

URBAN PLANNING AND ENVIRONMENTAL LAW QUARTERLY
(Published since May 1992)

簡家驄律師行 · 城規環保季刊

Hong Kong has had reasonably extensive environmental protection laws for more than 30 years. Their effectiveness, however, has been greatly reduced by the consistent failure of the courts to treat environmental offences seriously.

The Editors

CONTENTS

FEATURE:	Page
THIRTY YEARS ON – AND THE COURTS STILL TRIVIALISE ENVIRONMENTAL OFFENCES.....	1
LEGISLATION DIGEST.....	3
TOWN PLANNING.....	4
WEST KOWLOON CULTURAL DISTRICT (WKCD).....	4
HONG KONG BRIEFING.....	5
ADVISORY COUNCIL ON THE ENVIRONMENT (ACE).....	7
CLIMATE CHANGE.....	8
REGIONAL & INTERNATIONAL.....	9
PROSECUTION STATISTICS	11

THIRTY YEARS ON – AND THE COURTS STILL TRIVIALISE ENVIRONMENTAL OFFENCES

In the year 2013, with our advanced state of scientific knowledge of wide-ranging environmental degradation in Hong Kong, the region and the world-at-large, and having had more than thirty years of experience in administering the offences and penalties provisions in Hong Kong’s environmental laws, our magistrates continue the unfathomable culture of imposing manifestly inadequate penalties for environmental offences. This is perhaps the single most significant reason that the statutes have largely been ineffectual in improving and protecting our environment.

We were reminded of this systemic judicial flaw by a recent letter to the editor of the *South China Morning Post* (18 September 2013) by Associate Professor Amanda S. Whitfort of the Faculty of Law, University of Hong Kong, which highlighted the glaring weakness in sentencing practices concerning endangered species offences. Professor Whitfort’s accurate and telling comments (with which we entirely agree) are worth repeating:

“Courts must get tough with smugglers of endangered species

I concur with Anna Beech of Civic Exchange (“A tusk force”, September 6). Hong Kong has a long history as a key transit point for the trade in endangered species.

Not only are ivory and rhino horns regularly discovered smuggled through Hong Kong to the mainland (which experts believe takes about 70 per cent of the global trade), but more than half the world’s shark fin and sea cucumber catch passes through the SAR.

Endangered turtles and reef fish, including those species listed in the Convention on

International Trade in Endangered Species of Wild Fauna and Flora (Cites), are also widely available. While the illegal wildlife trade is largely controlled by organised crime syndicates, and the profits to be made are enormous – similar to trafficking in dangerous drugs – it is a sad fact that the penalties imposed, where rare convictions are recorded, are pathetic.

Worth an estimate US\$19 billion annually, wildlife crime is the fourth-largest illegal global trade. Yet our courts have yet to take the matter seriously.

In a magistrates’ court case last year, a woman was convicted of smuggling two rhino horns, worth HK\$1.3 million, into Hong Kong. As there was no evidence she was to be paid for the transaction, the maximum penalty which could be imposed was 12 months’ imprisonment.

The magistrate imposed three months’ imprisonment for smuggling the horns of two of the most endangered animals on earth.

The defendant appealed against her sentence on the basis that it was excessive, despite admitting she had done it before. The appeal court did not reduce her sentence, nor did the judge raise it.

Again, last year, a man was arrested at Hong Kong airport smuggling live turtles in a suitcase.

He had 20 of one of the world’ rarest species, the Philippines pond turtle (two died from stress) and 16 South Asian box turtles. It is estimated there are no more than 120 Philippines pond turtles left in the world.

The magistrate who heard his case did not even consider it necessary to impose a prison term. The man was simply fined HK\$8,000.

Wildlife crime is at record levels and several species are under threat of imminent extinction. It is high time Hong Kong’s role in the fight against the illicit trade in endangered animals was taken seriously, not

only by the enforcement officers but by those charged with sentencing the offenders.”

