

**URBAN PLANNING AND ENVIRONMENTAL LAW QUARTERLY**

(Published since May 1992)

簡家驄律師行 · 城規環保季刊

*On 20 April 2010 an explosion occurred on the BP operated Deepwater Horizon deep-sea drilling rig in the Gulf of Mexico which resulted in the largest marine oil spill in history. This tragic event highlights once again the folly of oil companies' and compliant governments' priority of extracting fossil fuels in unsuitable environments, to the exclusion of much more important environmental and economic factors.*

The Editors

**CONTENTS**

<b>FEATURE:</b>	<b>Page</b>
<b>LESSONS MUST BE LEARNED FROM THE GULF OF MEXICO OIL SPILL.....</b>	<b>1</b>
<b>TOWN PLANNING .....</b>	<b>2</b>
<b>WEST KOWLOON CULTURAL DISTRICT (WKCD) .....</b>	<b>4</b>
<b>HONG KONG BRIEFING.....</b>	<b>5</b>
<b>CLIMATE CHANGE.....</b>	<b>8</b>
<b>ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)...</b>	<b>9</b>
<b>REGIONAL &amp; INTERNATIONAL.....</b>	<b>11</b>
<b>PROSECUTION STATISTICS...</b>	<b>16</b>

**LESSONS MUST BE LEARNED FROM THE GULF OF MEXICO OIL SPILL**

*Deepwater Horizon catastrophe*

On 20 April 2010 the Deepwater Horizon oilrig was drilling for oil in 1,600 metres of water approximately 80 kilometres southeast of the Mississippi River delta in the Gulf of Mexico, when an explosion occurred. Eleven workers were killed and the well-head, through which oil was extracted from the seabed, was critically ruptured, allowing oil to gush freely into the sea in enormous volumes.

As has been well documented, it took the main operator of *Deepwater Horizon*; BP (British Petroleum), more than three months to stem substantially the flow of oil. Even now, at the time of writing, the well-head has not been permanently sealed so as to prevent further leakage of oil into the environment.

The much-touted engineering expertise of one of the world's major oil exploration companies has simply been unable to prevent an ecological disaster, the adverse environmental and economic effects of which far outweigh perceived economic gains from accessing some oil deep below sea level.

The question is: will this high-profile example (in a long line of oil-related environmental disasters) persuade regulatory bodies to restrict oil exploration in ecologically sensitive or difficult areas, such as deep sea fields? Alas, and as usual in the context of exploitation versus environmental protection, most probably not.

*Massive environmental harm from oil spill*

Whilst there is still no single set of reliable figures for the extent of pollution resulting from the Deepwater Horizon accident, on the basis of BP's and the U.S. government's estimates the quantity and extent of oil released into the Gulf of Mexico

is staggering, and is now accepted as the largest marine oil spill in history.

The sinking of the platform caused crude oil to gush out of the riser – the 5,000-foot pipe that connects the well at the ocean floor to the drilling platform on the surface. Attempts to shut down the flow, first estimated at about 1,000 barrels of oil a day, failed when a safety device- called a blowout preventer- could not be activated. On 28 April, government officials said there were three leaks and the well was spilling more than 5,000 barrels of oil a day – in excess of one million litres – nearly a mile below sea level. The exact spill flow rate is uncertain and is the subject of ongoing debate among private and government experts. Some independent estimates, made in the initial days of the accident, put the spill rate in the range of 20,000 to 100,000 barrels per day.

The rate of oil release itself became an intense controversy following the rig's explosion. On 27 May 2010, a U.S. government team of experts announced its determination that the overall best initial estimate for the lower and upper boundaries of flow rates of oil was in the range of 12,000 and 19,000 barrels per day. On 10 June the experts revised their estimate upwards to 20,000 to 400,000 barrels per day. By 10 June, this amounted to between 1,000,000 barrels (42 million gallons) and 2,000,000 barrels (84 million gallons) released in to the Gulf since 22 April, making the *Deepwater Horizon* by far the worst accidental release of oil in U.S. history.

On 3 June, BP installed a containment system on the leaking well that was capturing 15,000 barrels per day by 9 June. However, live video feeds from the well site a mile beneath the water's surface showed a sizable amount of oil continued to escape from the area of the containment cap. On 15 June 2010, the government team announced that the flow rate had increased to 60,000 barrels per day on 3 June when BP installed the containment cap.

The BP spill is by far the world's largest accidental release of oil in marine waters. The U.S. government estimated that about 4.9 million barrels of oil were released, of which about

800,000 barrels were captured by containment efforts. Prior to the *Deepwater Horizon*, the largest oil spill in U.S. waters was in 1968 when the tanker *Mandoil II* spilled about 300,000 barrels into the Pacific ocean off Columbia River near Warrenton, Oregon. The 1989 wreck of the *Exxon Valdez* released about 261,905 barrels (11 million gallons) of crude oil into Prince Williams Sound in Alaska.

In 2005, Hurricane Katrina caused a spill of eight million gallons of crude and refined oil products from many different point sources into the southern corridor of the Mississippi River and the Gulf of Mexico. In 1979-80, the Ixtoc 1 exploratory well operated by PEMEX, the Mexican national oil corporation, experienced a blowout and ultimately released about 3.3 million barrels (140 million gallons) of crude oil into the Bay of Campeche in Mexico.

Within a couple of months, the oil slick produced by the *Deepwater Horizon* oil spill had covered as much (75,000 square kilometers), an area about the size of South Carolina, and was continuing to expand.

The spill has caused extensive damage to marine and wildlife habitats as well as the Gulf's fishing and tourism industries. Skimmer ships, floating containment booms, anchored barriers, and sand-filled barricades along shorelines were used in an attempt to protect hundreds of miles of beaches, wetlands and estuaries from the spreading oil. Scientists have also reported the existence of immense underwater plumes of dissolved oil not visible at surface level. The U.S. government has named BP as the responsible party, and officials have committed to holding the company accountable for all cleanup costs and other damage and losses. After its own internal probe, BP admitted that it had made mistakes which led to the explosion on the rig.

The cleanup from the *Deepwater Horizon* spill continues today. It is impossible to assess the extent to which the ecology of the Gulf has been adversely affected. Impacts will continue for years to come (as with the infamous *Valdez* oil tanker spill in Alaska). As well, the extent of oil plumes below the surface of the sea is unknown, and their impact on marine life unassessable at this stage.

Correspondingly, the degree of economic harm – such as to the Gulf's once flourishing fishing and tourism industries – cannot be estimated at this time, if ever.

In this context, countries which allow oil-exploration in their marine waters should carefully re-think their approach to securing protection of their marine environments as their number one priority, over and above perceived short-term gains from oil production. This is unlikely to happen, however. As an example of oil exploration madness, we consider the small South American country of Belize.

#### Belize – threatened by petroleum exploration

The waters off Belize are still pristine, but oil companies have petroleum exploration contract for most of Belize's territorial seas.

Around the world, people are watching the impacts of the BP/Deepwater Horizon catastrophe in the Gulf of Mexico. They are concerned about how a similar incident might unfold along their shores. In Belize, for example, a colour-coded petroleum contracts map reveals that nearly every inch offshore is already charted for all oil development.

In the midst of the economic recession, governments, such as Belize, are desperate for revenue to provide basic services, and natural resource exploitation is a "cheap fix" in the short-

term. Oil consumption by the developed world is driving multinationals to explore for oil under every rock and reef.

In Belize, an alliance of more than 40 non-government organisations is seeking a moratorium on oil drilling offshore and in protected areas. Belize lacks the regulatory and emergency response capacity to manage large-scale oil exploration and development programmes. Even in the world's richest nation, the United States, the combined resources and technical know-how of public and private bodies could not prevent or minimise the *Deepwater Horizon* oil spill.

Natural resource management agencies in Belize are weak because they lack adequate funding to monitor and enforce environmental laws. At the same time, communities are only now learning about their country's plans for large-scale oil-development, and about their civil rights to object to environmentally dangerous projects. The Gulf of Mexico oil spill has been a spur to increased public opposition to the reckless oil exploration/production projects so long favoured by Belize's "pro-development" government. This changing public perception is reflected elsewhere in oil exploration areas.

In *The Guardian* (19 June 2010), award-winning journalist Naomi Klein wrote :

*The experience of following the oil's progress through the ecosystem is a kind of crash course in deep ecology. Every day we learn more about how what seems to be a terrible problem in one isolated part of the world actually radiates out in ways most of us could never have imagined. One day we learn that the oil could reach Cuba – then Europe. Next we hear that fishermen all the way up the Atlantic in Prince Edward Island, Canada, are worried because the Bluefin tuna they catch off their shores are born thousands of miles away in those oil-stained Gulf waters. And we learn, too, that for birds, the Gulf coast wetlands are the equivalent of a busy airport hub – everyone seems to have a stopover: 110 species of migratory songbirds and 75% of all migratory US waterfowl.*

Environmental NGOs are not just discussing the worldwide implications of the Gulf catastrophe, but working in solidarity to ensure that oil companies like BP and Chevron are held accountable for the damage caused by their business of oil extraction, and that the environment is restored.

The sad irony is that in Belize – as in most oil-exploration marine locations – maintaining healthy, unpolluted seas is likely to provide more economic benefits in the long term than oil exploration and development.

#### Facts about off-shore drilling: Belize and beyond

- Offshore drilling concessions in the sea off Belize include the entire length of Belize's coastline.
- Over its lifetime, a single oil rig can dump more than 90,000 metric tons of drilling fluid and metal cuttings into the ocean, including 25,000 pounds of toxic metals, such as lead, chromium, and mercury.
- To find offshore oil reserves, seismic waves are sent into the ground, which disorient marine life. This can lead to beachings of whales and hearing loss in dolphins.
- The majority of rigs are located close to shore. Oil spills and seepage are common and move quickly on the water.
- Belize currently gets \$38 million in oil revenues each year, while tourism brings in \$210 million each year. Tourism and fisheries employ about 24,000 people whilst approximately only 3,000 people would get jobs if every single oil concession found oil

(based on employment figures from *Belize Natural Energy*).

- Hurricanes Katrina in 2005 and Ike in 2008 each caused the release of more than a half-million gallons of oil from off-shore rigs and pipelines.
- Studies by the U.S. Geological Survey published in the October 2009 edition of *GEOLOGY* indicate that oil drilling can actually set off earthquakes by creating fractures and pressure in the hard rock inside the earth.

#### Conclusion

The Gulf of Mexico oil spill has been an environmental catastrophe for one of America's richest marine and estuarine areas. Yet again, a short-sighted focus on exploitation has been proved to be thoroughly bad policy – both environmentally and economically!

[Sources: *Encyclopaedia of Earth*; *Wikipedia*; *Elaw Update*, Summer 2010]

## TOWN PLANNING

### Lawmakers demand more curbs on developers

As a step toward curbs on uncontrolled development, lawmakers across the political spectrum are calling for a comprehensive review of the city's land planning and conservation policies.

Advocates for the review said current measures were insufficient to halt the controversial development of privately owned plots of land situated within country parks.

Public outcry over the development of a private retreat in Sai Kung's Sai Wan Beach and purchases of other scenic sites by developers have prompted the government to ram through a draft planning document establishing Development Permission Areas (DPA), which will eventually be superseded by an Outline Zoning Plan (OZP) in three years.

The draft that outlines the broad land use for the Sai Wan site will effectively freeze development, pending approval of the Town Planning Board.

Secretary for Development said the government used "exceptional powers" to earmark the site as a DPA, but added the administration was powerless to force the land owner to restore the landscape.

The area, which ranked first in the Hong Kong Best Ten Scenic Sites 2006 by the Friends of the County Parks, has been marred by excavation, ground leveling and turf work with heavy machinery. Most of the signs of construction have now been swept away by the sea. Evidence of excavation was also found on nearby government land, leading the Lands Department to consider prosecution of the offenders if enough evidence can be gathered.

According to the government, there were 54 such sites in the New Territories which were not covered by country park laws or town planning rules, meaning developers could develop them unhindered. The majority of sites were remote and inaccessible. It had been considered that there were sufficient logistical or other safeguards to conserve the areas.

Some legislators thought that buying the land outright could be a solution, with low prices offsetting the large areas needed to be purchased. Some thought the government should offer land exchanges, as buying up the land might be costly. Environmental impact analysis laws should also be amended so as to require that developments near

country parks observe planning guidelines set to safeguard the surrounding environment.

However, Permanent Secretary for the Environment said such an approach would be problematic because it could affect all sorts of minor works, small houses and renovation works.

Lawmakers commented that the government has become more reactive on land use issues at a time when it should be proactive in seeking out sites in need of protection. The work aimed at covering the entire city in OZPs was being delayed by urgent planning needed for the frontier control areas. Drafting OZPs could be a lengthy process, due to the need for public consultations. The government said it would prioritise the updating of OZP's for sites coming under development pressure or that are of compelling public interest.

[China Daily, 29/07/2010]

### Five draft Development Permission Area Plans gazetted

The publication of five draft Development Permission Area (DPA) Plans for the closed area in the northernmost part of the New Territories has been announced by the Town Planning Board.

The five draft DPA Plans are: the Draft Ma Tso Lung and Hoo Hok Wai DPA Plan; Draft Man Kam To DPA Plan; Draft Ta Kwu Ling North DPA Plan; Draft Lin Ma Hang DPA Plan and Draft Sha Tau Kok DPA Plan. These five DPA Plans are based on recommendations made by the Study on Land Use Planning for the Closed Area carried out by the Planning Department.

