

**URBAN PLANNING AND ENVIRONMENTAL LAW**  
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*The imminent decision to locate Hong Kong's first super waste-disposal incinerator on Shek Kwu Chau is another chapter in the government's record of paying lip service to environmental and town planning factors in large-scale infrastructure projects.*

*The Editors*

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**SHEK KWU CHAU INCINERATOR: ANOTHER ENVIRONMENTAL TRAGEDY UNFOLDING BEFORE OUR EYES**

*Waste management facility*

One of Hong Kong's most pressing environmental problems is how to dispose of the massive quantities of waste we generate each day in a more environmentally friendly way than has been the case to date – or, indeed, how to dispose of it at all.

Currently, municipal solid waste (MSW) which is not recycled is dumped in three landfill sites in the New Territories. However, these will have reached full capacity by 2018. This fact was the main motivation for the government's adoption of the *Policy Framework for the Management of MSW (2005-2014)* in 2005.

As is so often the case, the *Policy* is heavy on proposals for “engaging the public in continuing discussions” of the MSW problem, and light on actual remedies. But one practical idea raised in the *Policy* was the proposal to construct an integrated waste management facility (WMF) – in short, a super incinerator for burning MSW.

The WMF will comprise :

- (a) an advanced thermal incineration plant with design capacity of 3,000 tonnes per day (tpd) and
- (b) a mechanical sorting and recycling plant with design capacity of 200 tpd.

The non-recyclables sorted from the mechanical plant will be sent to the thermal incineration plant for further treatment. Under any conditions, the total MSW feeding to the thermal incineration plant and the mechanical plant will not exceed 3,000 tpd.

Since the *Policy* was released, and with the incentive of finding a landfill alternative for the 18,000 tonnes of MSW generated each day, the government has gradually moved ahead with the WMF proposal.

An Environmental Impact Assessment Report (EIAR) was released in February 2011, which analysed two potential locations for the WMF (why only these two is one of the many defects in the EIAR) – Tsang Tsui Ash Lagoons site (TTAL) and Shek Kwu Chau site (SKC).

The EIAR and the government favour the SKC as the preferred site. Despite vigorous opposition from local communities and conservation groups, the government (assisted by the Environmental Protection Department) is moving ahead to declare SKC as the site for Hong Kong's first WMF.

The proposed WMF, to be located on and adjacent Shek Kwu Chau, will in fact mostly occupy a 5 hectare artificial island. Altogether, the project entails reclamation of 11.8 hectares to accommodate the incinerator (comprising 6 individual units) and supporting infrastructure, such as a 4.1 ha. breakwater, a desalination plant and a wastewater treatment facility.

On 5 December 2011 a majority of the WMF sub-committee of the Advisory Council on the Environment endorsed the EIAR. The next step will be an application by the government to Legco to fund the estimated HK\$13 billion construction costs – which, incidentally, is a staggering HK\$10 billion more than the estimated cost of establishing the WMF at the alternative TTAL location.

The EPD continues to accept submissions opposing the SKC proposal, but yet again this seems to be no more than window-dressing, as a WMF on SKC is, and no doubt has been for a long time, a done-deal.

Apart from the massive difference in construction costs between the TTAL and SKC sites, on a broad assessment it seems incomprehensible that the ecologically

sensitive and environmentally valuable SKC would be preferred over the far less environmentally vulnerable TTAL.

We shall not attempt here to analyse the EIAR or provide comprehensive comparison of the two sites. Rather, we highlight some of the grounds – principally environmental – relied on by one of the concerned (and well informed) objectors to the SKC proposal, *Living Islands Movement* (LIM).

LIM's submissions to the government raised various environmental and economic factors which mitigate against SKC as the WMF site, and cast doubt as to the wisdom of the WMF – in its current proposed form – itself. Some of these are summarised below.

#### *Key factors against SKC*

##### *Marine environmental harm*

The EIAR acknowledges that SKC has a delicate ecosystem, providing natural habitat for unique wildlife and marine life. Further, the EIAR also accepts that construction work at SKC will cause irreversible damage to the ecosystem. Yet there is no proper assessment of the probable extent of such damage, and the government has not even included in the EIAR environmental impact assessments of other sites which appear far more suitable, at least in terms of damaging environmental impacts, e.g. Hei Ma Wan (Lamma Island, next to the power station).

Constructing a large WMF on reclaimed land at SKC will destroy 33 hectares of unspoiled marine and avian habitat, causing serious damage to various marine species, the best known and most vulnerable of which is the rare finless porpoise. On the other hand, there would be no new environmental degradation were the WMF located at TTAL.

##### *Air pollution*

The government claims there will be no significant polluting emissions from the facility. If this is the case, then it is not important where the facility is located. Logic suggests that a WMF should be built as close as possible to the sources of the MSW, not as far away from population centres as possible, as in the SKC option.

If the facilities are to be located in a remote area because there is a high risk of significant quantities of airborne pollutants, what is the risk to health, and how much more damage will be caused to Hong Kong's air quality by a WMF – wherever it is located? Any further deterioration in air quality will be enormously damaging to the international reputation of Hong Kong.

In summer, the prevailing wind is onshore from the south and south-west. So whatever emissions are given off by the incinerator will be blown directly on to South Lantau. For the rest of the year, the prevailing wind direction from the north-east is not material to either SKC or TTAL locations.

##### *Light pollution*

A WMF at SKC would be in clear view of the residents of Cheung Chau and South Lantau, day and night. On the other hand, the TTAL location is not in direct line of sight to any sizable populations, a fact the government has ignored.

##### *Lifestyle and tourism impacts*

Both TTAL and SKC are remote sites. However, SKC is visible from some of Hong Kong's most popular holiday and tourist

destinations, a point completely ignored in government studies.

Constructing the WMF at SKC will damage the only remaining pristine environment and scenic panoramas on the western side of HKSAR, including four of Hong Kong's finest beaches. Property values for residents on South Lantau and Cheung Chau (which is only 3 kilometres from SKC) will also be adversely affected.

The WMF will cause long-term damage to the local tourism industry. This compares with no material impacts at TTAL. The South Lantau Coast and Offshore Islands District is the last unspoilt area on the west side of the HKSAR, and the government's own strategic development plans have long stated that it will be reserved for conservation and recreation. Yet the EPD, in its typically compliant manner, has simply ignored these planning guidelines. In short, SKC is plainly an area that is simply not suitable for industrialisation.

##### *Increased transport costs and emissions*

The government says that we should spread waste disposal facility around Hong Kong, regardless of other considerations. But they do not cite any planning principle or policy to support this bald assertion. If this is "policy", then there should be balanced spatial distribution of all such facilities in the HKSAR.

Hong Kong's only explosives dump and low level nuclear waste facilities are currently on Lantau Island, along with seven correctional institutions. To which other facilities in Hong Kong has this "spread policy" been applied? Which academic or scientific research is it based on?

The EIAR cites reduced total carbon production as an advantage of SKC. The increased carbon output from locating the WMF TTAL, according to the government's own figures, will occur as a result of the extra land transportation required to cart the MSW to the incinerator. Either this assertion reflects a bias for the purposes of choosing SKC, or it ignores the alternative of building a MSW landing site closer to a WMF at TTAL.

##### *Outdated technology?*

A super incinerator with a massive capacity of 3,000 tonnes of waste per day will be out-of-date conceptually and technologically by 2018. The EPD has chosen moving grate incineration technology, based on officials' fact-finding visits some years ago to inspect incinerators in Europe and Japan. However, waste-incineration technology is evolving at a rapid pace. Will the EPD review most recent incineration technologies?

The technology for waste incineration has improved in recent years, and new techniques are now available. The government should consider the cleaner and more productive alternative of a burning-waste process, which produces liquid fuel – specifically jet-fuel – as other governments (e.g. U.K., Australia) are doing.

The process produces jet-fuel that can be sold to airlines, electricity that can be sold to electricity producers, and revenue for government, by selling the waste to the incinerator plant in the first place, and it has no negative side effects. There is not even a chimney, as there are no emissions.

The opportunity to turn waste-disposal into a commercially viable venture is something that Hong Kong should be willing to embrace with great enthusiasm. If an appropriate plant were located close to existing airport fuel tanks, thereby solving environmental problems associated with SKC, international credit would come to Hong Kong for having the excellent good sense to address its waste problems with vision and clarity, while providing a first-class source of bio-fuel to help reduce our overall carbon footprint.

##### *Will the WMF cure the problem?*

The government is planning to develop the WMF in phases, but has not yet revealed any firm plans beyond the first proposed WMF. Does this mean that extra facilities are already planned, or will the capacity of the proposed SKC facility actually be much larger? Can the government confirm whether there are two or more facilities being planned, or is the stated capacity for the SKC proposal much lower than actually planned? If the latter, what is the true planned capacity of SKC?

##### *Absence of due process*

LIM criticises EPD's public consultation process as, in effect, lacking genuine purpose and an affront to due process. It is evident that the EPD, as the controlling government agency, had already internally decided that SKC would be the chosen site – no matter what representations were made by other stakeholders in the "consultation" process.

This somewhat extraordinary decision flies in the face of most town planning and, importantly, environmental factors. But as well, in the currency the government finds most persuasive when deciding any issue, dollars and cents, the SKC choice will come at a massively greater cost than alternative and more appropriate sites, of which TTAL is but one.

So how could the SKC choice be made with so many sound reasons to build the WMF elsewhere? LIM suggests it may be because a powerful kuk head lives in a small village near TTAL. After all, if the government is impotent in enforcing the law on illegal structures in the New Territories, it surely will not stand up against rural interests in the matter of locating the WMF.

#### *Conclusion*

It seems likely the WMF at SKC fiasco will be yet another page in the government's and EPD's sorry environmental protection record.

## TOWN PLANNING

### *Energising Kowloon East*

Hong Kong's Kowloon East is an area comprising the former Kai Tak Airport, Kwun Tong and Kowloon Bay. The area witnessed the rapid growth as an important industrial base in the heyday of Hong Kong's manufacturing industry, creating hundreds of thousands of jobs and propelling Hong Kong's prosperity.

Following relocation of the airport to Chek Lap Kok and our manufacturing base to the Mainland, the area has lost some of its past vibrancy, leaving a huge stock of industrial buildings less than fully utilised. On the other hand, with Hong Kong's financial and service sectors booming and increasing

numbers of international companies establishing their regional headquarters in Hong Kong, the demand for quality office can no longer be met by our traditional Central Business District. In recent years, high grade office buildings and retail centres are emerging in Kowloon East, and about 1.4 million square metres of new office space has been created.