Way back in March 1995 the UPELQ highlighted weaknesses in Hong Kong’s endangered species laws. We wrote then :

“Hong Kong’s main piece of legislation aimed specifically at protecting endangered (and other) fauna and flora is the Animal and Plants (Protection of Endangered Species) Ordinance (Cap.187) (ESO). Other legislation may also directly or indirectly afford a level of protection for fauna and flora – such as the Country Parks Ordinance, the Waterworks Ordinance (Cap.102) and the various anti-pollution ordinances – but ESO is the primary source of statutory provisions directed to preventing the extinction of Hong Kong’s (and other, non-native) animals and plants. However, unlike comparative legislation in other western countries, ESO is directed only at trading or possession of species. There are no provisions aimed at protecting the habitat of the subject animal or plant.

The ESO provides two categories of protection: scheduled animals and plants and highly endangered species. In each case the plants and animals protected are specified in the schedules to ESO. They include many species not found in Hong Kong (such as dugongs, Asia elephants and Amazonian manatee).

The highly endangered species category was added by a recent amendment to ESO (No.3 of 1995). The amending ordinance also introduced 2 levels of penalty for offences involving scheduled species and highly endangered species with higher penalties (e.g. 1 year imprisonment, for highly endangered species versus 6 months) imposed for scheduled species (plus/or fines).

The principal offences created by ESO are found in sections 4, 5 and 6 which respectively prohibit (without licence, which may be granted by the Director of Agriculture and Fisheries – Section 7) the import, export and possession of scheduled or highly endangered species.”

And on the question of penalties, we commented :

“In what may be seen as a reaction to the well-publicised international trade in rare and endangered animal parts, the 1995 amendment introduces a new offence of “commercial” offences. Section 13A provides that an offence under Sections 4, 5 or 6 committed for a “commercial purpose” will, in effect, be treated much more seriously.

The penalties provided are :

Offence involving a scheduled species :-
fine \$500,000
imprisonment – 1 year

Offences involving an endangered species :-
Fine \$5 m
Imprisonment – 2 years”

However, the inherent weakness in Hong Kong’s laws for protecting wildlife, or any other aspect of the environment, in large part lies in systemically low penalties imposed by the courts for breaches of the laws. Never has a court imposed penalties for ESO offences (there have been very few prosecutions, anyway) remotely close to the

maximum provided for. Very rarely is an offender imprisoned.

On the broader topic of environmental penalties, it was noted in that March (1995) UPELQ:

“The comparative table of environmental convictions and penalties reveals a continuing trend of some magistracies to treat environmental offences very lightly; e.g. Western, 9th offence of failing to abate an air pollution nuisance, fined \$4,000 (the same fine as imposed for that defendant’s 8th offence).”

On other occasions the UPELQ has lamented the courts’ uniform culture of trivialising environmental offences, as reflected in consistently absurdly low penalties. In the June 1996 edition, in an article titled *Are Hong Kong’s Anti-Pollution Laws Effectively Enforced?* we commented :

“Finally, effective enforcement depends not only on the EPD’s policies and performance. The attitude of Hong Kong’s judiciary to environmental offences is critical. The courts, principally the Magistrates Courts, impose the penalties. To date penalties have been, with the odd exception, very much at the lower end of the prescribed scale. The brief data published by the EPD each month (and included in the Quarterly Reports) bear witness to this. No doubt one of the reasons for this is that environmental offences are different to other criminal or quasi-criminal offences. Magistrates have no tariff guidelines or similar offences to guide them in assessing penalties. Nevertheless, in terms of ordinary sentencing principles, there appears to be something radically wrong in most magistrates’ treatment of environmental offenders when the empirical data of penalties (which do not, admittedly, show the circumstances of the offences) indicate that repeat offenders often are fined only a nominal amount more for subsequent offences.”

These past, and the following, observations must be weighed against the benchmark of the range of penalties stipulated in our environmental legislation. Take the *Waste Disposal Ordinance* (Cap.354) (WDO) as a representative example. Although penalties under the WDO vary according to the offence in question (there are quite a number of offences created by the statute) the main offences of unauthorised disposal or depositing of waste render the offender liable to the following maximum penalties:
1st offence, HK\$200,000 fine plus 6 months imprisonment;
2nd and subsequent offences, HK\$500,000 fine and 6 months imprisonment;
plus, a HK\$10,000 per day fine for a continuing offence.
Other environmental legislation provides for similar, or even higher, penalties.