According to the Department, the general planning intention is to conserve the rural character of the areas, strengthen nature conservation, promote recreational tourism, retain good agricultural land for agricultural purposes and facilitate cross-boundary infrastructural development.

The draft Ma Tso Lung and Hoo Hok Wai DPA Plan covers a total area of about 553 hectares, of which about 217.75 hectares is zoned "Green Belt" to define the limits of development and contain urban sprawl. An area of 9.15 hectares is zoned "Other Specified Uses" and annotated "Eco-lodge" to provide for sustainable tourism in the form of an eco-lodge with low-rise, low density resort-type accommodation. About 246.32 hectares of land in Hoo Hok Wai is designated "Unspecified Use" pending a detailed study on the development content.

The draft Man Kam To DPA Plan has an area of about 354 hectares. The "Green Belt" area covers 114.19 hectares and about 16.68 hectares is zoned "Recreation" to provide recreational facilities for public use.

The Sandy Ridge Cemetery, with an area of 92.08 hectares, is zoned "Other Specified Uses" and annotated "Cemetery" to designate land for cemeteries, graves and funeral facilities. The Kong Nga Po ex-borrow area, which covers about 3.23 hectares, is designated "Unspecified Use" to provide interim planning control.

About 207.82 hectares of land in the 431-hectare Ta Kwu Ling North DPA Plan is zoned "Green Belt" to protect natural habitats. About 116.15 hectares is zoned "Recreation" for the development of active and/or passive recreation and tourism/eco-tourism pursuits.

A site to the southwest of Pak Fu Shan, with an area of 23.82 hectares, is zoned "Other Specified Uses" and annotated "Boundary Crossing facilities" for the development of facilities related to the proposed Liantang/ Heung Yuen Wai Boundary Control Point.

The draft Lin Ma Hang DPA Plan covers an area of about 329 hectares, with 253.9 hectares zoned "Green Belt" and 10.62 hectares zoned "Site of Special Scientific Interest (SSSI)". The draft Sha Tau Kok DPA Plan has allocated 461.37 hectares of "Green Belt" out of its total area of 557 hectares of land.

The "Green Belt" zoning in Lin Ma Hang and Sha Tau Kok DPA Plans includes part of the potential country park at Robin's Nest recommended under the Study on Land Use Planning for the Closed Area.

All five DPA Plans include "Village Type Development" zones which cover existing recognised villages and areas of land considered suitable for village expansion. The zoning will concentrate small house developments within existing villages or at suitable locations for more orderly and efficient use of land and conservation of the surrounding natural setting.

[news.gov.hk, 30/07/2010]

### Museum relocation gets green light

The Planning Department has given green light to the relocation of the privately owned Maritime Museum from Stanley to pier No. 8 at Central ferry piers.

According to the relocation proposal, public viewing decks will be converted into an exhibition hall, resource centre and office. A new mezzanine floor will be added to be used as a gallery. The new facilities, which will occupy an area of 4,200 square metres, will include storage space for artefacts, as well as a restaurant.

The Harbourfront Commission endorsed the proposal as an interim arrangement, as some commission members had said the pier had limited room for the museum to expand in the future.

In a government paper to be discussed at a Town Planning Board meeting, the Planning Department said it had no objection to the proposal and that if the Board approved the plan, the museum should be required to conduct an air-quality assessment to ensure the cafe on the roof would not be adversely affected by exhaust emissions from ferries.

According to the department, signs indicating free access should be provided on the cafe terrace. A landscape proposal for the roof should be subject to the approval of the board and the department's director.

The relocation will result in a loss of public space at the harbourfront. The museum was advised to explore the feasibility of providing an alternative area within the pier, with free access, for the public to enjoy harbour views.

During the three-week public consultation, 2,168 comments were received, of which 122 were objections to the proposal. The objectors were concerned about the loss of public viewing decks and were worried that public access to the waterfront would be impeded.

The department said the proposed ticket price for the museum, of about HK\$30 per person, was generally affordable, and concessionary tickets for groups, families and students would be available. Should the demand for ferry use increase in the future, the premises could be brought back into ferry use, as modifications to be made for the proposed museum are reversible.

[SCMP, 12/08/2010]

### Businesses, activists fume over Central smoke-stack

The government refused to relocate a proposed giant exhaust vent for the Central-Wan Chai Bypass as it would be undesirable and costly to do so. The massive six-to-nine-storey vent, which will occupy an area equivalent to half a football field, is to be built on open space opposite IFC Two tower.

The government has invited members of the Harbourfront Commission to visit the proposed site to explain two design options for the ventilation exhaust building. The group *Designing Hong Kong* will stage a protest at the scene. It suggested that the ventilation building should be shifted west toward a flyover, away from the harbourfront open space.

According to the Highways Department, the relocation would delay the whole project and the power consumption of the tunnel ventilation fans will have to be increased because of the longer distance from the tunnel.

IFC allowed the environmental campaigner to use its mall to stage a 10-day showcase to oppose the government plan.

Environmentalists are of the view that the "smoke-stack" is too noisy and the exhaust fumes from about 6,000 cars per hour on the bypass will be highly polluting. Even if a filter is added, the huge pollution will affect pedestrians as the location is too close to the congested area in Central.

In his policy address last year, Chief Executive said he was scrapping the planned hotel and office developments in the area, while retaining public space as a large landscaped deck connecting the Central district to the new harbourfront and providing about 1.7 hectares of public open space, including a central plaza for festive events. Under the two new design options, a smaller landscaped deck will still be put in place, along with the proposed vent.

A civil engineer and the convener of *Citizen Envisioning@Harbour* said that an accepted, major town planning principle is to enhance public access to and enjoyment of open space. However, the existing designs go against this principle and greatly reduce the integrity and quality of the harbourfront.

Opposition among businesses in the IFC mall is also gathering. Some are opposed to the vent construction as it will block the harbour view from IFC mall.

[The Standard, 17/08/2010]

### Planners reject call for park on North Point site

A call by developers for much of a prime waterfront site in North Point to be turned into a park has failed to impress town planners.

According to the *Real Estate Developers Association*, the site is unsuitable for sale as it is and should be divided into smaller plots with residential land separated from public open space. However, the proposal was rejected by the Town Planning Board.

The Association was among six groups that presented submissions to the Board, which was reviewing the North Point District Zoning Plan. It said the government should cut the site's residential space for various reasons, including residents' objections and a shortage of open space in the area. It also cited potential management problems of public open space contained within private developments, as encountered recently at Times Square in Causeway Bay.

The vacant 29,265-square-metre site is proposed as a "comprehensive development area" with residential, commercial and community uses and will be put on the government land sale list. It and an adjacent site, which is planned for hotel use, were where the former North Point Estate stood.

The site permits a plot ratio of 5.26 and a building 80 metres high. The eventual developer is required to provide public open space of 12,700 square metres and a promenade on the site.

A board spokeswoman said the Association's views were not supported because management of the public open space would be taken over by the Leisure and Culture Services Department.

[SCMP, 04/09/2010]

#### Rezoned land may go to build flats

The Town Planning Board is considering rezoning as much as 29.5 hectares of industrial and business land for residential use as part of an official bid to boost home supply.

The Board will hold a formal discussion on rezoning the sites, which have an existing gross floor area of about 840,000 square metres. A vast majority of the sites are in the New Territories. The biggest industrial area to be rezoned comprises 10 sites in Siu Lek Yuen, Sha Tin, amounting to 7.4 hectares. The only urban area is in Tai Kok Tsui. It is also the smallest on the list.

The government said it is trying its best to lift residential land supply via the application list system and by taking a pro-active approach to putting sites on the market.

Another 30.2 hectares of industrial sites will be rezoned to specified industrial business, columbarium and other uses. If all the rezoning proposals are implemented, the total purely industrial zones in the territory will be reduced by approximately 18.7 percent to 241.6 hectares.

Between 2001 and 2003, the Board rezoned approximately 196.5 hectares of industrial land for specified industrial business use, and another 48.6 hectares for non-industrial use.

[The Standard, 15/09/2010]

## WEST KOWLOON CULTURAL DISTRICT (WKCD)

### Architectural team breaks rules in concept plan to build arts hub

One of the three rival concept plans for the West Kowloon arts hub deviates from the design brief laid down by the government and may go slightly over budget.

The plans, presented to the board of the West Kowloon Cultural District Authority in a closed-door meeting yesterday, will not be made public until next month when the second stage of consultation starts. Each of the three architect teams had 90 minutes to introduce their work to the board at the meeting.

A person familiar with the arts hub development said all three teams had made a remarkable effort in turning the site into a green place, complying with the brief that 23 of the 42 hectares of the arts hub area had to be open space.

One of the three teams proposed a different phasing for the project - supposedly a two-phase development to be completed by 2031 - which

may result in a later final completion date. The design would also cost more than the budget. The government has set aside HK\$21.6 billion for the construction of the arts hub, which will be home to 15 performing arts venues, a museum known as M+, residential buildings, plus retail and dining facilities.

The concept plans are intended to show the land use and layout of the cultural district as a whole, rather than the designs of individual buildings, which will be the subject of a second competition at a later date.

The Authority has commissioned Britain's Foster and Partners, the Rotterdam-based Office for Metropolitan Architecture - led by Rem Koolhaas - and local firm, Rocco Design Architects, to draft the master plans.

A person close to the Foster design team said its plan would carry a local flavour, creating friendly streetscapes with shops like the old Yau Tsim Mong district, and avoiding huge modern structures.

The three plans are undergoing preliminary assessments of technical feasibility and compliance with statutory requirements. The public consultation exercise will last until November 2010 and will feature a roving exhibition across the city, guided tours and public forums. The exhibition will showcase the three conceptual plans, with models and animations. The public will be asked to comment on individual features of each option but not to make a choice out of the three, which is a decision to be made by the Authority.

[SCMP, 06/07/2010]

### Hub 'beauty contest' ruled out

Architects Norman Foster, Rem Koolhaas and Rocco Yim Sen-kee, who are competing to develop the West Kowloon Cultural District, have presented their master-plans for the massive complex.

The plans will be unveiled for a three-month public consultation, followed by a number of roving exhibitions throughout the territory.

In the first of the three public forums, representatives from London-based firm Foster + Partners, Rotterdam's Office for Metropolitan Architecture and the local firm, Rocco Design Architects, presented their concepts for the 40-hectare hub on 22 August 2010 at the Convention and Exhibition Centre in Wan Chai.

The exhibition features 3D models and animated videos. With interactive three-dimensional models and animated videos, visitors could feel like they were inside the hub. There are also models at scales of 1:1,000 and 1:2,000. The models at the scale of 1:2,000 will demonstrate how the West Kowloon hub will connect with its neighboring areas.

The public will be asked to state which features in the three concepts they prefer, but will not be asked to vote for their favorite plan or give a rating to all the plans.

It is suggested that the final design may incorporate the features of three different plans and it is estimated that the second round of consultation will be more expensive than the previous one, which cost about HK\$5 million. The first round, carried out between October and January, sought views of the public on overall planning of the hub and views of performers on facilities in arts and cultural venues.

The Public Policy Research Institute of the Polytechnic University will complete an analysis of the public's submissions and report to the consultation panel early next year.

The panel will then table the report to the board of the West Kowloon Cultural District Authority, which will then pick one of the three architectural firms for the project.

[The Standard, 10/08/2010]

### Concern West Kowloon will become a "mansion district"

Yesterday a public forum was held for the first time to discuss the proposed West Kowloon Cultural District development. Many people in the forum expressed concern that only luxury residential flats or houses would be built in the district and there would be a re-emergence of speculative investments by private developers. The architects of the three selected design, say that building residential flats can revitalise the Cultural District, but they were yet to determine the type of residential flats they would build.

The three designs for the West Kowloon Cultural District were shown to the public last Friday at the Wan Chai Convention Centre, and a first public forum was held to listen to the public's comments on these three designs. In the three options, there would be about 20 percent of land set aside for residential area. Two of the design options propose to have the residential area close to Kowloon Station, whilst the other option would spread the residential flats at various locations.

In the first round of the public forum, most citizens asked questions relating to their concern that the District would only build luxurious residential flats. One of the architects for the three designs, Rocco Yim, said that they were yet to decide what to build, and there would be a possibility that HOS would be built.

The Chairman of the Advisory Committee on West Kowloon reiterated that the West Kowloon district will not become a real estate project, and he had noted the opinions of the public that the developers must not build "wall-effect" buildings. Some people asked the West Kowloon Cultural District Authority to take into account the needs of disabled people when they design the district so that all the residents can have a chance to enjoy the facilities in the district.

Chief Secretary Henry Tang visited the district with his family yesterday. He said the Legislative Council has approved the funding in a sum of 21.6 billion dollars to the West Kowloon Cultural Authority and such sum would be spent cautiously.

[Hong Kong Headline, 23/08/2010]

### Culture hub chief put through the mill

West Kowloon Cultural District Authority's recently appointed chief executive officer, Graham Sheffield, met the press for the first time last week, as the Authority unveiled three conceptual plan options for public consultation.

One journalist fired the first salvo by asking Sheffield whether the West Kowloon project runs a risk of becoming a white elephant. He deflected the question by saying that he had never heard of the project being referred to as a "white elephant" before.