China's National 12<sup>th</sup> Five-Year Plan supports Hong Kong's position as an international financial, trade and shipping centre and Hong Kong's evolution as an international asset management and off-shore Renminbi business centre. To capitalise on commercial opportunities offered by the Mainland, and to sustain Hong Kong's competitive position and longer term development, a steady and adequate supply of quality office space is needed.

The Chief Executive announced in his Policy Address 2011-12 that the Development Bureau will adopt a visionary, co-ordinated and integrated approach to expedite the transformation of Kowloon East as an attractive, alternative central business district to support Hong Kong's economic development. Specifically, this will involve land use review, urban design, improved connectivity and associated infrastructure.

#### Government initiatives

Since April 2010, the Development Bureau has introduced measures to revitalise industrial buildings in Hong Kong. By August 2011, 33 applications had been approved for wholesale conversion or redevelopment, 16 of them in Kwun Tong and Kowloon Bay. These industrial buildings will be redeveloped or converted into offices, hotels, shops and services.

Additionally, about 1.06 million m<sup>2</sup> of office space has been planned for within the 320 hectare Kai Tak Development (KTD). The Development Bureau is building a Kai Tak Government Office and is planning to relocate other government office buildings to Kai Tak. With another 0.8 million m<sup>2</sup> of retail and hotel accommodation planned, some 33,200 public and private housing units, an international cruise terminal, sports and tourism facilities, KTD will inject development density and diversity into the area. Together with 168 hectares in Kwun Tong and Kowloon Bay, Kowloon East has great potential to evolve into a vibrant premier business district in Hong Kong.

#### Action Areas

##### Action Area 1 — Hoi Bun Road Redevelopment

The Development Bureau proposed to relocate the existing waste recycling centre and vehicle examination centres to release some 6.4 hectares of government land for the development of a new vibrant node for offices, exhibition/ conference facilities, hotel/service apartments and retail/entertainment outlets. With the location of the proposed EFLS station and depot connecting to Kai Tak at this site, it will become the linkage hub of Kowloon East.

##### Action Area 2 — Kwun Tong Ferry Pier Waterfront Development

The Development Bureau proposed to deck over the bus terminus to provide public open space and outdoor performance area. A station of the proposed EFLS is proposed to be located within the development to enhance connectivity. The area will become

a new hub for small offices, artist workshops, entertainment, gallery and specialty retail and restaurants along the waterfront promenade to complement the tourism node to be developed at Kai Tak Runway Park.

In addition, the Development Bureau will make use of government sites in Kwun Tong and Kowloon Bay totalling some 5 hectares to support the transformation.

#### Challenges

While most traditional manufacturing activities in Kwun Tong and Kowloon Bay have moved out, there are still a lot of economic activities in these former industrial areas. The Development Bureau needs to handle the further transformation of the area carefully. The present fragmented ownership in many existing flatted industrial buildings in the area may present a further challenge to their speedy redevelopment or wholesale conversion.

#### Implementation

The Development Bureau intends to set up a new multi-disciplinary Kowloon East Development Office to steer and monitor this highly strategic and significant development for Hong Kong.

[Development Bureau- Publication, 12/09/2011]

#### Zoning loopholes and red tape help illegal developers

Issues in the New Territories countryside are sometimes more grey than black or white. Often, these areas of ambiguity become battlegrounds among villagers, developers, government officials and the public in a mounting conflict between development and conservation.

For example, there are three ways a developer or villager can carry out a building plan: follow the rules to the letter (white); dismiss them altogether (black); or dismiss them initially and deal with the red tape later (grey).

Thus, development in rural areas can either proceed incredibly quickly or extremely slowly, depending on how much risk people are willing to take. If rules are followed, a long and complex procedure is set in motion. The developer begins by asking if the site is privately owned, if it is subject to any land use zoning control and whether the development proposal is in line with that.

If the development is at odds with the zoning, planning permission or even rezoning approval, approval must be sought from the Town Planning Board. Otherwise, the developer can seek approval directly from the Lands Department and Buildings Department.

However, planning permission usually takes two months. The public is given three weeks to comment before the Board makes a decision. A rezoning request takes at least nine months.

On the other hand, increasing public awareness of environmental and planning issues in the New Territories is helping to spur an upsurge in illegal development.

Professor Ng of the University of Hong Kong, a former Town Planning Board

member, said that the public views have become more critical when it comes to deciding planning applications, and this increases the risks and uncertainties faced by developers. Even if the land owners and developers are patient enough, they will not be guaranteed permission from the Board. Thus, many of land owners would rather develop first and apply for permission later.

To complicate matters further, planning applications are sometimes made by one party in respect of sites owned by others, including the government, with applicants either proposing to build on or even rezone the land. However, the actual construction still hinges on the ownership and subsequent approvals from other departments, such as Lands and Buildings Departments.

Therefore, it is not uncommon in the New Territories for owners or developers to take the risk and just go ahead with a project. One example is a pond in Luk Keng, which is part of a wetland habitat that supports a large diversity of dragonflies. Construction waste was dumped in the pond, but the owners only sought retrospective approval after planning officers threatened enforcement action.

The Board rejected the application and the owners were compelled to remove the waste, but the ecology of the pond may never recover.

Landowners in Ho Sheung Heung, Sheung Shui, took the same approach, seeking approval to build a small house only after dumping construction waste nearby. The application was approved, with the Board taking into account only the merits of the land use, not the dumping.

Whilst the city's planning system is considered an open one that allows a degree of public participation, a loophole exists when it comes to policing some areas of the New Territories. The Planning Department can only enforce unauthorised development rules, such as for illegal dumping and building works, in areas under the *Development Permission Area Plan*. However, it cannot police areas under the *Outline Zoning Plan*. The DPA plan was introduced in an amendment to the *Town Planning Ordinance* in 1991. It was designed to regulate booming cargo container and wreckers' yards in the New Territories in the 1980s. These DPAs are to be changed to *Outline Zoning Plan* within three years, but the enforcement power for the latter will apply.

This restriction on policing explains why some dumping that has been going on for years has not been resolved. For example, in a case of massive soil dumping at Tung Tsz in Tai Po in a green belt zone, the dumping was not stopped or remedied because the site is classified as an *Outline Zoning Plan* site. It also explains why the Planning Department generally has no enforcement power in new towns like Tsuen Wan, Kwai Chung and some parts of Sha Tin, where outline zoning plans were introduced and no DPAs were ever in force.

However, the absence of a zoning plan in some parts of the New Territories does not necessarily mean that the government is powerless to regulate developments or that developers can build wherever they like. Officers can still make use of land lease controls. The best illustration of this was the government's resumption of a private site in

Tei Tong Tsai on Lantau Island, where an underground columbarium was being developed on a site without any land-use zoning.

Any attempt to convert a site for uses not in line with the land lease requires prior approval and lease modifications from the Lands Department, which may incur a land premium. As a lease is a contract between the government and tenant, land lease terms may be interpreted differently and this can lead to legal disputes.

Apart from the planning system and land lease control, developments in the New Territories are also regulated by the Environmental Protection Department if they are designated as having an adverse impact under the *Environmental Impact Assessment Ordinance*.

However, most developments in the New Territories, including small houses and columbaria, do not require environmental impact assessments.

In the case of a private site that is part of a Country Park, land owners wanting to build a house must get approval from the Agriculture, Fisheries and Conservation Department and the Lands Department. However, the departments cannot stop them if they excavate sites and remove trees, as the *Country Parks Ordinance* does not cover private sites in country parks.

That is why the departments did not prosecute the de-facto land owner who removed trees and wanted to build two public parks with accommodation for the elderly inside Plover Cove Country Park.

The de-facto owner, who had rented the private site from indigenous villagers for 50 years, was fined just HK\$2,500 and HK\$1,000 in April for felling 13 small trees and driving vehicles into the park.

According to Professor Ng, the only way to tackle the problem, in particular preventing sites not subject to planning controls from being destroyed by illegal developments, is to work with land owners to get the most out of the sites. He suggested that this could be done by allowing businesses on such sites that are compatible with the environment. For example, villages could offer short-term accommodation such as hostels for visitors on eco-tours. In that case, villagers might consider starting up a business instead of selling their land to developers.

However, application procedures for running hostels were too costly and complicated, which deterred villagers from refurbishing their old dwellings.

[SCMP, 29/11/2011]

#### Greens fight rezoning request

A plan by a private developer associated with New Territories kingpin Lau Wong-fat to push through a large housing development close to a country park faced opposition from conservationists over proposed rezoning of the site.

City Development, controlled by Lau's daughter Beatrix Lau Lai-fan, has asked the Town Planning Board to approve rezoning of more than 10 hectares in Tai Tong near Shap Pat Heung, Yuen Long. The applicant wanted the site rezoned from agriculture and open storage to village-type development.

This would allow indigenous male villagers in the New Territories to build small houses on the land.

Part of the rezoned site would be used to relocate an unspecified number of villagers still living in nearby 400-year-old Tai Kiu Tsuen village, next to the Long Ping railway station, which is to be redeveloped into a private residential estate with four 27-storey blocks.

Among the 351 small houses proposed on the Tai Tong site under the company's rezoning request, about 117 would be reserved for relocating the inhabitants of Tai Kiu. The remaining area would be big enough for another 234 homes and would allow Tai Tong village to expand.

According to a summary of the rezoning application on the Town Planning Board website, the applicant did not explain why it was necessary to increase village-type development area for Tai Tong Tsuen. Moreover, there is no information on how many villagers would be relocated.

The rezoning request has hit a raw nerve with environmentalists who have been closely watching land issues in the New Territories amid pressure to increase land reserve to meet future housing needs.

A campaign manager of the Conservancy Association said he did not see any pressing need to rezone the site. He also said that the developer owned only about 20 per cent of the site it wanted to rezone. The government owned a third and the rest was believed to be in the hands of other landowners. Furthermore, the site is too close to Tai Lam Country Park and the conversion of the site from arable to housing land would mean that the last buffer against development would be gone.

On the other hand, the area might have high ecological values with natural streams flowing through; a colony of cattle egrets is within 500 metres of the rezoning site. As well, government departments could underestimate the ecological richness of the site if they perceived it only as agriculture land.