Examples of convictions and penalties under the WDO during June to August 2013 illustrate the point we are making.

No.	Date of Offence	Nature of Offence	Fines(\$)	Court
	26.1.2013	Deposited waste unlawfully	3,000	Fanling
	3.12.2012	Produced chemical waste without registration	20,000	Kwun Tong
	3.12.2012	Chemical waste storage area	10,000	Kwun Tong

		not provided or not in compliance with requirements		
	13.12.2012	Deposited waste unlawfully	15,000	Kwun Tong
	13.12.2012	Deposited waste unlawfully	15,000	Kwun Tong
	13.12.2012	Deposited waste unlawfully	4,000	Kwun Tong
	21.12.2012	Deposited waste unlawfully	2,000	Fanling
	25.12.2012	Imported controlled waste without a permit	5,000	Fanling
	16.1.2013	Imported controlled waste without a permit	10,000	Fanling
	4.1.2013	Caused another person to import controlled waste without a permit	10,000	Fanling
	10.1.2013	Deposited waste unlawfully	6,000	Kwun Tong
	22.1.2013	Imported controlled waste without a permit	8,000	Fanling
	11.3.2013	Deposited waste unlawfully	10,000	Kwun Tong
	11.3.2013	Deposited waste unlawfully	10,000	Kwun Tong
	30.1.2013	Deposited waste unlawfully	3,000	Kwun Tong

In those three months there were also two convictions under the *Water Pollution Control Ordinance* (Cap358) (WPCO), for “discharged waste/polluting matter into the water control zone”. The penalties imposed (both in Kwun Tong court) were HK\$2500 and HK\$6,000. The maximum penalties provided for in the WPCO for a first offence (assume these were first offences) are: a fine of \$200,000 and imprisonment for 6 months; and for subsequent offences, the penalty is a fine of \$400,000 and imprisonment of 6 months.

For the purposes of this article we asked the Environment Protection Department (Prosecutions Section) for details of repeat offences in the June-August period. For many years the EPD published the fact an offence was a second (or subsequent) offence. This is, after all, a critical factor in determining what the proper penalty should be, and is therefore a detail the public has every right to know. Regrettably, the EPD no longer publishes those details. Nor would they provide them at our request, even on a basis of their redacting the offenders’ identities.

The EPD argues that whether an offender has one or more convictions for an offence is not a matter for “the public domain”. We totally disagree. Clearly the public is entitled to know if someone (or a company) is repeatedly in breach of our environmental laws – as, indeed, we did not know until fairly recently. It is not a privacy matter as

the names of offenders are published each month and criminal proceedings are a matter of public record. What or who caused the change in the EPD's practice in this regard we do not know. No doubt big business once again influenced the government's shift to a less transparent policy. It does not reflect well on the application of the rule of law in the context of enforcement of our environmental laws.

The highest penalties imposed for environmental offences from June 2013 to September 2013 are as follows:

No.	Date of Offence	Nature of Offence	Fines(\$)	Court
	2.2.2013	Failed to comply with air pollution abatement notice	18,000	Fanling
	4.11.2012	Carried out prescribed construction work in designated area without valid construction noise permit	30,000	Kwun Tong
	3.12.2012	Produced chemical waste without registration	20,000	Kwun Tong
	13.12.2012	Deposited waste unlawfully	15,000	Kwun Tong
	19.12.2012	Failed to take measures to control air pollutant emission	10,000	Fanling
	22.1.2013	Carried out regulatory work not in accordance with the Construction Dust Regulation	20,000	Kwun Tong
	9.12.2012	Used powered mechanical equipment without valid construction noise permit	20,000	Kwun Tong
	26.12.2012	Imported/Exported ozone depleting substances without a licence	30,000	Fanling
	16.1.2013	Imported controlled waste without a permit	10,000	Fanling
	18.1.2013	Used powered mechanical equipment otherwise than in accordance with permit conditions	30,000	Kwun Tong
	22.1.2013	Imported controlled waste without a permit	8,000	Fanling