Sheffield was then asked whether he understands the demands of Cantonese opera in Hong Kong. He took the view that it is not the most important thing in meeting the needs of the opera sector, as decisions should be based on the advice of the Authority's professional team.

Someone told Sheffield bluntly that he is now enjoying a honeymoon period and the good days will not last too long. Soon, he was warned, he will head into a real storm of demands from arts groups, green bodies and the government. Trying to balance the myriad competing demands to everyone's satisfaction is practically a mission impossible.

Undaunted, Sheffield said he has run into similar situations in his homeland, Britain, where arts groups are all going through a tough time dealing with funding cuts. In fact, the Hong Kong situation is not too bad by comparison, he said, also noting that everyone knows that the West Kowloon Cultural District project is a mammoth challenge.

Authority sources said as Sheffield was chosen after a stringent selection process, he is fully capable of dealing with developing and managing the project, and he will not be easily intimidated by the challenges ahead.

[*The Standard*, 24/08/2010]

#### Foster back with a green canopy

The West Kowloon Cultural District Authority has unveiled three new "conceptual plan options" for the public to consider giving its views on. Initial responses have been enthusiastic, with many citizens visiting the exhibition showcasing the plans - but we have to wait to see which design master-plan wins the most hearts.

One tycoon said Norman Foster's City Park concept is the most appealing because it has a lot of green elements. This contrasts with Rocco Yim Sen-kee's proposal, which has a strong oriental flavor and is like a modern version of the painting *Along the River during the Qingming Festival*.

At first glance, Foster's latest concept is very different from his firm's earlier award-winning one featuring a gigantic glass canopy. But viewed from another perspective, one may also see similarities, as the present design also has a canopy - formed by trees.

While some may still choose to doubt Swire's intention, there is no denying that the green concept it proposed has once again found its way back onto the active agenda.

[*The Standard*, 02/09/2010]

## HONG KONG BRIEFING

### Draft law to curb light pollution

Hong Kong will be dimmed at night if the Environmental Protection Department adopts the draft bill proposed by the Friends of the Earth.

The draft bill seeks to curb the practice of leaving advertising neon signs and billboard spotlights on late at night. But festival lights and essential lighting for public facilities and security purposes may be exempted.

Under the proposal, light pollution is defined as: any adverse effect, such as health problems, energy wastage and disruption to ecosystems and astronomy, of artificial lighting on human beings and the natural environment.

The draft law also proposes a curfew on the operating hours of outdoor advertising, ornamental and non-functional lighting between 11pm and 7am. There will also be limits on the intensity of any light that spills onto a property within a residential, rural or mixed commercial-residential zone.

Under the proposed law, no lighting may be directed at the windows or balconies of domestic premises. City fringe areas with stargazing and conservation values, such as Sai Kung and South Lantau, will have their intrinsic darkness preserved, with a blanket ban on all advertising or ornamental lighting. Other lighting fixtures should be shielded. Sky beamers - intense, focused lighting directed at the sky - will be banned everywhere.

A spokesman for the department said the government was undertaking a consultancy study on the issue of energy wastage in external lighting. The study will be completed soon.

[*SCMP*, 17/06/2010]

### Digging pollutes the pride of Plover Cove

The famous waterfall at Bride's Pool, a scenic landmark in Plover Cove Country Park, was stained a muddy brown as a result of excavations upstream by workers hired by the owner of a private plot within the country park. The owner, who bought the private plot from its indigenous holders, planned to build village houses there.

Under the *Country Parks Ordinance*, private plot owners may apply for developments that are "compatible" with the surrounding environment. However, the Agriculture, Fisheries & Conservation Department had not received an application for the development of the Bride's Pool site.

The department had noticed the clearance and excavation work in October 2009 and workers on the site had been prosecuted for felling 13 trees and driving vehicles into the country park. The workers were fined HK\$2,500 and HK\$1,000. As it was the workers who were caught red-handed, the workers were prosecuted but not the owner of the private plot.

A spokeswoman said the department was collecting evidence to prosecute the workers for polluting the stream.

Despite the department's regular inspections, 127 trees inside country parks were felled illegally from 2006 to 2008. The department has received about 30 complaints about damage to the parks, including two about illegal changes of land use since 2004.

Under the *Country Parks Ordinance*, the government may request the Land Authority to discontinue or modify a land use if that use will substantially reduce the enjoyment and amenities of the country park. In 2008, the authority rejected an application to build nine village houses on agricultural land at Tai Mei Tuk in the same country park.

The existing penalty for illegal works inside country parks is a maximum fine of HK\$2,000 and three months' jail. Campaign manager of the Conservancy Association, Peter Li Siu-man, said the penalty was too lenient. Li urged the government to buy private sites in the country parks in order to protect them from pollution.

Professor Nora Tam Fung-ye, chairwoman of the Country and Marine Parks Board, urged the government to give more resources to the department.

[*SCMP*, 22/06/2010]

### Law toothless over private sites in parks

Excavation work at a private site in Sam Tam Lo led to pollution of scenic Bride's Pool in Plover Cove Country park.

The government said *Country Parks Ordinance* does not cover private sites that are inside country parks; excavation work at these sites could be considered to be agricultural activity which does not contravene the law.

The Lands Department said the site is an agricultural lot governed by a block government lease which does not allow construction of houses. However, both the Lands Department and the Agriculture, Fisheries and Conservation Department said the government cannot stop preparation work, including clearing trees and excavation, as the lease conditions do not ban excavation and clearing work compatible with agricultural use.

Country and Marine Parks Board chairwoman Professor Nora Tam Fung-ye said that this is a loophole in *Country Parks Ordinance*. Peter Li Siu-man, campaign manager of the Conservancy Association, said the government should amend the law to extend protection of country parks to private sites.

[*SCMP*, 24/06/2010]

### Developers face less room to move in new proposals

The Council for Sustainable Development's proposals, which are the product of a year-long consultation that attracted 1,100 submissions, including 347 from individuals, have quickly followed up the government's tightening of pre-sales regulations earlier this year. There are 51 proposed rules restricting property developers' room to exploit floor-area concessions for "green" features.

However, a specific cap is absent in the proposal. Chairman Bernard Chan Charnwut denied that the council's refusal to propose a specific cap was due to fear of developers. Chan said their role was to collect public views, and it is the government's responsibility to work out building floor area ratios.

The council also wants concessions on gross floor areas, implemented in 2001, to exclude a whole slew of other features, such as podium gardens, balconies, mailbox areas, clubhouses, guardrooms, etc, that are now regarded as indispensable for housing estates.

Opponents of the measures say that the proposed environmental effect of the concessions would be nullified by the growing density of housing estates, leading to the so-called "wall effect", as developers go all out to cash in on them.

Green Sense said the proposals fail to address public demands, and the absence of a specific cap was disappointing.

[*The Standard*, 28/06/2010]

### EPD launches funding scheme to replace Euro II vehicles

The Environmental Protection Department (EPD) has launched a \$540 million one-off grant scheme to encourage early replacement of Euro II diesel commercial vehicles. The grant scheme is available for 36 months from 1 July 2010.

Under the grant scheme, owners who replaced their Euro II diesel commercial vehicles with new commercial vehicles that comply with the prevailing emission standards for registration of new vehicles, i.e. the Euro IV emission standards, will receive a one-off grant. Depending on vehicle types, the grant ranges from \$17,000 to a maximum of \$203,000 per vehicle.

Euro II diesel commercial vehicles emit up to seven times more respirable suspended particulate (RSP) and double the amount of nitrogen oxide (NOx) compared with Euro IV ones. There are approximately 27,300 licensed Euro II diesel commercial vehicles in Hong Kong. EPD stressed that the replacement of these vehicles could substantially improve roadside air quality.

[H.K. Government Press Release, 28/06/2010]

#### Profits tax deduction for environment-friendly vehicles

From the year of assessment 2010/11, taxpayers may claim deduction for profits tax in respect of specified capital expenditure incurred in respect to environment-friendly vehicles. The tax deduction is not limited to environment-friendly vehicles purchased on or after the commencement date of the *Inland Revenue (Amendment) (No. 3) Ordinance 2010*, i.e. 18 June 2010. Eligible environment-friendly vehicles already in use by a business before the commencement date are also eligible for the deduction. The reducing value of the eligible vehicles under the depreciation allowance regime will be treated as specified capital expenditure for which deduction will be given accordingly.

Part 3 of Schedule 17 of the *Inland Revenue Ordinance* sets out the eligible environment-friendly vehicles, which are in the following three categories:

- environment-friendly vehicles under the "Tax Incentives Scheme for environment-friendly Commercial Vehicles" and "Tax Incentives Scheme for Environment-friendly Petrol Private Cars" administered by the Environmental Protection Department ("EPD");
- hybrid electric vehicles; and
- electric vehicles.

EPD will issue environment-friendly vehicle certificates to eligible vehicles under the "Tax Incentives Scheme for Environment-friendly Commercial Vehicles" and "Tax Incentives Scheme for Environment-friendly Petrol Private Cars". Businesses which purchase vehicles within these categories after commencement of this new tax concession should obtain a copy of the environment-friendly vehicle certificates from vehicle dealers for tax filing purposes.

If a business could not obtain the environment-friendly vehicle certificate (e.g. second-hand vehicle or eligible environment-friendly vehicle purchased before commencement of the new tax concession), the vehicle owner may seek verification from EPD by completing and returning a prescribed following application form.

[EPD Press Release, 06/2010]

#### Residents smell more misery in landfill expansion plans

The Planning Department has proposed further extending the Tseung Kwan O landfill to include five hectares of land in Clear Water Bay Country Park and some 15.6 hectares in Tseung Kwan O Area 137, to meet the increasing load of municipal solid waste.

Tseung Kwan O residents have complained that their lives have been affected by the stench since the existing Tseung Kwan O landfill was commissioned 20 years ago. They urged the government to abandon the proposal for expanding the landfill.

Chairman of Ocean Shores Owners Alliance, Chapman Chan Kai-wai, said Tseung Kwan O residents can hardly open their windows, especially in hot and humid weather, as the bad smell permeates their flats and shops. This occurs

even with closed windows and the aircon switched on.

Liberty Party member, Christine Fong Kwok-shan, of the Sai Kung District Council said the government set a bad example for environment protection by establishing landfills at the expense of a country park. She also urged better management and control measures in the existing landfill, including the use of enclosed garbage trucks.

According to the Environment Protection Department's statistics, about 9,000 tonnes of municipal solid waste is dumped at the landfill each day. The department said the Tseung Kwan O landfill is expected to reach capacity within five years, thus expansion of the landfill is urgent and necessary.

[The Standard, 05/07/2010]

#### Drivers not satisfied after back-down on idling engines

The Environmental Protection Department told the Bills Committee that all drivers would be allowed to keep their engines running during rainstorms or very hot weather warnings (usually issued when the temperature reaches 33 or higher) had been issued by the Observatory.

The compromise came after a minibus driver died on 3 July while sitting in his vehicle with the engine turned off. After the government agreed to waive the proposed ban on idling engines during rainstorms or on very hot days, lawmakers and professional drivers have asked for more exemptions.

Several lawmakers asked the bill committee if the exemptions could be allowed at around 27 degrees as the temperature inside and outside a cabin without air conditioning could vary by 10 degrees. Last year, there were 194 days when the temperature exceeded 27 degrees. Deputy director of environmental protection, Carlson Chan Ka-shun, said it needed to strike a balance between career drivers' operational needs and the enforceability of the law.

Chan said the government would continue to study if all taxis and minibuses waiting at formal stands, not just the first five and two in the queue, should be exempted from the ban.

[SCMP, 09/07/2010]

#### Expand plastic bag levy

A government study shows that the number of plastic bags distributed by registered retailers had dropped by 90 per cent after the plastic bag levy scheme was launched.

However, the amount of levy collected in the first nine months was less than HK\$20 million, which is much lower than the estimate of HK\$200 million for the first year.

Environmental group, Greener Action, urged the government to introduce the second phase of a levy proposal on the use of plastic bags by shops and expand the scheme from about 3,000 supermarkets, convenience stores, and health and beauty shops to smaller shops such as news-stands and dry-goods stores. Secretary for Environment Edward Yau Tang-wah said on a radio programme that it might not be possible to apply the same system to small shops.

Under the current scheme, registered retailers are required to give all the levy money to the government and report the details of the distribution and sale of plastic bags with the Environment Protection Department.

Yau said some countries simply required retailers to charge for the plastic bags and the government would review the scheme and study ways to move forward.

Greener Action found that more than 57 per cent of business organisations, other green groups and political parties want the levy money to go to the Treasury or the Environment and Conservation Fund, rather than to shops if the scheme was expanded.

[SCMP, 12/07/2010]

#### Businessman develops 'private lodge' in Sai Wan

Land at Sai Wan, one of four beaches fronting the clear water of Tai Long Wan in a remote part of Sai Kung, is being developed into what owner Simon Lo Lin-shing says will be an organic garden but what local villagers say will be a private lodge with artificial ponds, a tennis court and separate apartment.

Lo paid \$16 million to the owners of an abandoned village for the purchase of the Sai Wan site, which is estimated at 10,000 square metres, and is surrounded by the Sai Kung East Country Park.

The development at the Sai Wan site is neither subject to planning controls nor required to carry out any environmental impact assessments, because it is not covered by statutory zoning.

A spokeswoman for the Agricultural Department said it received a complaint about the development at Sai Wan site early June. Although there was no infringement on the surrounding Sai Kung East country park, some adjoining government land and a stream course were affected. The Lands Department said it posted signs warning the developer against illegal excavation on government land.