[SCMP, 25/10/2011]

#### Downgrading classification of sensitive border area "to appease powerful villagers"

The top town planner is opening the way for village house construction in an ecologically sensitive area as a "political decision" to please powerful villagers, green groups said. The two-kilometre-long Lin Ma Hang stream runs beside a village of the same name in the eastern section of the closed border area, which is due to reopen soon. The biologically rich stream was designated a site of special scientific interest in 2007.

However, the Town Planning Board planned to create a 20-metre-wide buffer area on both sides of the stream and to zone it as a conservation area. That angered the few villagers who still live there, as well as many former residents who said they planned to return when the border zone reopened. Conservation zoning would make it impossible for them to exercise their right to build homes under the small-house policy.

The plan was abruptly shelved when the Town Planning Board met on September 8 to

discuss the proposal, which was still being drafted. Chairman Thomas Chow Tat-ming announced that the proposed zoning was being changed from conservation to green belt, to make it easier for villagers to exercise their right to build houses. Chow is also the permanent secretary for development.

The board endorsed the change for the village, which had 80 residents when officials made a count in 2006. Village leaders say up to 900 men will become eligible to build small houses in 10 years, and an additional 100 old village houses must be rebuilt.

The green groups said that they did not see the minutes of the September meeting until mid-November. They want Chow and the Board to explain the rationale for the zoning change, and how the decision was made.

A joint statement made by Green Power, WWF Hong Kong, Designing Hong Kong, Hong Kong Bird Watching Society and Kadoorie Farm and Botanical Garden said the change would hamper future conservation efforts. They expressed concern that the case will set a bad precedent and affect a riparian zone of high ecological value, making it a land reserve for later development, which will be disastrous to the ecology of the natural stream system.

But a spokeswoman for the Board said the zoning change was a collective decision by its members. The Agriculture, Fisheries and Conservation Department had confirmed that the buffer area had low ecological value and was already partially developed, she said. The green-belt zoning will enable the Board to regulate development within the buffer area, and maintain a proper balance between conservation and the community's need for development. The green belt zoning will also provide flexibility for suitable small-house development subject to scrutiny under the planning permission system.

Public access to Lin Ma Hang has been restricted since the 1950s. The area is to be opened because the government no longer needs such a large restricted area along the border with China.

The pending opening has triggered a tug-of-war between villagers and environmentalists on the future land use of the area, parts of which are privately owned. Villagers have complained for months against the plans to zone more than 80 per cent of the 329-hectare Lin Ma Hang as green belts and conservation areas, saying that would breach their property rights. Four per cent of the site was originally reserved for development.

However, even the concession made on September 8 reportedly failed to satisfy the villagers, who want all agricultural areas rezoned for development, and the stream's designation as a site of special scientific interest dropped.

The president of the Ichthyological Society of Hong Kong said that the stream, which is home to at least 20 fish species, was a "scientific treasure" yet to be fully explored. He added that it is a pity to see that an ecosystem is going to be trashed before we really understand it.

[SCMP, 5/12/2011]



## WEST KOWLOON CULTURAL DISTRICT (WKCD)

### Stage 3 public engagement exercise

During Stage 1 of the public engagement process, the West Kowloon Cultural District Authority ("WKCD") invited the public to share their aspirations with three world-class planning teams. During Stage 2, the public was invited to evaluate and critique three proposed conceptual plans and choose its favourite design.

On 30 September 2011, the WKCD launched Stage 3 ("PE3") of the public engagement exercise. Information on the proposed Development Plan for the WKCD was on public display for a month. During the exercise, the public could see how Foster+Partners' City Park Conceptual Plan has been refined in response to public and stakeholders' suggestions.

An exhibition of the Modified Conceptual Plan and information on the proposed DP began from 30 September 2011 at the Thematic Exhibition Gallery in the Hong Kong Heritage Discovery Centre. There was a giant 1:250 physical model, showing the future arts hub will, featuring major arts and cultural as well as other facilities. There were also a digital 3D model, photomontages and panels displaying key information and features.

[Newsroom, West Kowloon Cultural District Authority Website, 23/09/2011]

### West Kowloon Cultural District – a place for everyone?

On 29 September 2011, the WKCD announced plans to turn the future arts hub into "A Place for Everyone". Arts and cultural facilities will be commissioned in phases, beginning in 2015. The unveiling of the proposed Development Plan has marked the commencement of PE3.

The Plan is based on Foster + Partners' City Park conceptual plan which earned enormous public support and was selected by the WKCD in March 2011 as the master-plan for the development of the WKCD. The plan has since been enhanced by incorporating public views and aspirations of stakeholders.

Mr Michael Lynch, CEO of the WKCD, said the WKCD had taken into consideration the public's wish for organic growth, aspirations of arts and cultural stakeholders after two stages of consultation, sites availability, and financial implications.

The plan reflects the WKCD's response to public views by incorporating certain desirable features favoured by the public, which include arts pavilions, education facilities in core arts and cultural facilities, a Premier Theatre, piers and an arts pontoon (both subject to meeting statutory provisions), as well as space for literary activities and exhibitions.

Part of the Great Park is expected to be commissioned in 2014-15, followed by the phased completion of arts and cultural facilities starting from 2015. The proposed implementation plan for the WKCD is:

2014 to 2017:

- 2014 -- 2015: development of part of the Great Park, and the Arts Pavilion
- 2015 -- 2017: construction of Xiqu Centre (Main Theatre, Tea House and education facility); free space (with Music Box); Outdoor Theatre; and Centre for Contemporary Performance (with three Blackbox theatres and education facility) subject to construction programme of the Express Rail Link

2017 to 2020, construction of:

- M+ Phase I
- Lyric Theatre
- Medium Theatre I
- Music Centre (with a Concert Hall, a Recital Hall and education facility)
- Mega Performance Venue + Exhibition Centre (subject to alternative funding options)
- Musical Theatre (subject to alternative funding options)

Beyond 2020, establishing the:

- Great Theatre
- M+ Phase II
- Medium Theatre II
- Xiqu Small Theatre

[Newsroom, West Kowloon Cultural District Authority Website, 29/09/2011]

### Scale model lacks some major features

Thirteen years have passed since former chief executive Tung Chee-hwa announced plans to establish the West Kowloon Cultural District. Some key issues involving the construction of the arts hub have yet to be resolved. These include: determining the scale of the district's underground parking space; the cost of competitions to design several iconic buildings for the area; and working with government departments on improving pedestrian access to the 42-hectare site, which has long been tagged by locals living in nearby areas as a "lonely island".

Bernard Lim Wan-fung, president of the Institute of Urban Design, said that the Authority should put more emphasis on the use of public transport rather than private cars, and should improve connections to nearby MTR stations as underground space is costly to excavate and ventilate.

The latest design also includes several ground-level pedestrian paths, footbridges and subways linking the site to Austin Road and Canton Road, but it is not clear how these would allow pedestrians to cross the busy roads to reach the site.

Vincent Ng Wing-shun, vice-president of the Institute for Urban Design, said the easiest way to improve access to the arts hub would probably be to provide patrons access by water transport.

The Plan has added two piers, but by law they must be subject to feasibility studies as their construction will involve harbour reclamation, which must fulfil an "overriding public need". Mr. Ng, who is also a member of the Harbourfront Commission, said the Commission would soon convene a taskforce to look at providing water transport from different points around the harbour. The

most active opponent, the Society for Protection of the Harbour, said last month it would not pose any more legal challenges as long as small projects like piers were for public benefit.

Michael Lynch, chief executive of the Authority, agreed that water transport had advantages; he said he would try to persuade the Commission to support the initiative.

[SCMP, 01/10/2011]

### West Kowloon Cultural District: Hong Kong's ambitious experiment

WKCD is Hong Kong's most ambitious experiment in urban planning since the creation of the New Territories New Towns in the 1970s. When the district is finally completed in the mid-2020s, it will not only include 18 new cultural venues, but also apartments and shops, new streets, parks, plazas and transportation links. It will create an entirely new neighbourhood which will eventually be home to thousands of residents, 16,000 workers and countless visitors. This is not merely about building a cultural hub, but also about building a new model of urban development.

Colin Ward, lead architect on Foster's West Kowloon design team, said the district will put an emphasis on the kind of convivial street-life and informal activity that makes a neighbourhood like Mong Kok interesting.

Most of West Kowloon is now a muddled collection of big roads and huge developments, like Union Square, a fortress-like complex that includes Kowloon Station, the International Commerce Centre, Elements Mall and several enormous apartment towers. To the west is the entrance of the Western Harbour Crossing; to the east, a highway-like stretch of Canton Road. Mr. Ward said the urban form of West Kowloon is a series of disconnected and isolated pieces.

The success of the cultural district will hinge on its ability to undo the damage of earlier thoughtless urban planning. Foster's plan calls for a network of broad elevated walkways that will branch out from the upper floors of Elements, gradually sloping down to the cultural district. The district's buildings will reflect the transition: taller next to Union Square, shorter near the waterfront.

Water taxis and ferries will serve the waterfront, and still more footbridges will link the district to nearby Kowloon Park in Tsim Sha Tsui, King George V Park in Jordan and the Yau Ma Tei typhoon shelter.

Foster's plan aims to knit a bunch of stray threads back into the fabric of the city. That urban fabric hopefully will serve as inspiration for the way the district will look and feel -- the "DNA of the city," as Foster put it.

The design plan also aims to make West Kowloon a carbon-neutral district. There will be a network of tree-lined streets, taking their architectural cues from old Hong Kong. Those covered sidewalks, in addition to street trees and water features, can lower temperatures by up to eight degrees on a hot summer day. Other features include the conversion of food waste into biogas fuel and the use of wind and solar energy to power the district's buildings. If West Kowloon's power and cooling systems are

implemented as soon as possible, the district should be carbon-neutral as early as 2025.

The most controversial part of Foster's plan is the 19-hectare park, which will take up nearly half of the cultural district's site. Critics suggested that the green space would be more useful if it was broken up into smaller pieces scattered throughout the district.

[*CNNGo.com*, 04/10/2011]

## HONG KONG BRIEFING

### Solid waste management strategies

The government has raised the municipal solid waste recovery target to 55% by 2015. In order to achieve this goal, the government will expedite legislation to extend the Environmental Levy Scheme on Plastic Shopping Bags to all retail shops, and to introduce a new Producer Responsibility Scheme for waste electrical and electronic equipment to encourage waste reduction.

Another aim of the waste management strategies is to incorporate the latest waste-disposal technology in waste treatment to reduce the volume of dumped waste and to turn waste into energy where possible.