From the days when the EPD did indicate in their prosecution details whether convictions were a first or subsequent offence, we have extracted the following sample data for two three month periods from July to September in 1996 and 2000 :

July to September 1996

	Number	1 st Offence	2 nd Offence	3 rd Offence	Highest Fine
APCO	8	5	2	1	\$12,000
	30	21	6	3	\$20,000
	16	12	2	2	\$25,000
WPCO	21	13	2	2	\$60,000
	34	22	4	8	\$85,000
	44	31	6	7	\$100,000
NCO	18	4	5	9	\$100,000
	24	9	4	11	\$60,000
	13	6	2	5	\$50,000
OLPO	1	1	-	-	\$15,000
	3	3	-	-	\$25,000
DASO	1	1	-	-	\$20,000
	-	-	-	-	-
WDO	26	26	-	-	\$15,000
	9	9	-	-	\$10,000
	13	13	-	-	\$20,000
Total	73	48	9	16	
	99	63	14	22	
	89	65	10	14	

July to September 2000

	Number	1 st Offence	2 nd Offence	3 rd Offence	Highest Fine
APCO	40	18	5	17	\$20,000
	36	17	3	16	\$30,000
	50	22	7	21	\$50,000
WPCO	27	18	6	3	\$50,000
	45	29	5	11	\$60,000
	28	21	2	5	\$100,000
NCO	58	16	10	32	\$60,000
	36	14	4	18	\$60,000
	43	14	6	23	\$115,000
OLPO	1	1	-	-	\$15,000
	-	-	-	-	-
DASO	2	2	-	-	\$30,000
	-	-	-	-	-
WDO	22	20	2	-	\$20,000
	22	26	2	3	\$10,000
Total	149	74	52	52	
	157	87	20	50	
	143	74	17	52	

Abbreviations

APCO Air Pollution Control Ordinance
 DASO Dumping At Sea Ordinance
 NCO Noise Control Ordinance
 OLPO Ozone Layer Pollution Ordinance
 WDO Waste Disposal Ordinance
 WPCO Water Pollution Control Ordinance

Conclusion

So it can be seen that over the years since our environmental laws were introduced the general level of fines has not increased – indeed, fines appear to have decreased – and that offenders are never imprisoned for offences under the anti-pollution ordinances.

It is high time magistrates – especially in the Fanling and Kwun Tong magistracies, which bear the bulk of environmental prosecutions – began to treat environmental offences as serious social wrongs – which they are. When you compare the substantial penalties imposed for copyright offences, for example, the only conclusion to draw is that the judiciary considers that causing damage to the environment is a much less serious crime than harming private economic interests.

This outdated, unenlightened imbalance must be corrected. But from where will the impetus for correction come? Not from the EPD or AFCD, that is clear. Neither has appealed against manifestly inadequate penalties imposed by the courts in the 30 years or so that Hong Kong has had – at least on paper – laws to protect the environment. The Department of Justice is also apparently happy to allow this shameful charade to continue.

As we observed in the March 1996 UPELQ on this issue of weak enforcement of our environmental laws:

“...in the words of the noted American jurist, Supreme Court Justice Brennan, at the end of the day “enforcement of the law is what really counts”.”

LEGISLATION DIGEST

Air Pollution Control (Amendment) Ordinance 2013
 [Gazette published on 19 July 2013, No. 29 Vol. 17, Legal Supplement No. 1]

Air pollution and visibility in Hong Kong have raised public concern in recent years. To improve air quality, the government has implemented several air quality improvement measures outlined in *A Clean Air Plan for*

Hong Kong targeting various key emission sources including power plants, vehicles and marine vessels. Apart from a joint emission reduction plan with Guangdong which is in place until 2020 announced by the government in November 2012, legislative reform of air pollution control regulation has been undertaken to achieve the government's on-going commitment to protecting public health and improving air quality.