A spokeswoman for the Lands Department said the site should be used only for agriculture and no application for a change of land use or redevelopment of the old village houses had been received.

[SCMP, 16/07/2010]

#### Sai Wan not the only site at risk

There are about 20 sites within or close to two country parks in Sai Kung which are not covered by any statutory zoning plans and are vulnerable to illegal construction work. Environmentalists urged the government to conduct urgent zoning of at-risk sites or to buy the land in order to save it from destruction.

The government said rezoning would be of little help in the Sai Wan case since vegetation has already been removed. And the buyout option was also rejected by the government. Secretary for Development Carrie Lam Cheng Yuet-ngor said it was unaffordable and that there was no current policy under which it could be done.

Representatives of green groups met environment minister Edward Yau Tang-wah to express concern over what happened at Sai Wan and to express frustration at flaws in the planning system. After the meeting, Yau said the government would seek a balance between private property interests and environmental protection in the construction of a controversial project in rural Sai Kung.

Environment minister Edward Yau Tang-wah described the construction at the Sai Wan site as "minor works" that encroached on some

government land, adding there was no clear evidence of vegetation destruction.

Meanwhile, a Facebook group set up on Friday to protest against the Sai Wan construction has attracted nearly 50,000 members.

Geopark officers from the Agriculture, Fisheries and Conservation Department said the incident would not affect Hong Kong's bid to list the city's geopark as World Heritage, as the site was not part of the park.

[SCMP, 21/07/2010]

#### Developer halts work on Sai Wan beach site

Amid pressure from green groups and villagers, the developer has decided to suspend excavation work at a Sai Kung site bordering country park.

A government official familiar with heritage policy said the Sai Wan site was among 200 archaeological sites across Hong Kong not covered by the *Antiquities and Monuments Ordinance*.

The ordinance provides that no person shall "excavate, carry on buildings or other works ... on or in a proposed monument or monument", including a declared archaeological site, without a government permit.

A spokeswoman for the Antiquities and Monuments Office said the Sai Wan site was included in an alert system for private developments, but the government had not received any development application that would have triggered such an alert.

Since 2008, all public projects have required heritage impact assessment, including the likely impact on archaeological sites. There is no such requirement for private projects.

[SCMP, 22/07/2010]

#### Close these loopholes to protect our green spaces

There are about 20 unzoned private sites in or near two country parks in the Sai Kung area. Illegal construction work has already blighted two of them.

In the 1970s, when government officials established the country park system, their agenda was recreation and conservation of water catchment areas and the natural environment, but they were also respectful of ownership rights. They zoned areas as agricultural or conservation, restricting usage. Land that did not fit either category, because of remoteness or rugged terrain, was left unzoned.

The lack of government oversight has created loopholes concerning development of unzoned private site. Unzoned land has to be designated in order to control usage of land and prevent further excavation of our green spaces in the future. The government should review the existing penalties for unauthorised excavation that have been unchanged for decades. There has to be a policy of negotiating a reasonable price for land that comes on the market and integrating these parcels of land into country parks.

Closing the loopholes in the planning control regime requires resolve. However, the responsibilities of government authorities are not always clear-cut. Often with at least a dozen departments, bureaus and agencies are involved when it comes to environmental protection. And the uncertainty is often followed by inaction.

[SCMP, 23/07/2010]

#### Rule protecting Sai Wan scenic site takes effect

The government has made a temporary zoning order which prohibits all new development without prior permission in a sensitive Sai Wan site.

The Town Planning Board gazetted the Sai Wan development permission area plan, designating the subject site for "unspecified use", pending further study of what uses should be allowed.

Under the temporary zoning, all developments or uses other than agriculture require planning permission. No diversion of streams, filling of land or ponds or excavation of land is allowed without approval.

As two artificial ponds have been created on the Sai Wan site, the restrictions mean that the Board's permission is required even if the developer wants to restore the site to its original state.

The Board said urgent zoning was needed for better protection of the site because the excavation work had damaged its character and that of the surrounding country park. A detailed outline zoning plan will replace the Sai Wan temporary zoning plan within three years, under the *Town Planning Ordinance* (Cap 131).

Three diggers were recently transported by a developer to the Sai Wan site, which has no road access. A spokeswoman for the Agriculture, Fisheries and Conservation Department said it was still investigating the delivery of the diggers and processing an application received on July 22 to remove them.

Meanwhile, officials attended a closed meeting of the Country and Marine Parks Board which considered how to better protect 54 unzoned sites within or next to country parks. Various approaches were discussed, including extending the country parks. But officials were resistant to the idea of buying back any of the sites because it would just create more government land lying idle.

[SCMP, 07/08/2010]

#### Fuming Greenpeace slams politicians' polluting cars

Two car models used by Chief Executive Donald Tsang Yam-kuen and his key secretaries - Chief Secretary for Administration Henry Tang Ying-yan, Financial Secretary John Tsang Chun-wah and Secretary for Justice Wong Yan-lung - are considered "two of the worst" polluters by European standards.

The chief executive's Lexus LS600hL emits 205 grams of carbon dioxide per kilometre while the Volkswagen Phaeton V6 3.2, used by the three secretaries, emits 293 grams per kilometre, Greenpeace said. Greenpeace said that although the two car models might be considered environmentally friendly in Hong Kong, one would have to pay a tax penalty for owning them in Europe.

In Hong Kong, cars were first categorised based on their weight when they were evaluated on fuel efficiency, which favored heavy cars. In 2007, the government started a scheme under which car buyers may claim a 30 percent deduction from the First Registration Tax, with a HK\$50,000 cap. There are 39 models, including those of the officials, which are eligible. The group said another 25 models that have been considered environmentally friendly also exceed the average emissions of a European green car.

An Environmental Protection Department spokeswoman said the Hong Kong standards are similar to those of Japan and are more stringent than those of the United States. She said the

department is constantly reviewing its environmental protection policy.

[The Standard, 19/08/10]

#### Common sense required in school noise dispute

The Environmental Protection Department (EPD) has decided to take the fight to an international school on Lantau regarding the noise of children playing during breaks.

In 2007, the Lands Department, Buildings Department and Education Bureau approved the school's expansion. But since that expansion, some villagers have campaigned that the school is too noisy. As a result, the EPD ordered the school to restrict noise levels to the permitted 60 decibels. Meanwhile, when the school asked for permission to build a noise-reduction canopy, the District Lands Office required a 58 per cent rent increase before granting permission.

Having allowed the school to expand, absorb more students and become an institution on which the increasing Lantau professional class relies for English-medium schooling, the government has made an order that could jeopardise its future.

Officials need common sense in enforcing the law. If every school in Hong Kong were subjected to an EPD order restricting noise, and were threatened by a fine of HK\$20,000 for every day the noise exceeded that limit, the city's future would be bleak. The relevant authorities should break down bureaucratic barriers and find a development strategy that matches the needs of all sides.

[SCMP, 21/08/2010]

#### Slope work ignores green guidelines

Buildings Department guidelines direct that Hong Kong Island slopes should look as natural as possible.

However, a slope in Magazine Gap Road, Mid-Levels is being covered by concrete. There is nothing the government can do as the slope is privately owned.

Work on government-owned slopes must adhere to strict greening laws, with the use of shotcrete (concrete that is sprayed over an area) used only as a last resort. For privately owned slopes, the greening guidelines are merely recommendations and are not legally binding. Thus, residents can opt to cover a slope with concrete instead of planting trees, shrubs and grass. The department was powerless if an owner opted to use concrete as long as the work complied with the Buildings Ordinance. A Buildings Department spokeswoman confirmed there were no plans to change the guidelines.

Melanie Moore, spokeswoman for the Lung Fu Shan environmental concern group and a resident of Old Peak Road, said several slopes in the residential areas leading up to The Peak had been covered in concrete in the past two years. Moore said concrete slopes are a huge eyesore, and people are getting really tired of seeing concrete and the destruction of the natural environment. Moore called for government to change the Buildings Ordinance by incorporating the greening guidelines.

[SCMP, 23/08/2010]

#### Buses are a major source of pollution

Friends of the Earth Hong Kong said buses are greater polluters than vehicles with idling engines. Thomas Choi Ka-man, senior environmental affairs officer, said 40 percent of air pollutants on busy roads come from franchised buses. The 2,600

Euro II buses, which comprise 40 percent of the fleet, are responsible for 40 percent of bus-emitted air pollutants. Banishing Euro II buses would serve a greater purpose than banning idling vehicles which would reduce air pollution by at most 1 percent.

The group urged the government to retire Euro II buses of franchised companies and replace them with Euro V buses by 2015, instead of the scheduled 2019 when their licenses expire. Choi said this would reduce emissions of nitrogen oxides by 23 percent and cut respirable suspended particulates by 16 percent. The group claimed that more than 200,000 visits to doctors may be avoided if Euro II buses are retired four years ahead of schedule.

[The Standard, 09/09/2010]

### Second stop of 'idling' tour

Secretary for the Environment Edward Yau Tang-wah and legislator Audrey Eu Yuet-mee visited the Sha Tin bus terminal to feel what it's like being stuck in a non-moving vehicle with the engine turned off. They were also made to sweat it out in a 40-degree Celsius taxi in Hung Hom in July.

Yau said the Bills Committee would consider all matters before deciding on the *Motor Vehicle Idling (Fixed Penalty) Bill*. Eu called for research into installing solar panels on vehicles to run the air-conditioning when the engine is off.

[The Standard, 10/09/2010]

### Cut in carbon emissions proposed

After a climate change study commissioned by the government over two years ago, the government launched a three-month public consultation on Hong Kong's climate change strategy and action agenda on September 10.

The government targets a cut in carbon emissions of between 19 per cent and 33 per cent from 2005 levels by 2020. It is more stringent than the mainland's objective, but less aggressive than greenhouse gas reductions required to be implemented by developed economies.

Green groups said the government should have opted for the still more stringent UN standards for developed economies, and heavily criticised the plan's reliance on nuclear power as "the most irresponsible and dangerous path" to tackling climate change.

Friends of the Earth environmental affairs manager Hahn Chu Hon-keung said Hong Kong, as an international city, had a duty to meet the stricter UN target, which would require a 25 per cent reduction in 1990 levels of carbon emissions, to 26.5 million tonnes a year, by 2020. But Yau said the target was already ahead of those set by the United States, the European Union and Japan.

The measures dealing with the changes in the source of power generation are the most drastic. Apart from increasing the proportion generated from natural gas from 23 per cent to 40 per cent, nuclear power would take over from coal as the major energy source. The bureau said nuclear power was chosen because it emits no greenhouse gas, is more reliable and also is cheaper. Nuclear power, now imported from the mainland, costs about 50 cents per kilowatt, compared to 40 to 60 cents for coal and 70 to 90 cents for natural gas.

Energy Advisory Committee chairman Edmund Leung Kwong-ho said the public should not worry about the safety of nuclear power, as the Daya Bay nuclear power station in Guangdong has operated safely for 20 years.

[SCMP, 11/09/2010]

## CLIMATE CHANGE

### Global emissions targets will lead to 4C temperature rise

The world is approaching an average temperature rise of nearly 4C, according to an analysis of national reports from around the globe. Such a rise would bring a high risk of major extinctions, threats to food supplies and the near-total collapse of the vast Greenland ice sheet.

More than 100 heads of state agreed in Copenhagen in December 2009 to limit the rise in global temperatures to 1.5C – 2C above the long-term average which existed before the industrial revolution.

However, the Climate Interactive Scoreboard estimates that the world is on course for a rise of nearly double the stated goal by 2100. Another study by Climate Analytics suggests that it is virtually impossible for governments to keep the temperature rise to less than 2C and warns that the rise is likely to be as high as 3.5C by the end of the century.

In both analyses, the current commitments are far above the 2C maximum the UN hoped would be agreed at the next major meeting in December 2010 in Cancun, Mexico.

The Intergovernmental Panel on Climate Change (IPCC) forecasts that, positively, a temperature rise of more than 2C would lead to potential increases in food production. On the other hand, such a rise would also result in an increasingly high risk of extinction for 20-30% of species, more severe droughts and floods, and loss of the Greenland ice sheet over very long time periods.

When the rise is of 4C, IPCC predicted global food production was very likely to decrease, major extinctions around the globe will occur and there will be the near-total loss of Greenland's ice sheet, precipitating a 2-7metres increase in sea-levels in the long term.

The Department of Energy and Climate Change (DECC) (UK) said that, based on national pledges of emissions reductions made in Copenhagen, the United Nations Environment Programme (Unep) and other bodies had calculated that it was possible to meet the 2C target. A DECC spokesman said that they are pushing the EU to cut its emissions by 30% in an attempt to avoid a 2C temperature rise.

The Climate Interactive Scoreboard makes a medium-range prediction of a 3.9C increase in temperatures based on committed targets and 2.9C based on potential commitments suggested but not enacted by many nations.

One of the major obstacles to setting higher emissions cuts was that many countries, including Canada and members of the EU, have refused to increase their targets until the US set significant reductions.

[The Guardian, 05/07/2010]

### Monitoring climate change in the ocean's "most studied spot"

Founded in 1903, the Bermuda Institute of Ocean Sciences (BIOS) is one of the few marine-research stations situated in the middle of the Atlantic Ocean.