[*Green Hong Kong*, published by the Environment Bureau, October 2011 issue]

### Chief Executive's clean air initiatives

In his 2011 *Policy Address*, Donald Tsang foreshadowed a number of limited measures tackling air pollution, namely :-

- \$180 million for trialing 36 electric hybrid buses;
- \$150 million for funding catalytic converters for taxis and light buses;
- a statement of intention to jointly tackle marine pollution with PRD authorities, including the establishment of a regional emissions control area.

Whilst some of these measures signal progress on the clean air front, CAN (*Clean Air Network*) was disappointed by the Chief Executive's failure to announce new Air Quality Objectives, or non-binding maximum guidelines for seven specific air pollutants.

In July 2009, the government announced its intention to overhaul Hong Kong's air quality standards (AQOs), along with a slew of measures intended to achieve these new, tighter standards. It is now more than two years later, and Mr. Tsang has mostly failed to act on this agenda; almost none of this pollution plan has been implemented. Further, Hong Kong's air pollution continues to worsen, affecting not only the health and well-being of residents, but also harming our reputation as a world class city, thus limiting the city's ability to attract international talent.

Even though this week's announcement of some new anti-pollution measures does constitute progress, the cornerstone of any new clean air regime is still missing. The continued delay on the new AQOs leads us to question whether Donald Tsang, despite purchasing an air purification machine for his own use, understands the link between air and health.

CAN is the #1 resource for health, news,

policy about air pollution with a special focus on Hong Kong policy and events. Please visit CAN at <http://www.hongkongcan.org/eng>.

[*CAN press release*, 15/10/2011]

### EPD collaborates with EPA on environmental protection

The Environmental Protection Department signed a Statement of Intent with the United States Environmental Protection Agency on 26 October 2011 which outlines a joint commitment to closer cooperation.

The joint statement was signed at the Eco Expo Asia held in Hong Kong. Under the agreement, the EPD and the EPA agree to strengthen regional cooperation to promote "low carbon, high technology and low pollution" communities and to expand capacity to implement environmental protection measures.

Cooperation between the two agencies will focus on fundamental challenges, including air and water quality protection and waste management. Both sides believe that the effort will promote development of cost-effective solutions to environmental problems.

[*Press Release, Environmental Protection Department*, 26/10/2011]

### Regional Air Quality Monitoring Network results for the first half of 2011

The Environmental Protection Department and the Department of Environmental Protection of Guangdong Province on 28 October 2011 released their report on the monitoring results of four major air pollutants: sulphur dioxide; nitrogen dioxide; ozone and respirable suspended particulates, as measured by the Pearl River Delta Regional Air Quality Monitoring Network. The report covers the period between January and June 2011.

The Network consists of 16 automatic air quality monitoring stations across the Pearl River Delta region. All stations are equipped with equipment to measure ambient concentrations of respirable suspended particulates, sulphur dioxide and ozone.

In the report records that:-

- overall averages of sulphur dioxide at various monitoring stations in the Network ranged from 0.009 mg/m<sup>3</sup> to 0.041 mg/m<sup>3</sup> for the period from January to June 2011
- overall averages of nitrogen dioxide at various monitoring stations in the Network ranged from 0.014 mg/m<sup>3</sup> to 0.076 mg/m<sup>3</sup> for the period from January to June 2011
- overall averages of ozone recorded by the Network ranged from 0.032 mg/m<sup>3</sup> to 0.088 mg/m<sup>3</sup> for the period from January to June 2011
- overall averages of respirable suspended particulates at various monitoring stations in the Network ranged from 0.053 mg/m<sup>3</sup> to 0.105 mg/m<sup>3</sup> for the period from January to June 2011

[*Press Release, Environmental Protection Department*, 28/10/2011]

### Control of emissions from petrol and LPG vehicles

On 15 November 2011, the Environmental Protection Department announced proposals to strengthen control of vehicles using petrol and liquefied petroleum gas which emit exhaust gases excessively, and to provide a one-off subsidy for owners of LPG taxis and light buses to upgrade the catalytic converters in their vehicles. The proposals aim at improving roadside air quality.

Mobile roadside remote sensing equipment will be used at roadside locations by 2013 to identify petrol and LPG vehicles with excessive emission. The owners will be required to repair their vehicles and to then put them under a dynamometer emissions test. Failure to pass the test within a prescribed period will result in the vehicle licence being cancelled.

To help owners of LPG taxis and light buses adapt to the scheme, the government has earmarked \$150 million to provide a one-off subsidy to replace the vehicles' catalytic converters before commencement of the new control scheme.

The EPD launched a public consultation process which will finish on 15 January 2012.

In his 2011-2012 Policy Address, the Chief Executive announced that the next focus for improving air quality is to reduce roadside air pollution, and he put forward a package of measures aimed at achieving this goal. One of the measures is to introduce the remote sensing equipment and advanced emission tests to control excessive emissions from poorly maintained petrol and LPG vehicles.

[*Press Release, Environmental Protection Department*, 15/11/2011]

### Why do we not have more electric vehicles?

Despite the increasing levels of roadside pollution, clean vehicles that could help tackle the problem have yet to take hold in Hong Kong. The government has said that they aim to achieve 30% of private vehicles and 15% of buses and trucks as electric vehicles (EVs) by 2020; but at the beginning of 2011, there were only 70 registered EVs in Hong Kong.

Whilst Hong Kong is an optimal city for EV use, given its small size, the cost of purchasing an EV and the scarcity of charging stations are the biggest obstacles to popular uptake. CAN believes that, as a zero emission form of transport, EVs are one of the most effective ways of reducing roadside pollution.

[*Clean Air Network newsletter*, 19/11/2011]

### Peninsula Hotel takes shark fin off menu

Hong Kong's oldest hotel will remove shark fin from the menu in a move applauded by marine conservation groups. From the start of next year, the Peninsula will stop serving the iconic Chinese dish. It is the first hotel in Hong Kong to impose a complete ban. Parent company The Hong Kong and Shanghai Hotels Ltd., said all its operations, including those on the mainland, would

follow suit, in a bid to protect the species.

The hotel, founded in 1928 and one of the most prestigious in the city, will stop serving shark fin from January 1. However, those who have already placed their order for shark fin dishes for banquets next year will not be affected. Since April last year, the hotel has been encouraging guests to choose alternatives to shark fin.

The Four Seasons Hotel yesterday said it had removed shark fin from all its basic banquet packages but would still offer it on request. The Island Shangri-La said it has a similar policy.

The WWF Hong Kong applauded The Peninsula's move and expressed a hope more hotel groups would follow its lead. "It is really a big step forward," a WWF spokeswoman said. "It is especially meaningful in Hong Kong, which accounts for half of the global shark fin trade."

*The Bloom Association*, a non-profit group with a mission to protect the oceans, said it was excellent news, and a tipping point for change, as Hong Kong is at the centre of shark fin trade and consumption.

*The Hong Kong Shark Foundation* also welcomed the ban.

[SCMP, 22/11/2011]

#### Hong Kong's air 'shame'

The level of fine particles – specks of pollutants that can penetrate the lungs – in Hong Kong's air is among the worst in more than 500 cities and at least 20 times that of the cleanest metropolis.

Only seven cities of 565 surveyed by the *World Health Organisation* have a higher level than that found in Central, which also has the highest concentration of larger particles among more than 1,000 cities.

The annual mean roadside reading of fine particles in Central – 36 micrograms per cubic metre – is exceeded only by Dakar in Senegal, Zabrze in Poland, Accra in Ghana, Kuwait City, Mexicali in Mexico, Antananarivo in Madagascar, and Ulan Bator in Mongolia.

The roadside reading in Central was used as a benchmark to compare Hong Kong with the cities in the WHO report, which did not make clear how many readings were taken in each city.

*Friends of the Earth* said it was "disappointing and shameful" that Hong Kong fared worse than developing cities. "Despite being a top class world financial hub, people in Central are breathing third-world-class air," said Jo Chan Chun-yim, assistant environmental affairs officer of the green group.

The rankings, released by the WHO in September, did not include Hong Kong because fine particles with a diameter less than 2.5 microns are not listed as a statutory air pollutant here.

But *Friends of the Earth* obtained data from the Environmental Protection Department showing the levels at the junction of Chater Road and Des Voeux Road Central was at least 20 times higher than the most pollution free city, Whitehorse in Canada, which has an annual average reading of 1.7 Hong

Kong's reading is worse than Singapore's 19, Manila's 21 and Lima's 34.

Medical specialists have warned that the fine particles – a micron is one-millionth of a metre – can penetrate deep into the respiratory system and cause severe health risks.

[SCMP, 25/11/2011]

#### Pollution index left hanging in the air

Hong Kong does not include fine particles in its air pollution index. This is a serious public health issue. Studies have shown that exposure to high concentrations of these pollutants from vehicle exhausts, power stations and factories can lead to heart problems, asthma attacks and bronchitis.

Friends of the Earth obtained data from readings by the Department of Environmental Protection at the junction of Chater and Des Voeux roads in Central which show levels of air pollution exceeded by only seven of 565 cities surveyed by the World Health Organisation. Hong Kong also rated worse than 869 other cities for concentrations of larger particles.

Medical specialists say fine particles can penetrate deep into the respiratory system and pose serious health risks. Anecdotal evidence from paediatricians of the number of today's children with respiratory complaints is a worry.

The government has promised to introduce new air-quality objectives to replace the city's 24-year-old standards.

[SCMP, 30/11/2011]

#### The government lacks of political will to combat air pollution

"I refer to the letter by Pang Sik-wing of the Environmental Protection Department ("Defending cleaner air measures", November 24) in response to a number of articles in *Lai See*.

It was a further masterpiece in the Environment Bureau's long series of deceptions on air quality management. The full array of short-term and annual pollutant concentrations show that the population is exposed to dangerously high levels of health-damaging particulates and gases, up to several hundred per cent above World Health Organisation (WHO) maximum limits.

Present-day medical evidence shows that harmful effects in children occur even below these limits, and it is likely they will be revised downwards long before Hong Kong is compliant with present international advisories.

Air pollution is a major cause of serious morbidity and mortality and will continue to be for decades, especially for children, the deprived and those with other health problems, even if pollution is reduced dramatically in the near future. This will not happen because the government procrastinates and adopts minimalist measures which do not match the size and severity of the problem. That is why, in public health protection terms, there has been little meaningful change in our exposures from ambient and roadside pollutants for more than a decade.

In 2009 the environment minister claimed that the government had adopted WHO guidelines for the new air quality objectives (AQO). Nothing could be further from reality.

