of the highlights of the festival is the 'Magnificent Rocks and Magic Cameras' photo contest. Participants can submit their work from November to December, showcasing either interesting rock features in the geopark or the cultural and human activities in the geo-areas. A judging panel

will select the best entries and each winner will be awarded prizes. The AFCD will offer two photography workshops free of charge. Participants will be able to visit High Island, Double Haven, Port Island, Bluff Head and Tung Ping Chau areas of the geopark.

Meanwhile, the 'Magnificent Rocks and Magic Scissors' roadshow will be held from October 2010 to February 2011 at six large shopping malls in Hong Kong Island, Kowloon

and the New Territories. In this exhibition, the artwork of the renowned modern paper-cut artist, Ms Lu Xue, will reflect the unique geological features and spectacular natural landscape in Hong Kong.

The Geopark Festival will also incorporate the 'Magnificent Rocks and Magic Scenery', best geo-tour route poll. Until the end of January 2011, people can vote online for their favourite geo-tour route. ■



The picture shows Kang Lau Shek in Ping Chau Country Trail, one of the nominated routes.



# Festival to promote better understanding of bird conservation



Wetland interpreters and volunteers take visitors on bird watching guided tours to look for birds in various kinds of wetland environments.

The launch ceremony for the Bird Watching Festival 2010, which runs till February next year, was held at the Hong Kong Wetland Park on November 6. The festival, which aims to enable better understanding of the importance of conserving birds, will incorporate a wide range of events and activities.

The Hong Kong Wetland Park attracts over 230 bird species annually, accounting for about 50% of total bird species recorded in Hong Kong and making it an ideal place for bird watching.

Highlights of the festival will include bird watching guided tours, a 'Birds and Wetlands' funfair, a seminar entitled 'Bird and Wetland Conservation in Hong Kong', a 'wetland classroom', a treasure hunt, a photo exhibition, origami workshops, the inter-school 'Bird Race' and a musical.

Next to the Hong Kong Wetland Park is the Mai Po Inner Deep Bay Ramsar Site, an important feeding and resting ground for migratory birds. According to bird monitoring data, a total of 70,000 to 80,000 migratory waterbirds used the area during winter in recent years, including globally threatened species such as Black-faced Spoonbill, Baikal Teal, Falcated Duck, Spoonbill Sandpiper, Eurasian Curlew and Saunders's Gull. ■

Special thanks to Information Services Department and Sing Tao News Corporation Limited for providing photographs for inclusion in this publication