The location of the base has enabled BIOS scientists to reach very deep ocean waters in just a few hours' sailing. For decades, BIOS researchers

have been sailing to the same spot in the Atlantic, Hydrostation "S", where they obtain water samples from the surface all the way down to just above the ocean floor. Since the programme began in 1954, BIOS ships have visited the "S" more than 1,100 times.

In essence, what BIOS is doing is fishing for water. When the research ship reaches "S", researchers prepare the CTD rosette (conductivity, temperature, depth recorder), which holds 24 cylindrical bottles in an array. A fishing lure is connected to thousands of feet of cable. The CTD is lowered over the side of the ship and into the water. At regular intervals between the surface and more than 9,000 feet below, bottles open up and capture water at a particular depth. Sensors in the CTD record temperatures and other data as the rosette is reeled out and then reeled back in.

The objective of these trips is to find out whether the ocean is changing. Thanks largely to man-made greenhouse gas emissions, carbon dioxide levels are on the rise in the ocean just as carbon levels have been rising in the atmosphere.

As the oceans hold far more energy than the atmosphere, ocean data are important. Director of BIOS Tony Knapp said that actually climate change is all about the oceans instead of the atmosphere. However, in reality, people know a lot more about the atmosphere and land than the ocean.

A truly global ocean-monitoring system is therefore necessary to provide enough data from around the planet to help scientists construct a holistic picture of the oceans. Such system will require far more probes and more satellites covering the oceans, as well as robotic and manned submarines which could explore the far depths.

[Time Magazine, 07/09/2010]

### Are the polar ice caps melting more slowly than we thought?

Climate scientists are faced with one of the most pressing questions today: how vulnerable are the vast ice caps in Greenland and Antarctica to rising temperature? A substantial amount of ice is stored on those two land masses. As the ice melts and flows into the oceans, global sea levels will rise. If all the ice in Greenland melted tomorrow, it would raise global sea levels by more than 20 feet.

In order for scientists to get a better understanding of how quickly sea levels could rise, it is important to ascertain how quickly polar land ice is melting. Such information is also vital for policy-makers to adapt to climate change. Unfortunately, the dynamics of the Greenland and Antarctic ice sheets are extraordinarily complex.

Nevertheless, over the past several years, scientists have been able to use data from the twin Gravity Recovery and Climate Experiment (GRACE) satellites to arrive at better estimates of how fast polar ice is melting. Recent studies using GRACE data estimated that Greenland is losing approximately 230 billion metric tons of ice a year, while West Antarctic is losing approximately 132 million metric tons a year. Together, that would account for a 0.2 inch sea level rise a year.

However, a new study published in the September issue of *Nature Geoscience* suggests that the true melt rate might be much slower than that. A joint team of American and Dutch scientists found that Greenland and West Antarctica may be melting just half as fast as the earlier studies estimated. The reason for the discrepancy is that the earlier estimates failed to take into account the glacial isostatic adjustments related to the rebounding of the Earth's crust after the end of the last Ice Age.



The joint team used ground-based GPS stations and sea floor pressure, as well as GRACE data, to find the changes to the land in Greenland and Antarctica. They estimate that Greenland is losing about 104 billion metric tons of ice a year and West Antarctica is losing approximately 64 billion metric tons a year.

Nevertheless, the Nature Geoscience study still does not change the essential fact that we are losing ice on a daily basis from Greenland and West Antarctica. After all, 104 billion metric tons is still a lot of water to add to the global seas each year.

[Time Magazine, 09/09/2010]

#### Tougher emission reductions broached

The Hong Kong government has issued a consultation paper on climate change strategy and action agenda, setting a target of reducing carbon intensity by up to 60% by 2020.

Secretary for the Environment Edward Yau said climate change is bringing more severe weather and has posed an unprecedented challenge. He added that Hong Kong has to adopt a proactive and forward-looking strategy in tackling climate change which is directed at our emission characteristics.

The government's proposal includes maximising energy efficiency, introducing environmentally-friendly transport, promoting the use of clean fuels and converting waste into energy.

If the government's target is achieved in 2020, Mr Yau forecasts the city's total greenhouse gas emissions will drop significantly from 42 million tonnes in 2005 to 28-34 million tonnes in 2020, representing a 19%-33% reduction. Per capita emission would also fall from 6.2 tonnes to 3.6-4.5 tonnes.

Mr Yau added that implementation of the measures will necessitate new legislation and some other measures will require technology and products, market acceptance and community support.

A three-month public consultation will be held on this issue.

[H.K. Information Services Department, 10/09/2010]

#### Indonesia could cut CO2 emissions by 70 pct by 2030

According to a report, "Indonesia's Greenhouse Gas Abatement Cost Curve," released by the National Council on Climate Change, the country's greenhouse gas emissions are projected to rise by about 60% to 3.3 billion tonnes in 2030. But the report also said that Indonesia could reduce the projected emissions by 2030 by about 70% if 90 strategies are implemented across 8 sectors: forests; cement; power; petroleum; gas; agriculture; transportation and buildings.

The projected reduction would account for 7% of the global emission deductions required to limit global warming to no more than 2 degree centigrade.

Unchecked carbon emissions will make extreme events more often, such as we have seen with recent floods in Pakistan and drought in Russia.

The report also added that Indonesia could provide up to 2.3 billion tonnes of greenhouse gas abatement by 2030, which would match Russia's entire greenhouse gas emissions in 2008.

A carbon market has been established, which

allows polluters in developed countries to offset their greenhouse gas emissions by paying for low-carbon projects in developing countries. Currently, carbon offsets traded on the European Climate Exchange change hands for under 14 Euros per tonne.

[Reuters, 06/09/2010]

#### Swift adjustment to changing climate urged

Employers' organization, CBI, has publicly stated that it is important for businesses to adapt to climate change. According to its report, climate change could in the future adversely affect business operations, consumer behaviour, and the construction and maintenance of infrastructure.

In order for businesses to better plan for rising temperature and extreme weather risks, CBI calls on the government to help businesses to gain access to all the important related data. It also calls for a new public information bank to be established which can show the risk of climate change to critical infrastructure.

CBI also suggests that businesses should include the impact of climate change in their risk management assessments and should also ensure the resilience of infrastructure to withstand climate changes over the next century.

Climate change has a host of adverse impacts. Rising temperatures could affect the functioning of industrial equipment and key infrastructure assets. Crop failures will become more frequent and water supplies will become more scarce, imposing a strain on global food and other supply chains.

[Financial Times, 13/09/2010]

#### Climate causing wilder weather

China has suffered extremely abnormal weather in 2010 as a result of climate change.

Ren Guoyu, chief expert with the National Climate Centre, said that since the winter of 2009, some parts of the country have been affected by severe droughts whereas other parts have been devastated by abnormally heavy rainfalls, leading to mudslides and flooding.

Research has shown that over the past 50 to 60 years, China has suffered increased events brought about by high temperatures. Most parts of the country have suffered from droughts, especially in the northern areas along rivers and oceans; 6.1 million hectares of farmland were affected, leaving at least 18 million people short of drinking water. Some parts of Guizhou did not receive substantial precipitation for more than 200 days.

On the other hand, the western regions of the country have suffered from heavy rainfalls for the past five to six decades. The torrential downpours from 1 January to 31 August this year claimed 3,100 lives and left 1,067 people missing. The flooding also caused crop failure in 2.66 million hectares of farmland and the collapse of 2.11 million houses, leading to direct economic losses of more than 350 billion yuan. A mudslide in Northwest Gansu province this August also killed 1,471 people and left 294 others missing.

Lin Erda, a senior researcher with the Chinese Academy of Agricultural Sciences, said that climate change has led to reduction in grain output and increase in the number of people suffering illnesses, adversely affecting the country's development.

[China Daily, 09/09/2010]

## ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

Framework Agreement on Hong Kong/Guangdong Co-operation - Environmental Protection and Ecology Conservation (ACE Paper 10/2010)

#### Purpose

This paper is to seek members' views on environmental protection and ecology conservation under the Framework Agreement on Hong Kong/Guangdong Co-operation ("the Framework Agreement") which was signed on 7 April 2010.

#### Background

In early 2009, the National Development and Reform Commission ("NDRC") promulgated the "Outline of the Plan for the Reform and Development of the Pearl River Delta ("PRD")" ("the Outline"), establishing Hong Kong/Guangdong co-operation as a national policy. To implement the Outline, the Chief Executive and the Governor of Guangdong Province signed the Framework Agreement on 7 April 2010. The Framework Agreement outlines future cooperation between Hong Kong and Guangdong. The proposed cooperative undertakings include the joint initiatives in environmental protection and ecology conservation.

#### Environmental protection and ecology conservation

In respect of environmental protection and ecology conservation, the Framework Agreement has included co-operative initiatives being undertaken or actively considered by various organisations in Hong Kong and Guangdong. The objectives are to improve regional environmental quality and to transform the PRD region into a quality living area. Major areas of co-operation between Hong Kong and Guangdong under the Framework Agreement include the following:-

- (a) taking action to tackle air pollution;
- (b) enhancing cleaner production in the PRD region;
- (c) promoting wider use of electric vehicles;
- (d) co-operation in protecting marine water quality; and
- (e) co-operation in ecology and marine resources conservation.

#### (a) Taking action to tackle air pollution

Under the Framework Agreement, Hong Kong and Guangdong will continue to co-operate to improve the air quality in the PRD region by taking control measures suggested under the PRD Regional Air Quality Management Plan. Both sides will aim to achieve stipulated emission reduction targets by 2010 and will conduct a joint study on the post-2010 arrangements for emission reduction in the PRD region.

Targeting major air pollution sources, such as exhaust emissions from motor vehicles and marine vessels, Guangdong and Hong Kong will progressively adopt air quality objectives and fuel and emission standards for motor vehicles and vessels which are more advanced than other locations in China. For the purpose of tackling regional air pollution problems, both sides will also strengthen co-operation in research into the relationship between the air quality and the formation of photochemical smog and hazy weather.

#### (b) Enhancing cleaner production in the PRD region

Under the Framework Agreement, both sides will actively encourage companies to enhance cleaner production in the PRD region by promoting energy efficiency and reducing emissions. The governments in Hong Kong and Guangdong will continue to implement the five-year Cleaner Production Partnership Programme (“the Programme”) which was commenced in April 2008. The Programme aims to encourage Hong Kong-owned companies in the PRD region to adopt cleaner production practices. It also gives recognition to Hong Kong-owned companies, which have participated in the Programme, with good performance awards as “Hong Kong-Guangdong Cleaner Production Partners”.

In early 2010, Legco’s Panel on Environmental Affairs supported the Hong Kong government’s proposal to revise the coverage of the Programme to provide professional advice and technical support to Hong Kong-owned factories in the PRD region to reduce effluent discharges, so as to further promote a wider application of cleaner production technologies amongst the industries.

#### *(c) Promoting Wider Use of Electric Vehicles*

In promoting wider adoption of electric vehicles (“EVs”), the governments in Hong Kong and Shenzhen have jointly undertaken trials of dual mode plug-in hybrid vehicles in 2009. Based on the past experience in the development of energy efficient transportation system, Hong Kong and Guangdong will work together to promote the wider use of EVs as stipulated in the Framework Agreement. They will continue to strengthen exchanges in fostering the research and development, manufacturing, wider adoption and development of relevant auto parts industry of EVs in the PRD region.

#### *(d) Co-operation in protecting marine water quality*

Under the Framework Agreement, the governments in Hong Kong and Shenzhen will enhance regional water quality management and pollution control. Both sides will commission an initial study of Pearl River Estuary water quality management planning, and will continue to advance regional environmental management co-operation in Shenzhen Bay areas.

In addition, Shenzhen and Hong Kong will commence a review in 2012 of the effectiveness of the Deep Bay Water Pollution Control Joint Implementation Programme and the progress of pollution reduction. The purpose of the review is to jointly establish further water quality improvement targets and implementation plans.

#### *(e) Co-operation in ecology and marine resources conservation*

According to the Framework Agreement, Guangdong and Hong Kong will carry out coastal wetland cooperative conservation projects such as: (1) mangroves restoration in the Pearl River Estuary; (2) joint planning of major cross-boundary nature conservation areas; and (3) developing a regional cross-boundary green corridor for the Bay Area in the Pearl River Estuary. Both sides will also foster the exchange of ideas and other forms of co-operation to establish cross-boundary nature conservation areas and ecological corridors through the existing “Hong Kong-Guangdong Afforestation and Conservation Special Panel”.

In order to facilitate the establishment of regional green corridors, the Hong Kong side will commence a feasibility study of the proposed designation of Robin’s Nest in the border area as a country park, and will carry out tree planting,

forestry enhancement and hill fire prevention works in the country parks.

As for marine resources conservation, Guangdong and Hong Kong will continue to foster co-operation and exchanges to encourage conservation and research of Chinese white dolphin, corals and turtles in accordance with the requirements of the Framework Agreement. Both sides will also explore opportunities for co-operation in the areas of: establishment and evaluation of the effectiveness of artificial reefs; conservation of rare marine life; red tide studies; and law enforcement action in respect of marine fisheries, through the existing “Hong Kong-Guangdong Marine Resources and Conservation Special Panel”.

#### **Proposal to Control Emissions of Non-Road Mobile Sources** (ACE Paper 11/2010)

##### **Purpose**

This paper is to seek members’ views on a proposal regarding control of emissions from non-road mobile sources.