In section 7 of the *Air Pollution Control Ordinance* (Cap. 311) (“APCO”), the *Air Quality Objectives* (“AQOs”) (i.e. concentration limits of certain air pollutants) in Hong Kong are stipulated as the level of air quality which must be “achieved and maintained in order to promote the conservation and best use of air in the zone in the public interest.” The current AQOs have been in effect since 1987.

In response to the new *Air Quality Guidelines* (“AQGs”) released by the World Health Organisation (“WHO”) in 2006, the *Air Pollution Control (Amendment) Ordinance 2013* was passed by the Legislative Council on 10 July 2013 and will come into operation on 1 January 2014. The new AQOs are benchmarked against a combination of both interim and ultimate targets of the AQGs of WHO and are broadly comparable to the air quality standards adopted in the European Union and the United States. The new AQOs will also serve as a benchmark for assessing the air quality impact of specified processes under the *Environmental Impact Assessment Ordinance* (Cap. 499) (“EIAO”).

The main amendments are:-

- 1) An updated set of AQOs are set out in Schedule 5 to the APCO replacing the current set of AQOs.
- 2) The Secretary for the Environment (“Secretary”) must review the updated AQOs at least once every 5 years and submit a report of the review to the Advisory Council on the Environment as soon as practicable after the review.
- 3) The Secretary's power to promulgate AQOs in a technical memorandum subject to negative vetting, as presently provided for under section 7 of the APCO, will be repealed.
- 4) Subject to (5), the AQOs published in the APCO technical memorandum will cease to have effect on 31 December 2013.
- 5) A transitional period relating to AQOs published in APCO technical memorandum is provided in the following situation: If an application is made before 1 January 2014 under section 13(1) of the EIAO for a variation of the conditions of an environmental permit issued before 1 January 2014, the old AQOs published in the APCO technical memorandum as in force immediately before 1 January 2014 will continue to have effect as a criterion for evaluating air quality impact under section 1.1(a) of Annex A to the EIAO technical memorandum.

The government believes that implementation of the new AQOs will help combat air pollution. This could, in turn, improve quality of life, reduce medical costs and indirectly raise labour productivity. Less hospital admissions and longer life expectancy are expected. In addition, better

air quality and visibility would help in attracting more tourists and foreign investment, and are conducive to attracting talented people to stay and work in Hong Kong. Apart from improving the air quality in Hong Kong, the stringent AQOs are also consistent with the sustainability principle of enhancing environmental quality and providing a living environment which promotes and protects the health of the public.

Concerning the tightening of AQOs, it is expected that more vigorous mitigating measures and longer implementation periods are needed for projects which are of a capital nature to comply with the new AQOs.

TOWN PLANNING

Landfill expansion plans to be resubmitted to Legco

The landfill site expansion plan at Tseung Kwan O has been resubmitted to the Legislative Council, together with the landfill site expansion proposals at Tuen Mun and Ta Kwu Ling.

Residents of Tseung Kwan O expressed strong opposition to the expansion of landfill in Tseung Kwan O earlier. This caused the proposal to be shelved. However, the government resurrected the proposal on 12 July 2013 following the adjournment of the debate on funding for extending the landfills in Tuen Mun and Ta Kwu Ling. The government is of the view that extensions to any of the three landfills are necessary. As the blueprint for the sustainable use of resources is a 10-year plan, it is not practical to expect immediate results in the short term. Since it is expected that there will be opposition from the public, in particular from residents in the affected areas, the government will visit the districts, explain the expansion proposals in more details and gather more residents' views on the proposals in the coming months.

Although some politicians resorted to hunger strikes to protest against the landfills expansion proposals, other politicians criticised such opposition, in the sense that the problem of waste management has to be faced. The government is also of the view that it is the right time to introduce fees for waste disposal to help alleviate the solid waste problem in Hong Kong.