The department and its consultants mostly selected much less stringent "interim targets". They also engaged in blind tinkering with short-term limits, allowing additional exceedances to accommodate the present high levels of pollution, instead of implementing the full guidelines and enforcing them to drive down pollution on the shortest possible timescales. This constitutes a major health hazard for everyone.

We need to at least start the process of rational air quality management, but it is now clear that, whatever else may be introduced by way of pollutant mitigation, these totally inadequate AQOs will not deliver safer air and protect child health. Once these contrived proposals are enshrined in law, it will be possible to approve highly polluting projects because they will not violate extremely lax standards.

Unless there is a radical change in political will, our bad air epidemic is set to continue for a very long time"

[SCMP (letter to the editor, Professor Anthony Hedley, School of Public Health, University of Hong Kong), 2/12/2011]

#### Hong Kong rates badly for air pollution

Hong Kong is among the worst of 500 cities, in terms of the level of air pollution from ultra-fine particles (PM2.5). The size of the PM2.5 particulates makes them a grave threat to a person's health, as they are small enough to enter the deepest recesses of lungs. Only seven of 565 cities surveyed by the *World Health Organization* (WHO) had higher levels of particulate matter than was found in Central.

The annual mean roadside reading in Central in 2010 was 36 micrograms per cubic metre, exceeding the WHO's recommended annual average level by almost 4 times.

In the same ranking exercise by the WHO for concentrations of larger particles (PM10), Hong Kong came in at number 870 on a list of 1,100 cities (cleanest air ranked number 1).

[*Clean Air Network* newsletter, 02/12/2011]

#### Idling-engine ban in place

Up to 280 traffic wardens and 400 inspectors from the Environmental Protection Department will enforce an idling-engine ban from 15 December 2011. During the first month after the ban takes effect on 15 December 2011, enforcement officers will issue a warning instead of a penalty ticket. If the warning is ignored, drivers will be prosecuted. The amount of the fine is HK\$320.

The idling-engine ban covers all vehicles and roads unless exemptions apply. The exemptions include a three-minute concession for all drivers once every hour and when a very hot weather or rainstorm warning is in force. Taxis waiting at taxi stands and the first two minibuses at a designated bus terminus will also be exempt.



Mok explained that law enforcement officers will first identify whether a vehicle is in idling mode by hearing the engine sound, observing vibration or checking the meters in the vehicles. If the engine is idling, the officer will time the three minutes. He also said that if they find a car idling without a driver, they will wait until the driver comes back. If he does not, they will seek police assistance.

[SCMP, 09/12/2011]

### Green building takes root in HK

A symbol of the Hong Kong building industry's commitment to sustainability will open in the middle of next year. The Zero Carbon Building in Kowloon Bay aims to educate the industry, the public and students about the need for low-carbon living and green building technology. The three-storey building will be built by the Construction Industry Council and the Development Bureau.

The Council executive director said that the Council has always been committed to promoting sustainable buildings and good industry practices focused on improved environmental protection.

The Council chairman said buildings are a major contributor to greenhouse gas emissions in Hong Kong. Electricity generation accounts for at least 60% of the total greenhouse gas emissions and buildings consume about 90% of the electricity. Therefore, the construction industry has a significant role to play in reducing the greenhouse gas emission.

Since 1995, the department of civil and environmental engineering of the Hong Kong University of Science and Technology has been working on green construction skills which industry and society need.

The Council recognises the important role both university education and ongoing industry training have to play in the success of the industry. He said that as the demand for green building design increases, architecture and engineering firm employers will need to equip themselves with the necessary environmental skills and knowledge.

[SCMP, 10/12/2011]

## CLIMATE CHANGE

### Dhaka Declaration calls for a Green Climate Fund

The Dhaka Ministerial Declaration of the Climate Vulnerable Forum (CVF) calls for creation of a Green Climate Fund (GCF). The GCF would be funded by developed countries providing funds on an increasing yearly scale, to achieve a total of USD 100 million per year (in 2009 dollars).

The declaration calls for 50% of the proposed GCF to be allocated to adaptation purposes. The target is an emission cut of 85% by 2050 and an upper limit of 1.5C on global warming by industrialised nations.

The CVF comprises countries disproportionately affected by the consequences of global warming. The countries are vulnerable socio-economically and environmentally, and are seeking a firm and urgent resolution to climate change.

Developed nations are accused of making a lot of commitments without taking concrete action. Developed nations so far have contributed only USD 3 billion of their pledged USD 30 billion to climate change programmes in poorer countries. For example, Bangladesh needs USD 10 billion to mitigate the impact of climate change, but has so far received only USD 125 million.

Displacement and relocation of people affected by climate create pressure on infrastructure, service facilities and security.

The Dhaka Ministerial Declaration calls for a comprehensive, legally-binding global agreement capable of fully attaining the objective of the United Nations Framework Convention on Climate Change, focusing on adaptation and mitigation, particularly the development and easy transfer of environmentally sound technology to priority areas.

[The Financial Express, 14/11/2011]

### More extreme weather coming

A new report on global warming and extreme weather prepared by the Intergovernmental Panel on Climate Change (IPCC), formed by the United Nations and World Meteorological Organisation, has revealed that changing climate leads to changes in frequency, intensity, spatial extent, duration, and timing of extreme weather and climate events, such as heat waves, floods, droughts and storms.

Approximately 95% of the fatalities for the period since the 1970s caused by natural disasters have been in developing countries. Losses are running at USD 200 billion a year. As risk of disaster is increasing due to global warming, tackling climate-related disasters becomes more difficult.

It is virtually certain that heat waves are increasingly severe, and heat waves, which happened once every 20 years, will occur in the future once every 5 years. There is a two-in-three chance that major rainstorms will increase in frequency, both in the tropics and northern regions, and as a result of tropical cyclones.

In certain regions the situation may worsen such that the place has to be abandoned by residents. A particular pattern of rising risks from smaller events are noted, and extreme weather can kill and cause massive damage.

[The CBS News, 18/11/2011]

### Climate change causes decrease in wetlands

According to a report "Assessment on the Impact of Climate Change to Wetland Ecology in Huazhong Region" (translated), which examined natural changes caused by global warming, the variety and area of wetlands in the Huazhong Region decreased during the past 50 years.

Wetlands are earth's kidney and the water of life, but the change of climate in the Huazhong Region since 1980s has impacted adversely the wetland ecology. For every 3C increase in temperature, 20% increase in precipitation is required to compensate the adverse impact on ecological system. However, Honghu in Hubei, the 7th largest freshwater lake in China, has experienced increased average temperature without compensation increased freshwater inputs.

Many other areas are affected as well. The area of 4 large lakes (Hubei Honghu, Futouhu, Liangzihu and Longganhu) as at late 1990s had decreased by 48%, 40%, 33% and 46% respectively, compared to their levels in the 1950s.

The report calls for protection of wetlands, both at policy level and scientific level. At the policy level, strict implementation of the Wetland Protection Act and cooperation between government departments are required; at the scientific level, monitoring mechanisms for wetlands and research on various aspects of wetlands are also needed

[Takungpao, 24/11/2011]

### Climate change is a 'disease threat'

Tim Flannery's Climate Commission, set up by the Australian government to provide independent information on climate change science, warns that human-induced climate change brings potential health hazards.

Increasing climate variability and temperature increases lead to growth in bacteria, parasites and viruses. Mosquito-borne infections, such as dengue fever, will extend their range and activity. Heat-related deaths are likely to rise on the increase in the number of heat waves. A temperature rise of 2C probably will raise the death toll in Australia from heat-related causes from just over 6000 in 2020 to approximately 10,000 in 2070. In the worst scenario, the death toll in Queensland and the Northern Territory may increase by a factor of 10 times by the end of this century.

[The Australian, 30/11/2011]

### Durban climate change deal

The United States, China and India, the world's three largest polluters accounting for almost half of the world's greenhouse gas emissions, are now committed to cutting carbon emissions. The nations which accepted the last minute agreement are committed to negotiating by 2015 a legally binding protocol for real emission reductions to come into force in 2020, although the likely wording of the protocol remains vague.

From now until 2020, Europe and some other developed countries are legally bound to cut carbon emissions through a second commitment period of the Kyoto Protocol. Europe is likely to increase its carbon cutting target to 20-30% by 2020, and the UK is under pressure to increase its targets. A Green Climate Fund of approximately USD 100 million a year will be established to help countries adapt to climate change from 2020. According to the plan, poor countries will be paid from the fund in return for stopping deforestation.

Critics commented that the deal was not enough to stop dangerous climate change, and the deal had been watered down to such an extent that it was essentially meaningless. Failure to secure an ambitious deal will affect poor people, who will experience increasing hunger and poverty facing a 4C temperature rise.

[The Telegraph, 11/12/2011]

### China, India, U.S. take steps towards emissions deal



Major industrial and emerging economies joined the pact to reduce greenhouse gas emissions. The pact aims to cut global emissions across the board by 2020, but the benchmark to which nations will be held is open to negotiation, pending U.N.-led scientific reviews of global temperature data and current emissions policies over the next few years. Delegates from almost 200 countries agreed to draft a new global emissions treaty by 2015.

Most industrial nations, including European Union members bound by EU law to comply with the Kyoto requirements, agreed to extend their commitments beyond 2012. Russia, Canada and Japan will enter into a new agreement that will take effect later.

The 1997 Kyoto Protocol does not include China and India, because they were not then considered major industrial nations. China and India recently commented that it was unfair for them to curb rapid development that is helping eradicate poverty, whilst rich nations produced emissions for decades without consequence.

The U.S Congress did not ratify the Kyoto Protocol because major developing countries did not have to check emissions, which the U.S said was unfair and unrealistic. The chief U.S. negotiator in the Durban summit, Todd Stern, believed that this time the emissions-reduction agreement stood a chance of passing in the Congress.

[*The Wall Street Journal*, 11/12/2011]

#### Sea levels are rising

At an annual meeting of the American Geophysical Union, scientists reviewed ice core data spanning more than 500,000 years of Ice Ages and subsequent warming periods. They concluded that global warming is occurring at a faster rate than previously thought. One result of this is that global sea level has risen by an average 3 feet within the last 100 years approximately.

Climate scientists agree that greenhouse gases, such as carbon dioxide, raised global average temperatures by about 1.4F worldwide in the review period.. Carbon dioxide concentrations in the air are 39% higher than pre-industrial levels, and the number is still increasing.