##### **Background**

Non-road mobile sources can be defined as mobile machines, transportable industrial equipment and non-road vehicles powered by a combustion engine used primarily off the main roads. These devices are commonly known as “non-road mobile machinery” (“NRMM”) which is widely used off-road, such as at airports, container terminals and construction sites.

NRMM constitutes approximately 7% and 11% of local emissions of nitrogen oxides and respirable suspended particulates respectively. These air pollutants contribute to environmental pollution, nuisance and smog and have adverse health effects. Therefore, these emission sources should be kept under control in Hong Kong.

##### **Key proposals**

Having regard to the community’s feedback, and making reference to the practices of other countries, the proposal puts in place a new control scheme under which NRMM imported into Hong Kong or manufactured locally for sale in Hong Kong must comply with a set of statutory emissions standards, which are broadly in line with the emission standards adopted in Europe, the United States and Japan.

##### **Consultation with stakeholders**

In May 2010, the government launched a two-month consultation process, targeting the following stakeholders:-

- (a) owners and operators of NRMM; e.g. operators at the airport, container terminals and construction sites; and
- (b) suppliers of NRMM; e.g. authorised dealers, importers, dealers and lessors of both first-hand and used NRMM.

This proposal was introduced to the Subcommittee on Improving Air Quality of the Legislative Council’s Panel on Environmental Affairs at a meeting on 11 May 2010. The Subcommittee was supportive of the idea of controlling emissions from non-road mobile sources.

##### **Action plan**

After the conclusion of the consultation exercise on 5 July 2010, the proposal will be finalised in the light of the consultation findings. The plan is to initiate the necessary legislative procedures within 2011 for implementing the proposed scheme.

#### **Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel** (ACE-EIA Paper 4/2010)

##### **Purpose**

This paper is to seek members’ view on the Environmental Impact Assessment (“EIA”) report for “Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel” (“the Project”).

##### **Background**

The Kwai Tsing Container Basin and its approach channel (“KTCB&AC”) are currently maintained at depths of approximate 15.2m to 15.5m below the Chart Datum. In recent years, there has been an increase in the use of ultra-large container ships (“ULCS”), which have a maximum draft of 15.5m. Thus, it is necessary to provide sufficient water depth at KTCB&AC to cater for the size of ULCS. Otherwise, the efficiency and reputation of Kwai Tsing Container Port (“KTCP”) will be diminished and there is a possibility that ULCS will look for alternative arrangements, including diversion to Shenzhen and other ports. Therefore, it is necessary to dredge KTCB&AC to meet the draft requirements of ULCS in order to maintain the competitiveness of KTCP and to increase the cargo handling capacity of Hong Kong.

##### **Description of the project**

The total area of the project is approximate 446 hectares. It involves the dredging of around 4.4 million cubic metres (Mm<sup>3</sup>) of sediment from the seabed of KTCB&AC. In addition, the Tsing Yi Submarine Sewage Outfall and the Kwai Chung Submarine Sewage Outfall will be modified and demolished respectively. The Project is within 100m of the Water Services Department’s (“WSD”) Tsing Yi Seawater Flushing Intake. The project will begin in 2011 and be completed by 2013.

##### **Consideration of alternative options**

Alternative dredging methods have been considered with a view to reducing environmental impacts to the surrounding areas of the project. The recommended option is to use grab dredgers. Although a grab dredger operates more slowly than other types of dredger, it generates the least sediment plume. It is suggested that only one cutter suction dredger will be used for excavation of a small amount of hard materials at the northern side of the project.

##### **Specific environmental aspects**

###### *Water quality impact*

The impact to the water quality during construction and operation has been thoroughly assessed. Key sensitive receivers identified include fish culture zones (“FCZs”), bathing beaches, coral communities, WSD’s flushing water intakes and Electrical & Mechanical Services Department’s cooling and flushing water intakes.

Suspended solids (“SS”), Ammoniacal Nitrogen (“NH<sub>3</sub>-N”) and Unionised Ammonia (“UIA”) are identified to be the critical water quality parameters. The EIA report recommends a few mitigation measures to control these parameters. For example, the project should involve a maximum of 3 dredgers (say, mainly grab dredger and a cutter suction dredger for hard materials) operating at any one time at a prescribed dredging rate and locations, and installation of silt curtains and screens around dredgers and water intakes.

It is suggested that approximately 1% of the project area may reach a very high Ammoniacal

Nitrogen value. Dredging in such area may lead to UIA values exceeding the Water Quality Objectives ("WQO"). The EIA report recommends that dredging in this area should not commence until a field trial or alternative confirmatory method with appropriate dredging rate is identified. With the implementation of mitigation measures recommended in the EIA report, the concentrations of SS, dissolved oxygen and UIA during construction stages will comply with the WQO.

#### *Marine ecological and fisheries impact*

According to past records, the KTCB&AC are not major areas for fishery operations. The marine ecological impact assessment concluded that ecological resources for these areas are relatively low. Therefore, the potential environmental impacts on marine ecology and fisheries are insignificant. In addition, the project area is also outside the distribution range of both Chinese White Dolphin and Finless Porpoise.

According to the water quality modeling results, the predicted sediment plume with the use of grab dredger will be confined to the dredging area and the deposition rate of SS is within an acceptable level for all coral sites. The EIA report also finds that the two nearest FCZs, i.e. Ma Wan FCZ and Lo Tik Wan FCZ, are over 5km and 4km from their nearest dredging boundaries respectively. With the implementation of mitigation measures recommended in the EIA report, no other specific marine ecology or fisheries mitigation measures are considered necessary for the project.

#### *Waste management*

The total volume of dredged sediment to be disposed of is estimated to be 4.4Mm<sup>3</sup>. For maintenance purposes, dredging an average volume of 30,000m<sup>3</sup> per annum will be conducted whenever that is necessary.

Given the large amount of sediment to be disposed of during construction and operation of the project, the EIA report recommends that the project should only commence after obtaining confirmation from the Marine Fill Committee on disposal of waste options. In addition, marine sediment disposal must follow the statutory requirements under the *Dumping at Sea Ordinance*.

#### *Other environmental impacts*

Other potential environmental impacts, including air, noise, cultural heritage, landscape and visual impairment were found to be insignificant because the sensitive receivers are relatively far away from the project area and the dredging work is conducted under water.

## REGIONAL & INTERNATIONAL

### CHINA

#### **Flooding sparks supply line fears among ecologists**

Soldiers were called in to work to fix damaged water pipelines in suburban Tonghua. Four pipes connecting the city with a local water filtering plant were destroyed in floods caused by torrential rain. Daily flooding in Northeast China last month, which killed 74 people with another 71 still missing, has triggered fears among experts about the country's infrastructure and industrial zoning.

Heavy rains, which have battered Jilin province since July 20, have resulted in severe damage to 677 bridges and 51 reservoirs and affected almost 4.6 million people. More than 784,000 residents

were evacuated from the danger zones across the province.

Water and electricity supplies in several cities and counties were either disrupted or completely severed for days. Urban planning experts also blamed shortages of potable water on the number of pipes destroyed by the rushing floodwaters.

A researcher at the China Academy of Urban Planning and Design said that extra investment in city infrastructure would have prevented similar disasters in extreme weather conditions or natural disasters. He added that if the country had backup water supplies and pipelines, this wouldn't have happened and entire cities would not have been disrupted.

As the country has witnessed rapid development and urbanisation, projects above ground have overshadowed the urgent need to update cities' underground pipe and sewer networks.

Researches suggested that the threat of flooding should be taken into consideration when new infrastructure projects are launched, while overall standards should be improved to ensure any supply lines are strong enough to withstand a major catastrophe.

More than 300 companies were forced to halt or slow production amid the continuous downpours. Floodwaters also swept 7,000 barrels filled with chemicals into Songhua River, sparking serious concerns for a waterway that acts as a major source of drinking water for Jilin.

[*China Daily*, 08/09/2010]

### TAIWAN

#### **Environmental groups call for green traffic**

Environmental groups called on election candidates yesterday to make Taiwan a friendly place for bicycles and for non-polluting means of transportation.

The Thousand-Mile Trail Planning Centre and 45 other organisations presented a booklet containing their proposals for "low-carbon, healthy and economical" transportation policies. The TMTPC said it had worked for half a year to develop the policy proposals for an environment which is friendly to bicycles, and for sustainable urban centres.

Campaigners explained at a news conference that local governments should actively promote the increased use of bicycles and control the growth in the number of cars and motorcycles.

According to campaigners, the quality of life would also increase if the distribution of road surfaces between various means of traffic was revised. Campaigners want the design of a perfect transit system, increased protection for vulnerable road users, and the establishment of a network of roads deemed friendly to cyclists.

Campaigners argued that governments should pay special attention to the formation of quiet traffic zones and to roads linking homes with schools. The government should also strengthen its education campaigns and the enforcement of traffic rules to protect cyclists and pedestrians.

[*Taiwan News*, 02/09/2010]

### SINGAPORE

#### **Singapore can be a model for green cities**

Densely packed urban cities like Singapore can be a strong lever against climate change, a guest speaker at the World Cities Summit said yesterday.

The speaker suggested that with proper planning, urban density can lead to energy efficiency and lessen the impact on the environment. He gave the example of how in Manhattan, in New York City, everybody walks because buildings are close together.

But this is not the case across the rest of the United States, where the dream is to own a house in the suburbs and drive rather than take public transport to work.

However, the speaker said that when you look at a place like Singapore, what you see is a viable alternative to an effective urban environment, where people live richly, deeply, and with a minimum impact on the land and the environment.

A climate change researcher said that developing green urban cities is critical as they can be powerful tools to reduce the impact of devastating climate change, which he said is the greatest crisis faced by humanity.

In response to a question on whether cities like Los Angeles should start building inwards and upwards instead of outwards, another speaker commented that Singapore is an expensive model for cities to adopt even though it will become less costly over time.

[*The Strait Times*, 30/06/2010]

### PAKISTAN

#### **Forget politics, Pakistan is drowning**

Floods, consequences of the most devastating rains seen in Pakistan in more than 80 years, will have a severe and long-lasting impact on Pakistan's already fragile and mismanaged economy.

The floods have decimated Pakistan's most fertile agricultural land, along the banks of the Indus River. They have destroyed a large share of the livestock population, and they have left more than 4 million people entirely homeless. The number of people affected now exceeds 20 million. These people's livelihoods, health and future prospects have drowned in the floodwaters. Some of the worst-hit areas along the Indus River are Southern Punjab and rural Sindh.

As floodwaters continue to threaten the lives of millions more this week, the first and only focus of people, no matter where they live and what country they are from, should be on the humanitarian catastrophe represented by these floods. Supporting the international and Pakistan NGOs working round the clock to save lives is the best way to do that.

[*CNN*, 19/08/2010]

### ASIA

#### **Asia's alarming cities**

The world's hopes of putting carbon emissions on a manageable path depend upon on how developing Asia urbanises in the coming decades. The scale is staggering—energy consumption grew by 70% in the ten years to 2008. According to the Asian Development Bank, 44 million people join city populations each year in Asia. Every day sees the construction of 20,000 new dwellings and 250 km of new roads.

Construction and use of buildings accounts for a large part of developing Asia's carbon emissions—30% in the case of China, where nearly half of the world's new floor space is built each year.

Governments acknowledge the challenge. Green

codes in China mandate energy-saving standards for heating, cooling and lighting new buildings. The aim is to cut new buildings' energy use by 65%. Nevertheless, many new buildings are designed first and "greened" later (if at all)—a cheaper but less effective approach.

As for the superblocks that exemplify China's urbanisation, a dozen new ones are completed every day. Yet their conceptual design is flawed, however many low-energy light bulbs they boast. They get built after the city government lays out a system of arterial roads. State utility companies put down power, water and sewage mains. Developers bid for the rights to build blocks with specified numbers of housing units, schools, offices, shops, green space and so on. The developer throws up the block and plugs it into the centralised utilities grid. Presto, another urban residential block is created!

The environmental impact is already apparent. Gated blocks with a single entrance not only force residents to abandon cycling or walking for the motorcar whenever they need to go anywhere, they cause congestion, pollution and traffic accidents.

A different approach for Tianjin in northern China was devised by thinking of the development as a whole system in which high-density neighbourhoods would generate nearly all their energy and water needs. First, "greenways" were marked out that gave pedestrians and cyclists a way to get to the nearest mass-transit station without being run down or choked by fumes. Meanwhile, good use of sunlight, shading and ventilation cuts heating and cooling loads. Photovoltaic panels and windmills provide four-fifths of electricity needs. The rest, as well as gas for cooking and hot water, comes from biogas generated from sewage, waste food and plant clippings. Rainwater will flush lavatories. Storm-water run-off will be collected for irrigation, including for allotments and the trees that reduce the "heat-island" effect. Something of China's traditional urban scale would be echoed by community blocks within the greater scheme, each accommodating 100-300 families.

Yet in China the idea appears to have run into the sands because of the radical approach it requires. What is more, the costs are up to a fifth higher for such developments, though they more than pay for themselves in the long run.

A climate-change official from the United Nations said that limits to what can be done are set by the perverse economic incentives that apply in most parts of Asia. Developers, a big part of the solution, will struggle to make a profitable fist of turning green when energy and the costs of pollution are grossly underpriced, thereby favouring old-fashioned utilities.

[*Economist*, 01/07/2010]

## AUSTRALIA

### People affect climate change

The Australian Academy of Science has pitted its expertise against the greenhouse sceptics in a report firmly stating that human activity is changing our climate.

The statement expresses for the first time the consensus among Australia's top climate scientists on the evidence for human-caused global warming.

In it, nine eminent climate scientists declare that global average temperatures have risen during the past century, and that increased greenhouse gas levels due to human activity are mostly to blame. The academy issued the statement, *The Science of Climate Change : Questions and Answers*, in Canberra as part of National Science Week.

The document sets out the evidence of human impact on climate and outlines the possible consequences of failure to make deep cuts to greenhouse gas emissions. It synthesizes the latest peer-reviewed research and identifies areas of scientific uncertainty, such as regional impacts and tipping points : thresholds that, if crossed, could send the climate system awry.

Professor K. Lambeck of the Australian National University's Research School of Earth Sciences, initiated work on the document to clear up common misconceptions.

"A lot of the genuine scientific debate is about issues that are largely second order things, and they do not impinge on our principal understanding of climate change," he said.

Professor Lambeck said the fundamental principles of climatology, such as the role of carbon dioxide in global warming, were beyond dispute. But scientists were still arguing about complex earth systems feedback mechanisms, such as the possible cooling effect of clouds.

Among the authors of the academy's report are David Karoly, of the University of Melbourne; Matthew England, of the University of NSW; Michael Bird, of James Cook University; and the CSIRO's Mike Raupach.

"They have identified the questions." Professor Lambeck said. "They've debated the answers. Here is the best advice you can get from the scientific community by real experts in their fields in climate science."

A seven-member committee of experts reviewed the document, which concluded : "Decisions will need to be made before we have absolute certainty about the future."

[*The Australian*, 18/08/2010]

## U.S.A.

### New rules slow gulf drilling pace in shallow water too

The drilling moratorium enacted after the BP oil spill applies only to the deepwater Gulf of Mexico. Yet energy exploration in the Gulf's shallow waters has come to a virtual standstill as drillers grapple with tougher federal rules imposed since the spill.

The pace at which regulators grant drilling permits in water less than 500 feet deep has slowed sharply this summer. Just 4 out of 10 shallow-water drilling applications have been approved from June until August; 15 applications were lodged and approved in the same period last year.

Environmental groups are encouraged by the trend. But drilling executives say the new rules, which require them to produce detailed spill-response plans and estimates for worst-case scenarios, are adding millions of dollars in costs and causing delays that have led to layoffs. Executives worry that when the Obama administration lifts the six-month moratorium on deepwater drilling, where the risks are greater, the permitting process will be even slower.

These worries increased following a fire on September 2 on an oil and gas platform owned by Mariner Energy that was working in the Gulf's shallow waters. 31 out of 47 rigs used for shallow-water drilling in the Gulf will be out of work by the end of September, industry officials say.

[*American Broadcasting Company (ABC)*, 14/09/2010]

## Oil slick from Deepwater Horizon expected to affect dolphins

For now, desperate oily pelicans are the gut-wrenching image of the Deepwater Horizon oil spill. But before long there will be others, including the most beloved sea creature of all, the dolphin.

"We're going to lose a lot of them," said Dr. Denise Herzog, research director for the Wild Dolphin Research Project in Jupiter. "It is unconscionable and it is criminal. It is akin to a nuclear power plant explosion underwater."

As of Wednesday, there were 51 confirmed reports of marine mammal strandings: one sperm whale, 3 spinner and 47 bottlenose dolphins collected in the Gulf – dead and alive – since the Deepwater Horizon spill on April 20. It is not known if oil from the Deepwater Horizon spill caused the strandings. Necropsy results are pending. Four of the 51 were dolphins were found along Florida's Gulf coast.

Although oil and tar will not stick to a dolphin as they do to fur and feathers, dolphins –unlike fish – breathe air. Every time they surface, they have to swim through the toxic slick and also breathe oil fumes at surface level.

Whilst dolphins are among the smartest animals on the planet, researchers do not know if their intelligence will protect them from the oil.

The biggest threat probably will come from dolphins eating fish contaminated with oil. Eating toxic fish could suppress the dolphins' immune system, making them vulnerable to pneumonia and other illnesses.

Another marine mammal facing death by food poisoned with oil are baleen whales, which often feed on plankton at the surface.

[*Palm Beach Bay News*, 25/06/2010]

## Gulf of Mexico oil spill increasing

The giant oil spill in the Gulf of Mexico is increasing at a fast rate. Satellite images show it has more than tripled in size in just a day. The oil is spewing out of a BP-operated platform which sank after a huge explosion over a week ago.

The crisis is also beginning to affect oil and gas production in the Gulf of Mexico. Two gas platforms have stopped pumping, and one of them has been evacuated.

Sheen from the spill has begun washing up on the Louisiana coast, fuelling fears of an impending environmental disaster. Mississippi, Alabama, Louisiana and Florida have all declared a state of emergency. Analysts say the spill could rival the 1989 Exxon Valdez disaster as the worst in US history.

Strong winds and rough seas have been frustrating efforts to contain the oil slick.

[*RTHK English News*, 02/05/2010]

## UNITED KINGDOM

### Urban areas getting hotter, faster

In the future, city-dwellers can expect night to bring less relief from a hot day, say researchers. A combination of climate change and urban growth will push temperatures higher in cities worldwide.

Climate scientists at the UK's Met Office found not only do cities retain more heat than rural areas do, but hot cities will grow even hotter as the climate warms and cities grow. By mid-century,

night-time temperatures in cities could rise by more than 5.6°C.

At stake are the comfort and health of people who live in cities around the world, especially those who don't have access to air-conditioning.

In a concrete jungle, roads and buildings absorb sunlight and trap heat, which also flows as waste out of cars, air-conditioning units and even just the breathing of millions of people crammed into a busy grid of streets. As a result, cities create their own, warmer microclimates - a phenomenon called the "urban heat island effect".

Scientists have known about urban heat islands for many decades. Still, most climate models are based only on conditions in rural areas, where soil, trees, lawns and fields don't absorb and reflect sunlight the same way that asphalt and concrete do.

To see how climate change might interact with urbanisation and population growth, climate scientists at the UK's Met Office created a new model that compared future climate scenarios in cities with predictions for rural areas.

The results showed that the urban heat island effect is most extreme in dry, subtropical regions, where the differences between night-time and daytime temperatures are greatest.

With projected increases in heat-trapping carbon dioxide, the model predicted that between now and 2050, daytime temperatures will increase equally in cities and rural areas. But over the same time period, city nights will get much warmer than rural nights.

In the Middle East, where the effect will likely be most extreme, the study predicted that CO2 emissions will lead to a night-time rise of about 3°C both inside and outside cities, with an extra 3°C rise within city limits.

Among other places, nights will also get significantly warmer in the urban areas of East Africa, Central Asia and the Western United States.

US climate researchers from the National Centre for Atmospheric Research in Boulder, Colorado, believe that as cities grow warmer, it will become even more important to invest in urban cooling strategies. White roofs, green spaces, calculated window placements and other architectural decisions which enable buildings to emit fewer greenhouse gases and less heat will become more popular.

[*Australian Broadcasting Corporation*, 23/06/2010]

#### BP spreads blame for oil spill

An investigation carried out by BP said it was responsible in part for the disaster, in which an estimated 4.9 million barrels of oil leaked into the Gulf after the *Deepwater Horizon* explosion in April, but it also blamed two other companies working on the oil rig.

BP faces billions of dollars worth of legal claims for compensation as a result of the spill, which was the worst in US history. The well was substantially capped on July 15, and an operation to permanently seal it is due to take place in the next few weeks.

In the internal report released on its website, BP said that decisions made by multiple companies and work teams contributed to the accident, which it said arose from a complex and interlinked series of mechanical failures, human judgement errors,

poor engineering design, and inadequate operational implementation and team cooperation.

BP leased the *Deepwater Horizon* rig from Transocean, and its cement contractor (for cementing the riser through which oil is extracted) was Halliburton. The BP report was critical of the processes and actions of both companies.

However, in a statement issued after the report, Transocean dismissed BP's criticism, calling the company's own oil-well design fatally flawed. Transocean said that in both its design and construction, BP made a series of cost-saving decisions that severely increased risks of a major blow-out.

Halliburton also criticised the BP report, saying that it had a number of substantial omissions and inaccuracies. Halliburton also said that it remains confident that all the work it performed with respect to the Macondo well was completed in accordance with BP's specifications.

The report highlighted eight key failures that, in combination, led to the explosion. BP suggested that both BP and Transocean staff incorrectly interpreted a safety test which should have flagged up risks of a blow-out. In particular, over a 40-minute period, the Transocean rig crew failed to recognise and act on the influx of hydrocarbons into the well, which eventually caused the explosion. BP also criticised the cementing of the well, which was carried out by Halliburton.

Among the other findings, the report said:

- There were no indications that Transocean had tested intervention systems at the surface, as was required by Transocean policy, before they were deployed on the well.
- Improved engineering rigour, cement testing and communication of risk by Halliburton could have identified flaws in cement design and testing, quality assurance and risk assessment.
- Important monitoring was not carried out for a period of more than seven hours by the Transocean rig team.
- Crew may have had more time to respond before the explosion if they had diverted escaping fluids overboard.

A spokesperson from BP said that the disaster was caused by a combination of a bad cement job and a failure of the shoe track barrier at the bottom of the well, which let hydrocarbons from the reservoir into the production casing. The negative pressure test was accepted when it should not have been, there were failures in well control procedures and in the operation of the automatic blow-out preventer, and the rig's fire and gas safety system did not prevent ignition.

According to the report, the explosion was a shared responsibility among many entities. BP said it had accepted all the recommendations in the report and would implement them worldwide. BP added that it is determined to learn the lessons for the future and will be undertaking a broad-scale review to further improve the safety of its operations to ensure that a tragedy like this will never happen again.

[*BBC*, 08/09/2010]

#### GERMANY

Germany expects to source 20 per cent of its total energy consumption from renewable sources by 2020, which is double the current figure. The Environment Minister said the use of wind, solar and biomass will increase faster than first expected. In 2020, 38.6 per cent of electricity will

come from renewables, 15.5 per cent of heating and cooling, and 13.2 per cent of transport energy.

[*The Advertiser*, 06/08/2010]

#### ITALY

##### Sustainable cities: the Italian way

In the four months since it opened in May, the Italy Pavilion at the Shanghai Expo has continued to surprise guests with a rich calendar of events. The focus in September will be on architecture, design and green buildings, featuring major Asian architects.

Events in store include a seminar on design and management of public spaces and the opening of a Frette workshop, where fine Italian linens will be superbly embroidered by skilled craftsmen. Also on tap are a business seminar on the Italian luxury furniture industry and a conference on eco-efficient construction.

The Commissioner General of Italy Pavilion said that they will continue to arrange events that highlight their strength in creating sustainable cities through pioneering design and technology. Specifically, September is dedicated to highlighting Italian excellence in the design of buildings that are environmentally, socially and economically viable, and will be for generations to come.

The seminar on bio-habitat was jointly organised by the Italian Trade Commission, ANVE and Federbio to illustrate new techniques and approaches to designing and managing green space in the urban context.

A Green Week (between September 13 and 18) will include forums, conferences and training courses on how to combine environmentally friendly policies with sustainable development. Discussions will include "early warning systems to protect biodiversity in natural reserves", as well as panels on architectural design and technology.

A conference on eco-efficient construction has been organised by the Ministry of Environment of Italy in cooperation with the Ministry of Science and Technology of China, Tsinghua University of Beijing and Jiao Tong University of Shanghai.

An international conference on the effects of climate change on Venice will include a training course for public officials by Venice International University. A two-session forum on architecture and urban planning will be held along with exhibitions by young Italian architects Carrino, Damato, Gregotti and Portoghesi.

On September 6, the Italian Trade Commission will host a seminar on eco-friendly food and gourmet cuisine to focus attention on the development of China's biofood market.

[*China Daily (Hong Kong Edition)*, 30/08/2010]

#### HAITI

##### US\$1.5 Billion cleantech project to reduce carbon emissions

Haiti Prime Minister Jean-Max Bellerive and ECCO2 Corp have begun discussions regarding the launch of the "ECCO2 Haiti Project" with the aim of reducing carbon emissions and stimulating the Haitian economy following the catastrophic earthquake earlier this year. Implementation of a clean development mechanism (CDM) will be achieved by installing ECCO2's patented technologies within all 133 communes that make up the nation.

ECCO2 Corp is a not-for-profit sister company of DBS Distributors, Inc. who are worldwide manufacturers and distributors of the ECCO2 / ECO Systems products. The company's patented technologies have been used by government agencies for nine years, reducing greenhouse gases output by motor vehicles and fossil fuel generators all over the world.

The ECCO2 (Environmental Control of Carbon Dioxide) Project was launched in July 2010 as a multi-billion dollar investment plan with various banks and private investors with interests in trading over 400 million carbon emission offset futures through use of ECCO2 / ECO Systems products used in CDM projects worldwide from 2010 until 2020.

The Republic of Haiti has been a member of the Kyoto Protocol since 2005 and currently has an estimated national carbon footprint of 10 million metric tons per year according to current statistics. The ECCO2 Haiti Project is expected to offset as much as 80 million metric tons of carbon emissions during the next 10 years. The carbon emission offsets will generate certified emission reduction (CER) credits with a current value of about US\$1.5 billion. The carbon credits will be sold to various trading firms and investment banks to finance the ECCO2 Haiti Foundation, which is a not-for-profit organisation based in Orlando, Florida, whose primary focus is to further economic development in Haiti using environmental initiatives as its catalyst.