Doubling the carbon dioxide level will create a climate with which human beings are unaccustomed. Carbon dioxide emissions remain in the atmosphere for centuries, and the current high level of carbon dioxide implies that sea level will rise by 80 feet, hitting coasts worldwide at some point in this millennium.

As a result of more greenhouse gases, the risk of sea level rise from melting ice sheets on Greenland and Antarctica is increasing. In 2007 the Intergovernmental Panel on Climate Change (IPCC) projected a less than 2 feet of sea level rise this century, but this assessment was conservative due to the difficulty in forecasting the effects of sudden ice sheet melts.

[*ABC News*, 11/12/2011]

#### Canada condemned for pulling out of Kyoto treaty

One day after Canada announced her withdrawal from the Kyoto protocol, the international community expressed regret

and described Canada's act of withdrawal as "shameful", "deeply regrettable", "preposterous", "disappointing" and "act of sabotage".

Under the Kyoto Protocol, Canada was committed to cutting its greenhouse gas emissions by 6% by 2012, compared to its 1990 levels, but its actual emissions have risen by over 30%. Peter Kent, Canada's environmental minister, said that the cost of buying emission permits to compensate overshoot of its target imposes a great burden to Canadian taxpayers. However, a UK government spokesman countered that such cost would be far lower than the cost of inaction.

The UN climate chief, Christiana Figueres, commented that Canada's rising carbon emissions put it in a "weaker position" to demand carbon limits on fast-growing countries, such as China and India. Further, she commented that Canada still owes a moral obligation to itself and future generations to lead in the global effort.

[*The Guardian*, 13/12/2011]

### ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

#### Summary of minutes of the 180<sup>th</sup> Meeting of the Advisory Council on the Environment (19 September 2011)

##### Green living region

Members were briefed on the ACE Paper 11/2011 on the *Proposals for the Regional Cooperation Plan on Building a Quality Living Area*. Salient points arising from the meeting are:--

- 1) ACE was supportive of the proposals to build a green and quality living area in the Greater Pearl River Delta (Greater PRD). The aim is to transform the Greater PRD region into a low carbon, high technology and low-pollution city.
- 2) The governments of Hong Kong SAR, Guangdong and Macau should work jointly in considering and implementing the proposals holistically. The proposals cover five areas of cooperation between the governments. They are: environment and ecology; low-carbon development; culture and social living; spatial planning, and transportation systems.
- 3) ACE was of the view that specific targets regarding the proposals should be set, and that there should be a monitoring system or mechanism for implementation of the proposals.
- 4) The Council considered the importance of exchange of views amongst the three areas at the non-government level. It was agreed that public engagement in, the exchange of ideas regarding, the Greater PRD Regional Cooperation Plan are crucial to the successful planning and implementation of the Plan. A mechanism for the exchange of information and views should be put in place.

- 5) In relation to ecological aspects of the Plan, ACE considered that the Plan should not merely focus on a few specific areas; it should preserve and strengthen ecosystems and the overall ecological value of the Greater PRD area. Suggestions as to environmental restoration, for instance landfill sites, should also be given due consideration.
- 6) The concept of an ecological corridor was also stressed. The Plan should aim to enhance the ecological value of the region by cross border cooperation, discussions and site visits.

##### Low energy light bulbs

Members were also briefed on the ACE Paper 12/2011 on the proposal to restrict sale of energy-inefficient incandescent light bulbs (ILB). Points covered by the meetings included the following:

- 1) In view of potential environmental benefits which would result from the replacement of ILB by other energy-saving bulbs, the Council was supportive of the proposals in ACE Paper 12/2011. The Paper proposes that the sale of ILB should be restricted through legislation, and eventually should be phased out. The proposal mainly covers two points :
  - (a) bulbs which do not satisfy the minimum energy performance standards (MEPS) should not be allowed to be supplied on the markets;
  - (b) bulbs which satisfy the MEPS should be registered in accordance with a registration system.It is estimated that implementation of the proposal could result in a saving of HK\$ 390 Million in annual electricity costs.
- 2) The Council accepted that the MEPS should be adopted in measuring the energy saving level of light bulbs, in place of the classification of light bulbs as LIB and non-ILB bulbs.
- 3) Regarding the energy efficient light bulb CFL, the Council stressed the importance of proper collection and recycling of unused CFL. The *Florescent Lamp Recycling Programme*, launched by the government in March 2008, should be strengthened.

##### Waste management

Members were briefed on the ACE Paper 13/2011 on the Report of Waste Management Subcommittee. Points arising from the Paper included the following:

- 1) Noting the success of the first phase implementation of the *Environmental Levy Scheme on Plastic Shopping Bags*, the Council supported the proposals put forward by the Waste Management Subcommittee regarding the extension of the Scheme. The Scheme should be extended to all retailers so that some retailers would

not benefit from the list of exempted retailers currently in place.

- 2) Publicity of the proposed extension should undertaken by the government. In addition, public education on the environmental implications of using plastic shopping bags should be provided and strengthened by the government.

#### Summary of minutes of the 181<sup>st</sup> Meeting of the Advisory Council on the Environment (17 October 2011)

##### Better building practices

Members were briefed on the ACE Paper 14/2011 on *Combating Climate Change: Energy Saving and Carbon Emission Reduction in Buildings*, a report prepared by the Council for the Sustainable Development. Salient points arising from the meeting include :

- 1) ACE supports the importance of the issues highlighted by the report, and the eleven “action areas” proposed. These action areas are broadly divided into two classifications: Systemic Enhancement and Facilitation of Behavioural Change. They are :
  - (a) Tightening the *Building Energy Code*;
  - (b) Provide recognition for buildings achieving high level of energy efficiency;
  - (c) Extend application of mandatory energy efficiency labelling system (MEELS);
  - (d) tightening energy efficiency grading levels for room air-conditionings and refrigerators under MEELS;
  - (e) phasing out energy inefficient light bulbs; 6) phasing out energy inefficient electrical appliances;
  - (f) Undertaking an Energy/Carbon Audit;
  - (g) Better understanding of individual’s energy consumption;
  - (h) More use of energy efficiency management systems;
  - (i) Adoption of energy efficient electrical appliances amongst the trades;
  - (j) Electricity tariff review.
- 2) The Council was of the view that facilitating behavioural change on a voluntary basis may not suffice. Behavioural change could best be facilitated through incentive boosting steps – such as tax relief for a certain level of electricity saved. Alternatively, legislation might be required in about half of the 11 action areas to mandate the relevant minimum energy-saving standards.
- 3) The Council was aware of the need to strengthen the mandatory Building Energy Code (BEC). It was suggested that the government should conduct reviews regularly so as to update and tighten the BEC in view of technological advancements. Regular public announcements of the energy efficiency levels of different buildings could be made.
- 4) On the issue of external lightings of buildings, the Council concluded that

the feasibility of switching off external lights during certain specified hours of the day/night should be investigated. It was noted that signboards for buildings in Korea, for instance, are required to be turned off at 2 a.m.

- 5) The ACE considered that more information should be provided to the public to convince them of the benefits of energy saving. For instance, information such as potential electricity tariff savings should be provided to occupiers. In addition, a database should be developed for the purpose of carbon auditing, so that different buildings in the private sector could compare performances.

#### Summary of ACE Paper 15/2011 Proposals on Tightening Emission Standards of Newly Registered Motor Vehicles to Euro V Level

##### Vehicle emission standards

On 14 November 2011, the Council discussed the ACE Paper 15/2011 regarding stricter emission standards for newly registered motor vehicles. Main points arising were :

- 1) Motor vehicles constitute a large proportion of roadside air pollution, so it is necessary to tighten motor vehicles’ emission standards. In view of the European Union’s move to tighten its vehicle emission standards to Euro V level, ACE believes Hong Kong should follow.
- 2) The benefits of tightening the emission standards are obvious. For instance, Euro V vehicles produce about 40% less nitrogen oxides and 80% less respirable suspended particulates, compared to Euro IV vehicles.
- 3) The Paper also considered the supply situation of Euro V Vehicles. Since April 2008, the government has offered tax concessions for Euro V Vehicles. As a result, vehicle manufacturers increased their supply of Euro V Vehicles. In view of this, the ACE considers Euro V Vehicles are sufficiently available to replace Euro IV Vehicles, except for light goods vehicles of less than 3.5 tonnes.
- 4) The proposal is to tighten emission standards for all new vehicles registered on or after 1 June 2012, with the exception of light goods vehicles.

#### Summary of ACE Paper 16/2011 : A new producer responsibility scheme for waste electrical and electronic equipment

##### Waste management

Major points covered in this ACE Paper are :

- 1) The PRS scheme concerns proper disposal of waste electrical and electronic equipment, and proposes that the government introduces

legislative measures to complement the scheme.

- 2) The public was generally in support of the PRS scheme.
- 3) As the public consultation process was well received, the Paper recommends that the PRS scheme be implemented. Main elements of the scheme are :
  - (a) Implementation of the PRS scheme would be executed by amending the *Product Eco-responsibility Ordinance* (Cap.603).
  - (b) The Scheme mainly covers five types of electrical and electronic products; i.e. television sets, washing machines, refrigerators, air conditioners and computer products. Digital products, such as mobile phones and cameras are not included in the PRS.
  - (c) To create an organised and systematic disposal of waste electrical and electronic products, retailers would be required to take back used products from customers for no cost. The waste products would then be transferred to treatment facilities by the retailers. Without this step, waste products would need to be transported to the treatment facility on a voluntary basis by individual households, or by second-hand dealers, which is not practical.
  - (d) No used electronic or electric products may be exported unless certain criteria regarding reusable goods are met. This would ensure that waste electrical products are adequately dealt with and treated before they are exported to other jurisdictions for further processing. Import controls will also be put in place to ensure that there is no dumping of used and untreated electrical products in Hong Kong from other jurisdictions.
  - (e) Regulatory licensing of recyclers undertaking treatment and recycling of used electrical products is supported overwhelmingly.
  - (f) Construction of local treatment facilities will be necessary. Although there are a few local recyclers in Hong Kong, their capacity is clearly not sufficient to cover huge demand for waste treatment to be generated by the PRS scheme, if it were to be implemented.
  - (g) The government would assume the role of facilitating the scheme through public education. Legislation should also be implemented. The ACE would prepare legislative proposals for the consideration of the government to implement of PRS. In addition, a competent private contractor would be procured through open tender to provide collection and recycling

services for waste electrical and electronic products.