According to the Chairman of ECCO2, the ECCO2 Haiti Project opens up vast employment opportunities and potential economic growth as Haiti continues to restore its infrastructure.

[Reuters, 08/08/2010]

## AFRICA

### Gambia: Forestry Ministry briefed on National Disaster Report

The National Disaster Technical Team yesterday briefed the Ministry of Forestry and Environment on the findings of their just concluded assessment of flood-hit areas in the country, and their recommended plans for quick response to the victims' needs.

The Minister of Forestry and Environment of the Gambia Government said that the government has already donated D10 million to disaster victims, of which D5 million will be spent on infrastructure to control flood waters in the areas affected by the floods and areas where bridges were cut-off, and D5 million will be spent on food for the disaster victims.

The Minister called on Gambians to complement the efforts of government in assisting flood victims by donating in cash or kind, since the government cannot do it all alone.

The Technical Team has identified a series of solutions for areas like Kotu, where they will clear obstructions to drainage systems. It added that Kotu Quarry requires a triple pedal approach to relocate the residents and reclaim the area, as flooding has become a major problem because people settled on and in waterways. Further, congestion at the waterways is the main issue and tackling it needs good planning and preparation.

The Technical Team's report stated that the bridge linking Wassu to Kuntar in CRR has been cut off; the Sami road is now unaccessible; and in URR, the bridge linking Sotoma to Gambisara has been washed away by floods. The report also stated that villages in Wuli are disconnected from each other due to poor roads.

A total number of 17,739 people are affected by natural disasters nationwide. Out of this number, 4,530 people were affected in Western Region, 5,811 in Kanifing Municipal Council, 802 in Banjul, 2,119 in Upper River Region, 1,596 in Central River Region and 624 in North Bank Region.

[AllAfrica.com, 09/09/2010]

## WORLD

### Eco-Schools will generate innovative local climate change solutions

Eco-Schools is a public-private partnership that helps schools apply the concepts of low-carbon living in their operations and communities. With a focus on practical action, students, teachers and community residents learn about the implications of climate change and sustainable development.

The partnership links 32,000 schools in about 50 countries with non-governmental organisations (NGOs) that work with national and local governments. The Foundation for Environmental Education (FEE), an international non-profit organisation dedicated to promoting sustainable development through environmental education, started the international programme in 1994 and has partnered with the International Business Leaders Forum to involve private corporations.

Innovation partnerships strive to create and scale up new business or operating models, products, services and markets. When working on climate change issues, innovation partnerships focus on changing core business practices and, by involving many partners, on reducing the risks and costs of innovation.

The Sandwich Technology School in the United Kingdom has improved its operations through Eco-Schools. Sandwich Tech has transformed its operations and educational approach by installing wind turbines and other renewable energy systems. It has reduced carbon impact while generating economic, social and environmental benefits, and has become a role model for sustainability for the wider community.

The Eco-Schools model features two distinguishing characteristics. First, as an innovation partnership, it prompts schools to transform their core operations and mobilises those involved with schools to generate practical climate change solutions. Second, the partnership operates as a local-to-global collaboration with all partners participating equally.

FEE provides a framework that enables members to advance their individual goals through joint action. The local-to-global design has attracted partners such as automaker Toyota and financial services company HSBC, which provide the Eco-Schools programme funding and technical assistance. The programme enables corporate partners to link their global aspirations to local operations, such as Eco-Schools, that focus on innovation and low-carbon product and process adoption. Other international partners include the United Nations Environment Programme and the European Union.

For daily implementation and operation of an Eco School, FEE requires a national NGO to act as a coordinator in each country. All coordinators meet once a year to discuss policy and planning issues, new initiatives and concerns. These meetings offer opportunities to recruit global or international partners, and they provide a method of programme self-regulation and quality control.

Urban Mines, a U.K. based NGO focused on waste management, orchestrated an Eco-School transformation in Halifax, England. The project,

called Tread Lightly, encourages children in Halifax to use energy more efficiently and reduce their waste by recycling at home and at school. The project has involved the Halifax Bank of Scotland in supporting local school initiatives on recycling, energy and sustainability education.

Odt Gelistirme Vakfı Özel İlköğretim Okulu Primary School in Ankara, Turkey, won the 2010 competition for "I take Responsibility," which puts students directly in charge of electricity use in the classrooms. Electricity switch units operated by a card, similar to those found in some hotel rooms, are installed in each classroom. One student per class takes responsibility for carrying the class card. The project and the theme of energy saving were integrated into the curriculum of the entire school. It has achieved a lower electricity bill for the school and a better environment for everyone.

Innovation partnerships such as Eco-Schools are resources for other innovation partnerships aimed at speeding the transition to a low-carbon economy and to national governments that aim to cut carbon emissions as a necessary response to global climate change.

[U.S. Government News, 24/08/2010]

### Poison shock for fish eaters

Sperm whales feeding even in the most remote reaches of earth's oceans have built up stunningly high levels of toxic and heavy metals, according to American scientists who say the findings spell danger not only for marine life, but for the millions of humans who depend on seafood.

A report released on 24 June 2010 noted high levels of cadmium, aluminium, chromium, lead, silver, mercury and titanium in tissue samples taken by dart gun from nearly 1,000 whales over five years. From polar areas to equatorial waters, the whales ingested pollutants that may have been produced by humans thousands of kilometers away, the researchers said.

The researches found mercury as high as 16 parts per million in the whales. Fish high in mercury, such as shark and swordfish – the types health experts warn children and pregnant women to avoid – typically have levels of about 1 part per million.

The whales studied averaged 2.4 parts of mercury per million, but the report's authors said their internal organs probably had much higher levels than the skin samples contained.

Sperm whales, which occupy the top of the food chain, absorb the contaminants and pass them on to the next generation when a female nurses her calf. "What she's actually doing is dumping her lifetime accumulation of that fat-soluble stuff into her baby," a spokesman said, and each generation passes on more to the next.

The contaminants could jeopardise seafood, a primary source of animal protein for 1 billion people.

US Whaling Commissioner, Monica Medina, informed the 88 member nations of the whaling commission of the report and urged it to conduct further research.

[SCMP, 26/06/2010]

Members of ADVOCASIA



An Association of Asian Commercial Law Firms

Adelaide, Australia

**NORMAN WATERHOUSE**  
Level 15, 45 Pirie Street, Adelaide 5000  
South Australia  
Tel: (618) 8210-1200  
Fax: (618) 8210-1234

Melbourne, Australia

**MADDOCKS**  
140 William Street, Melbourne  
Victoria 3000, Australia  
Tel: (613) 9288-0555  
Fax: (613) 9288-0666

Perth, Australia

**KOTT GUNNING**  
Level 8, AMP Building  
140 St Georges Terrace  
WA 6000, Australia  
Tel: (618) 9321-3755  
Fax: (618) 9321-3465

Sydney, Australia

**COLIN BIGGERS & PAISLEY**  
Level 42, 2 Park Street  
Sydney, NSW 2000  
Australia  
Tel: (612) 8281-4555  
Fax: (612) 8281-4567

Beijing, China

**JINCHENG & TONGDA LAW FIRM**  
11<sup>th</sup> Floor, 22 JianGuoMenNei Avenue  
Huaxia Bank Building  
Beijing 100005, P.R. China  
Tel: (86) 10-8523-7766  
Fax: (86) 10-6526-3519

Hong Kong, China

**FRED KAN & CO.**  
Suite 3104-07, Central Plaza  
18 Harbour Road  
Hong Kong  
Tel: (852) 2598-1318  
Fax: (852) 2588-1318

Inner Mongolia, China

**JIANZHONG LAW FIRM**  
The Middle Part of Jiانشe Road  
Baotou, Inner Mongolia  
P.R. China  
Tel: (86) 472-7155473  
Fax: (86) 472-7155474

Macau

**THE LAW OFFICE OF DR ANTONIO RIBEIRO BAGUINHO**  
Suite 1308, 13<sup>th</sup> Floor, Landmark Building No. 555  
Avenida da Amizade, Macau  
Tel: (853) 28705352  
Fax: (853) 28705351

Shandong, China

**SHANDONG QINDAO LAW FIRM**  
22/F, Northern Tower, Golden Square  
20 Hong Kong Road(M),  
Qingdao, P.R. China  
Postal Code 266071  
Tel: 86-532-85023128  
Fax: 86-532-85023080

Shanghai, China

**SHANGHAI UNITED LAW FIRM**  
14/F, China Insurance Building  
166 East Lujiazui Road  
Shanghai, P.R. China  
Postal Code 200120  
Tel: (86) 21-69419377  
Fax: (86) 21-68419499

Mumbai, India

**DHRUVE LILADHAR & CO**  
13-A/B, Ismail Building, 3<sup>rd</sup> Floor  
381, D.N. Road, Flora Fountain  
Mumbai – 400001  
India  
Tel: (91) 22-2285-2362  
Fax: (91) 22-2285-5787

New Delhi, India

**O.P. KHAITAN & CO.**  
Khaitan House B-1,  
Defence Colony, New Delhi-110 024  
India  
Tel: (9111) 2433-7516  
Fax: (9111) 2433-7958

Kuala Lumpur, Malaysia

**CHEANG & ARIFF**  
39 Court @ Loke Mansion  
No. 273A, Jalan Medan Tuanku  
50300 Kuala Lumpur, Malaysia  
Tel: (603) 2161-0803  
Fax: (603) 2161-4475

Auckland, New Zealand

**HESKETH HENRY**  
41 Shortland Street  
Auckland, New Zealand  
Tel: (64) 9-375-8700  
Fax: (64) 9-309-4494

Manila, Philippines

**HERRERA TEEHANKEE & FAYLONA**  
5<sup>th</sup> Floor, SGV II Building  
6758 Ayala Avenue  
Makati City 1200, Philippines  
Tel: (632) 813-7111  
Fax: (632) 813-7881

Singapore

**MADHAVAN PARTNERSHIP**  
5 Shenton Way #26-01 UIC Building  
Singapore 068808  
Tel: (65) 6225-5111  
Fax: (65) 6224 3594

Colombo, Sri Lanka

**D.N. THURAIRAJAH & CO.**  
2<sup>nd</sup> Floor, Don Carolis Building  
Post Box.1464, No. 64, Keyzer Street Colombo-11,  
Sri Lanka  
Tel: (94) 1-439-798  
Fax: (94) 1- 448-002

Bangkok, Thailand

**APISITH & ALLIANCE**  
Wave Place, 7th Floor  
55 Wireless Road, Lumpini  
Pathumwan, Bangkok 10330  
Thailand  
Tel: (66) 2655-2860  
Fax: (66) 2655-2868

Dubai, United Arab Emirates

**LUTFI AL BAHAR & CO.**  
Suite 804 A City Tower 2  
PO Box 8812, Dubai, United Arab Emirates  
Tel: (97) 14-321117  
Fax: (97) 14-311455

Ho Chi Minh City, Vietnam

**LUATVIET**  
Saigon Tower, Suite 908-909  
29 Le Duan Boulevard  
District 1, Ho Chi Minh City  
Vietnam  
Tel: (84) 8-824-8440  
Fax: (84) 8-824-8441

**Convictions under environmental legislation:  
June to September 2010**

[Note: the EPD no longer classifies second (and subsequent) offences.]

The EPD's summary of convictions recorded and fines imposed during the above period is as follows:

**Fred Kan & Co.  
Solicitors  
Suite 3104-07 Central Plaza  
18 Harbour Road  
Wanchai  
Hong Kong**

*June 2010*

Forty-one convictions were recorded in June for breaches of legislation enforced by the Environmental Protection Department.

Ten of the convictions were under the Air Pollution Control Ordinance, 8 under the Noise Control Ordinance, 4 under the Product Eco-responsibility Ordinance, 16 under the Waste Disposal Ordinance, 2 under the Water Pollution Control Ordinance and 1 under the Hazardous Chemicals Control Ordinance.

The heaviest fine in June was \$20,000, assessed against two companies that imported controlled waste without a permit.

*July 2010*

Thirty-six convictions were recorded in July for breaches of legislation enforced by the Environmental Protection Department.

Sixteen of the convictions were under the Air Pollution Control Ordinance, 7 under the Noise Control Ordinance, 11 under the Waste Disposal Ordinance and 2 under the Water Pollution Control Ordinance.

The heaviest fine in July was \$40,000, assessed against a company that imported controlled waste without a permit.

*August 2010*

Nineteen convictions were recorded in August for breaches of legislation enforced by the Environmental Protection Department.

Five of the convictions were under the Air Pollution Control Ordinance, 3 under the Noise Control Ordinance, 8 under the Waste Disposal Ordinance, 2 under the Water Pollution Control Ordinance and 1 under the Hazardous Chemicals Control Ordinance.

The heaviest fine in August was \$12,000, assessed against a company that imported controlled waste without a permit.

*September 2010*

Twenty eight convictions were recorded in September for breaches of legislation enforced by the Environmental Protection Department.

Seven of the convictions were under the Air Pollution Control Ordinance, 8 under the Noise Control Ordinance, 9 under the Waste Disposal Ordinance and 4 under the Water Pollution Control Ordinance.

The heaviest fine in September was \$30,000, assessed against a company that imported controlled waste without a permit.