## REGIONAL & INTERNATIONAL

### UNITED KINGDOM

#### Energy subsidies push up the price of wood

It is clear that carbon emissions contribute to global warming. The United Kingdom has been paying subsidies for biomass energy from 2002. Several power plants are now burning wood as well as coal to generate electricity.

Some commentators believe that burning wood is more environmentally friendly than using coal, as it only releases carbon stored by the trees and hence no extra emission of carbon has been taken place. However, environmentalists take a different view, arguing that the trend to using wood as a major energy source will lead to increased deforestation and may even lead to higher climate-changing emissions.

Another side effect is that biomass subsidies have increased demand for wood, pushing the price nearly 50% higher than 10 years ago. The wood industry believes that the extra costs will be passed on to consumers ultimately.

[BBC News – United Kingdom, 07/12/2011]

### CHINA

#### HK green products have edge in China

Hong Kong may be best-positioned in the mainland's booming green product market as our food and related products not only enjoy higher demand than those produced over the border but also have price competitiveness against foreign products.

A survey conducted by the Trade Development Council has found mainland consumers are willing to pay up to 11 per cent more for environmentally friendly products made in Hong Kong when choosing between them and unfriendly ones. Green products made on the mainland had to be priced within 6 per cent of non-green ones to attract consumers. Green products made overseas carried the greatest margin, at 16 per cent.

Hong Kong has an edge in this regard as locally made products are tax-free in China under the *Closer Economic Partnership Arrangement*.

Ahead of a Hong Kong trade fair on eco-friendly products, and Guangdong's first green product trade show starting next month, the TDC polled 2,400 consumers from six mainland cities in June on their spending pattern on environmentally friendly products, such as food, clothing and electronic gadgets.

Ninety-five per cent of the respondents said they have bought green-labelled food, while 90 per cent have purchased energy-efficient appliances, like power-saving light bulbs, which are a big hit on the mainland.

Nearly three in five said they had bought clothing made from natural materials and 53 per cent were interested in natural skin products. Less than half have spent money

on green household cleaners. Among the food categories, parents are willing to pay the highest margin – 19 per cent – on green baby food.

[SCMP, 21/10/2011]

#### Is Beijing's smog getting worse?

The best weather in Beijing is at the end of year - sunny days, cool nights and cleanest air. This year, regrettably, is an exception. The smog in Beijing, as well as in other parts of northern China, has reduced visibility to only a few hundred metres. Government officials maintain their stance that there is a downward trend in air pollution, but the public take a different view. Citizens in Beijing usually wake up to find the city shrouded in smog. Many wear face masks to protect themselves from air pollution.

There is heated debate over how to measure pollution, such as where should it be measured and the standards to be applied. Some environmentalists and academics believe that the government is not honest in disclosing true pollution levels, which is an obstacle to any real improvement in air pollution.

[BBC News – China, 06/12/2011]

#### Blueprint for control of emissions

China has announced its 5-year plan for controlling greenhouse gas emissions. Under the 5-year blueprint, which has been approved by the State Council, the target is to reduce emission of carbon for each unit of GDP by 17% by 2015, using the 2010 level as the baseline.

Provincial governments will be responsible for carrying out the plan; e.g. Guangdong province is required to cut its carbon intensity by 19.5%, whilst Qinghai province is required to achieve a target of only 10%. Industries are urged to issue their own plans to reduce their carbon emissions, and major enterprises are required to report their level of emissions.

This is the first time that China has officially published its carbon intensity goals for provincial governments, which demonstrates that China is serious in controlling its carbon footprint.

[China Daily, 07/12/2011]

#### Beijing planning to use cleaner petroleum and diesel

Authorities in Beijing have decided to require use of cleaner petroleum and diesel from next year in a bid to reduce pollution. Government officials revealed to the public that they aim to reduce sulphur content in petroleum and diesel from 50 mg to 10 mg per litre. The government is seeking public feedback on the plan. Some research shows that cleaner fuels will help cut nitride oxide, a major pollutant in emissions by motor vehicles, by up to 10 percent.

There is also increasing public discontent over the air quality, as there are discrepancies between the official data released by the Chinese government and measurement taken by the US Embassy. The US Embassy in Beijing rated the air as "hazardous", whilst the Chinese government rated pollution levels as "slight".

[Xinhua News Agency, 10/12/2011]

### Lakes disappearing every year

Over 83,000 square km of China is covered by natural lakes. These play a critical role in maintaining ecological balance, controlling floods and reducing droughts. Currently China has about 24,000 natural lakes, but approximately twenty are disappearing every year due to climate change.

According to the declaration made at the *First China Forum on Lakes* in Nanjing: "Water quality is deteriorating, sediment is accumulating, wetlands are shrinking in size and aquatic organisms are dying out. Consequently, the lakes' capacity for flood control and drought relief has been affected."

[Xinhua News Agency, 12/12/2011]

### MONGOLIA

#### "Ice Shield" experiment aims to cool Mongolian City

"Global warming" refers to an increase in the average temperature of the Earth's atmosphere. Mongolia hopes to tackle this difficult problem by creating an ice shield that would, in effect, cool its capital city, Ulaanbaatar.

During the past 60 years, Mongolia has warmed an average 1.9 degrees Celsius, which is about three times faster than the Earth's average temperature increase. To help keep the city cool, the EMI-ECOS Consortium, a British- Mongolian venture, will launch an experiment to create a large ice shield on Tuul River. The plan is to grow a thicker ice shield by drilling holes and pumping water into the ice. The water will freeze and form a thicker ice sheet which will take longer to melt and so should cool nearby cities, thus countering to some extent the effect of global warming in Mongolia.

However, the river-ice manipulation proposal has been severely criticised. Although the ice shield could create chilly winds in nearby areas, the effect of these would be limited to a distance of approximately half a kilometre. In addition, this climate-manipulation plan could possibly adversely affect the river ecosystem or water supplies downstream.

[National Geographic Daily News, 07/12/2011]

### AUSTRALIA

Until now, evolutionary biologists have believed there are about 10 million different species on earth. But that figure is set to be revised upwards, perhaps as high as 100 million.

Some 450 DNA experts have attended the *International Barcode of Life Conference* in Adelaide and they are expected to reach an updated consensus on life on the planet, from mammals to underground microbes.

The conference heard that advances in DNA barcoding were helping scientists understand nature's diversity, and the current estimate of species could be anything between two million and 100 million. Only about 10 per cent of species have so far been identified. DNA sequencing has resulted in rapid advancements in understanding genetic diversity, including in the identification of pests and diseases.



Seaweed is an example of the vast array of unidentified plant species. Adelaide University researcher, Fred Gurgel, who has been barcoding marine macroalgae, has so far found that Australia hosts the world's greatest diversity of seaweed. Australia has nearly 4,000 species of seaweed.

Dr. Gurgel said that identifying species helped scientists understand if climate change affected growth and whether noxious species were spreading into different regions. "The role of marine seaweeds is equivalent to that of trees in rainforests," Dr. Gurgel said. "If you take away a tall tree in the forest, all the animals and birds and ants that use it will go as well."

Researchers have also discovered that underground aquifers contain thousands of stygofauna, or water-based species, which were previously unknown. Identifying the species and the underground ecosystems has led to scientists urging mining companies which extract ground water to do so responsibly.

[*The Australian*, 02/12/2011]

#### Solar to add billions to power bills

Significant investment has been made to electricity networks to replace and upgrade the existing system. Installations of rooftop solar panels and solar powered hot-water systems had cost approximately 4.7 AUD billion by mid 2020. It is predicted that residential electricity prices will increase by 37 percent in the 3 years to 2012-2014.

Increased Investment is required due to meet increased electricity demand and to facilitate a transition towards clean energy technologies.

[*The Australian*, 10/12/2011]

### JAPAN

#### Japan extends tax breaks for fuel-efficient vehicles

Japan's domestic car sector has been hit by the nuclear power crisis of 2011 and the strength of the yen recently. Japanese car-makers are determined to deliver a less energy intensive and cleaner future.

Japan's car-makers are busy trying to find solutions for Japanese cities' notorious congestion and pollution. Car-makers wish to improve efficiency, fuel economy and emissions reductions of vehicles. These benefits are being offered by a broad spectrum of petrol-electric or diesel-electric vehicles.

Recent technological advancements make possible more economical and cleaner driving in Japan, mainly by employing hybrid battery and petrol engines.

[*BBC News*, 28/11/2011]

#### Japanese tsunami fund 'used for whaling' programme

Environmental activists have complained that Japan used 2.3 billion yen from the tsunami relief fund to subsidise the annual whaling programme. There is an international ban on commercial whaling, but Japan slaughters approximately 1,000 whales

every year, on the basis that they are conducting a scientific research programme.

A government official explained that there was no link between the whaling programme and the tsunami recovery. Japan's decision to continue whaling, however, has been criticised by the Australian and New Zealand governments. The governments of both countries are considering sending vessels to monitor the Japanese whaling fleet, and environmental activists also promised to carry on their campaign against commercial whaling.

[*BBC News*, 07/12/2011]

### INDONESIA

#### Mattel to help stop deforestation

Mattel Corporation, manufacturer of the famous Barbie doll, has finally bowed to pressure from *Greenpeace* and other environmental NGOs by agreeing to cease buying packaging from Asia Pulp and Paper (APP).

APP is notorious for sourcing much of its new pulp from Indonesia's rainforests, so substantially contributing to unsustainable deforestation in Indonesia. As the largest toy company in the world, their new policy sends a message to other companies that to be in business you must be vigilant about keeping deforestation out of your products. As part of its new commitment to the environment, Mattel instructed its suppliers to avoid wood fibre sourced from controversial sources, including companies that are known to engage in deforestation. Mattel's policy also aims to increase the amount of recycled paper used in their business, as well as use of wood products certified by the Forest Stewardship Council (FSC).

Mattel's commitment to saving Indonesia's rainforests, which are critical Sumatran tiger habitat, means that APP is paying a heavy price for continuing to rely on destroying rainforests for pulp and paper. People no longer want to buy products that come from deforestation, and companies that are "deforestation-free" will not use APP products. APP has to face these realities and change.

As long as APP continues to put its efforts into marketing campaigns designed to "greenwash" its destructive activities rather than changing its practices, NGOs will continue to expose the truth. It is important to keep attention on the plight of Indonesia's rainforests.

[*Greenpeace Australia*, 05/10/2011]

### SOUTH AFRICA

#### Is South Africa addicted to coal?

South Africa is the fourth largest coal exporter in the world and has more than 40 billion tonnes of known coal reserves. With more power plants either being built or planned and increased demand in the coal export market, South Africa's coal mining industry is expected to grow.

South Africa is under pressure to curb the use of coal as its major energy source. Environmentalists claim that coal is a notorious contributor to greenhouse gases, which are blamed for causing climate

change. However, it has been argued that coal is the bedrock on which most world economies have been built, and it will reduce South Africa's productivity if the use of coal is restrained.

[*CNN News*, 05/12/2011]

### CANADA

#### Canada to withdraw from Kyoto Protocol

Canada will formally invoke their right to withdraw from the Kyoto Protocol on climate change. The move makes Canada the first nation to pull out of the climate-change treaty.

The Minister for the Environment said that the cost of meeting Canada's obligations under the Protocol would be 13.6 billion Canadian dollars. Even if this money is spent, the world's two largest polluters, United States and China, are not covered by the Protocol.

In addition, Canada may face huge fines for failing to meet its emission reduction targets.

[*BBC - US & Canada*, 12/12/2011]

### BRAZIL

#### Chevron causes oil spill

Brazil's government suspended Chevron Corp's drilling rights until the company clarifies the causes of an offshore spill.

The decision came as the head of the Chevron's Brazilian unit testified before Brazil's Congress. He apologised for the November 8 spill that leaked about 2,400 barrels of oil into the ocean off the coast of Rio de Janeiro.

Brazil's National Agency of Petroleum said it decided to halt Chevron's drilling rights after determining there was evidence the firm had been "negligent" in its study of data needed to drill and in its contingency planning for abandoning the well in the event of accident.

The agency also rejected a request from Chevron, made before the leak, to drill wells in the deeper subsalt areas in the Frade field where the spill occurred. The field, in the oil-rich Campos Basin, is the only block in Brazil where Chevron produces oil as the operator. The Campos Basin is the source of more than 80 per cent of Brazil's oil output.

The spill is an ominous reminder of the risks involved in offshore drilling, cooling the euphoria over vast subsalt oil reserves that Brazil found in 2007 some 7 kilometres below the seabed. The country is banking on those reserves of approximately 100 billion barrels to speed its development.

Chevron, the second-largest US oil company, has been fined US\$28 million by Brazil's environmental agency for the spill, an amount that is sure to rise when ANP and Rio's state government slap fines on the company, as they have pledged to do.

Chevron initially attributed the "sheen" on the sea surface to naturally occurring seepage from the seabed. The company is being investigated by the Federal Police, which noted discrepancies between Chevron's account of the spill and Brazil's.

The Frade leak, although small, is likely to provide more ammunition for increasing worldwide opposition to offshore drilling in the wake of the estimated 4 million barrel BP Deepwater Horizon spill in the Gulf of Mexico last year.

[SCMP, 25/11/2011]

## UKRAINE

Recently an administrative court in Ukraine upheld Environmental-People-Law's (EPL) claims and declared that the failure of the Ministry of Ecology and Natural Resources to publish final EIA (environmental impact assessment) decisions was illegal.

EPL for many years has campaigned to improve public access to environmental information, among other means by virtue of increasing the amount of the information spread via official governmental web-pages on the Internet. Despite the provisions of the *Aarhus Convention* and relevant domestic legislation, the Ministry has always been reluctant to facilitate public access to EIA decisions. The only way to get a final EIA decision was to file a request, which was not always fully satisfied.

In October 2010, EPL filed a lawsuit alleging that failure to actively disclose all the final EIA decisions by the Ministry violates international obligations of Ukraine under the *Aarhus Convention*, as well as Ukrainian laws, and asking the court to oblige the Ministry to publish all EIA decisions issued since the beginning of 2009. In October 2011 the court rendered its decision requiring the Ministry to post full texts of over one thousand decisions on its official web-page, covering the last 2.5 years.

[EPL Ukraine news release, 01/12/2011]

## THE ARCTIC

### A global tragedy is unfolding

Largely unnoticed, a silent drama has been unfolding over past weeks in the Arctic. The long-term consequences will far outstrip those of the international debt crisis now commanding media attention. The drama – more accurately, a tragedy – is the rapid disappearance of the polar ice cap, the Arctic Ocean's defining feature.

In September, the sea-ice cover on the Arctic Ocean melted all the way back to the record-low level recorded in September 2007. At 4.4 million square kilometres, it was the smallest ice cover since satellite observations began 40 years ago. There is now 40 per cent less ice than in the 1970s and 80s.

The 2007 record low stunned climate scientists at the time. They blamed unusual wind conditions in the Arctic that year. But satellite data since then proved them wrong; this year, the Arctic reached the same low level without those exceptional winds. The previous steady decline is rapidly accelerating.

The ice is also getting thinner. If it simultaneously shrinks and gets thinner, the area shrinkage is first steady but then accelerates towards the end. This is what could be happening now. If this continues, we will probably see an ice-free North Pole within the next 10 to 20 years.

Global warming, caused by our greenhouse-gas emissions, is thus far continuing unabated. 2010 was one of the two hottest years on record globally, despite extremely low solar activity. It is almost certain that warming – including in the Arctic – will continue in the coming decades.

The loss of ice cover will not only turn the Arctic ecosystem upside down, it affects many animals that are adapted to a life with sea ice. It will also affect all of us. If the Arctic ice disappears in the summer months, we will lose a giant mirror that reflects solar heat back into space and helps keep the planet cool.

The ice loss will amplify global warming and upset weather patterns. It is now affecting one of the most vital components of the global climate system: the Greenland Ice Sheet. If this giant structure melts, sea levels worldwide would rise by about seven metres!

This melting, it seems, has already begun. Nasa data revealed earlier this year that the Greenland Ice Sheet is losing mass at an accelerating pace. As tide gauges from around the world show, sea levels are indeed rising.

Future sea levels are hard to predict, but most experts agree that unabated global warming could lead in the coming centuries to a rise measured in metres, threatening the existence of many coastal cities and island nations.

We ignore the silent meltdown in the North at our peril. It is a grave warning for us all.

[SCMP (letter to the editor from Stefan Rahmstorf, Professor of Physics of the Oceans at Potsdam University, and Department Head at the Potsdam Institute for Climate Impact Research), 19/10/2011]

## WORLD

### Tuna sales far exceed official catch status

More than twice as many tonnes of Atlantic bluefin tuna were sold last year than was officially caught, pointing to widespread fraud in the management of this threatened species.

This "bluefin gap" occurred despite enhanced reporting and enforcement measures introduced in 2008 by the 48-member International Commission for the Conservation of Atlantic Tuna (ICCAT), which sets annual quotas by country, it said.

Sales figures showed that real catches of bluefin in 2009 and 2010 totalled more than 70,500 tonnes, twice ICCAT's tally for those two years, according to a report compiled by Washington-based *Pew Environment Group*.

"The current paper-based catch documentation system is plagued with fraud, misinformation and delays in reporting," said Roberto Mielgo, a former industry insider and author of the report. "Much more needs to be done."

Before 2010, ICCAT systematically set fishing quotas substantially higher than the recommendations of its own scientific committee, which had warned repeatedly that stocks were in danger of crashing. In 2010, the target quota – 12,900 tonnes for fish caught in the Mediterranean and Northeastern Atlantic – for the first time was

within the panel's recommended range.

[SCMP, 19/10/2011]

## Climate talks end with late deal

The UN climate-change forum in Durban, South Africa, has closed with an agreement that put off meaningful measures for several more years. The conference ran 36 hours beyond the scheduled close. The delay was caused by a dispute between the European Union and India over the precise wording of "roadmap" for a new global deal. In effect, nations will in 2012 begin discussion on the real emission-reduction plan, which is to be implemented in 2020.

The European Union has agreed to place its emissions-cutting pledges in a Kyoto Protocol commitment, and a management framework has been adopted for the Green Climate Fund which will gather US\$ 100 billion every year to help poor countries adopt cleaner technologies and to adapt to climate-change impacts. The conference also made significant progress on reducing emissions from deforestation and forest degradation.

Environmental groups held different views of the outcome, with some finding it a step forward, while others gave a negative response, saying the eventual agreement ("the Durban Platform") does nothing to tackle climate change.

[BBC News, 11/12/2011]

## Why women are world's best climate change defence

A World Bank report published recently shows that women represent 40 percent of the global labour force, 43 percent of agricultural labour force in the world and more than half of the world's university students.

Women must articulate their concerns in climate negotiations, as the role of women in their homes, work places and communities is critical. Women understand the inter-generational aspects of climate change. They will think in time horizons that span the lives of children and grandchildren.

In a country like Africa, women are responsible for 60 to 80 percent of food production. Climate change may bring them unpredictable growing seasons and women are adapting to these changes, showing resilience while confronting situations like crop failures and water shortages, as well as increases in environmental related diseases, such as malaria.

It is too late to achieve a comprehensive climate-change treaty by 2020, as time is running out. It has been argued that the richest countries caused the problem but it is for the poorest in the world to suffer its effect.

The report called on women to speak up and make known their concerns, as their children's and grandchildren's future is at stake.

[CNN News, 09/12/2011]

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**Convictions under environmental legislation:  
October to December 2011**

[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:

*October 2011*

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

Three of the convictions were under the Air Pollution Control Ordinance, 6 under the Noise Control Ordinance, 10 under the Waste Disposal Ordinance and 1 under the Water Pollution Control Ordinance.

The heaviest fine in October was \$35,000, assessed against a company that imported controlled waste without a permit.

*November 2011*

Twenty-seven convictions were recorded in November for breaches of legislation enforced by the Environmental Protection Department.

Three of the convictions were under the Air Pollution Control Ordinance, 11 under the Noise Control Ordinance, 1 under the Ozone Layer Protection Ordinance and 12 under the Waste Disposal Ordinance.

The heaviest fine in November was \$30,000, assessed in three convictions respectively against a company that carried out prescribed construction work not in accordance with the conditions of a construction noise permit.

*December 2011*

Fourteen convictions were recorded in December for breaches of legislation enforced by the Environmental Protection Department.

Three of the convictions were under the Air Pollution Control Ordinance, 6 under the Noise Control Ordinance, 3 under the Waste Disposal Ordinance and 2 under the Water Pollution Control Ordinance.

The heaviest fine in December was \$10,000, assessed in two convictions respectively against a company that carried out prescribed construction work in designated area without valid construction noise permit and used powered mechanical equipment without valid construction noise permit.

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