[*South China Morning Post*, 14/07/2013]

New town Hung Shui Kiu picked as data hub

The government launched public consultation sessions concerning a development plan under which Tin Shui Wai would be developed as a logistic and technology base. The plan also would create 60,000 homes, half of which would be public housing. However, it is expected that 1,400 village houses in Hung Shui Kiu in the northwest New Territories will be razed.

Apart from the fact that developing Hung Shui Kiu can provide a major source of Hong Kong's mid-term housing supply, the location of Hung Shui Kiu indicates the suitability of the development plan. As Hung Shui Kiu is close to Qianhai, which is one of the mainland's special economic zones in Shenzhen, the development plan, including the development at Hung Shui Kiu, could strengthen the connection between Hong Kong and Shenzhen.

A quarter of Hung Shui Kiu is now used as open-air storage for cargo containers. To relieve housing space pressures in Hong Kong, the government plans to build multi-storey buildings in Hung Shui Kiu to provide 60,000 flats. Logistic facilities and information technology sites would be included in the development plan also.

The new town is expected to have a new West Rail station connecting Hung Shui Kiu to the city centre, and a road linking Hung Shui Kiu and Kong Sham Western Highway, which leads to Shenzhen. These could enhance the idea of such "strategic" new town development in serving as a logistics hub and being a connection between Hong Kong and Shenzhen.

Among the affected rural village households, 20 indigenous villages would be preserved, but five out of nine non-indigenous villages would have to be displaced. Although the government accepts that timely compensation for villagers must occur, similar to other development projects in Hong Kong in recent years, this newly announced scheme will still probably attract opposition from villagers in the affected area.

[*South China Morning Post*, 16/07/2013]

Five draft outline zoning plans gazetted

The Town Planning Board ("TPB") has announced the publication of five draft outline zoning plans ("OZPs") covering the northernmost part of the New Territories. The five draft OZPs are: the draft Ma Tso Lung and Hoo Hok Wai OZP; Man Kam To OZP; Ta Kwu Ling North OZP; Lin Ma Hang OZP; and Sha Tau Kok OZP. The aim of the plans is to conserve the rural nature of the areas, strengthen nature conservation, encourage recreational tourism, retain good agricultural land for agricultural purposes and facilitate cross-boundary infrastructural development.

The draft Ma Tso Lung and Hoo Hok Wai OZP covers a total of 553 hectares. An area of 234.64 hectares is zoned "Green Belt" to define the limits of development and contain urban sprawl. An area of 228.37 hectares is zoned "Conservation Area (1)" to cover the neighboring ecologically sensitive wetland complex in Hoo Hok Wai. As well, an area of 9.15 hectares is zoned "Other Specified Uses" annotated "Eco-lodge" to provide for environmentally sustainable tourism in the form of an eco-lodge with low-rise, low-density resort-type accommodation.

The draft Man Kam To OZP covers an area of about 354 hectares. An area of 114.22 hectares is zoned "Green Belt". An area of 16.68 hectares is zoned "Recreation" to provide recreational developments for the public. Additionally, an area of 92.08 hectares, covering the existing Sandy Ridge Cemetery, is zoned "Other Specified Uses" which provides land for the purposes of cemetery and related facilities, including columbarium, crematorium and funeral parlour and other related uses, as well as a visitor centre and ancillary restaurant and convenience store facilities, to serve the needs of the general public.

The draft Ta Kwu Ling North OZP covers a total of 431 hectares. An area of 208.13 hectares is zoned "Green Belt" to protect the existing natural habitats and an area of 111.83 hectares is zoned "Recreation" for the development of active and/or passive

recreation and eco-tourism. A site of 23.82 hectares is zoned "Other Specified Uses" for the development of facilities related to the proposed Liantang/Heung Yuen Wai Boundary Control Point.

The draft Sha Tau Kok OZP covers a total of 557 hectares. An area of 461.39 hectares of it is zoned "Green Belt". An area of 5.14 hectares is zoned "Recreation (1)" for low-intensity recreational developments to promote agri-tourism and eco-tourism.

The draft Lin Ma Hang OZP covers an area of 329 hectares. An area of 10.62 hectares is zoned "Site of Special Scientific Interest". An area of 4.71 hectares is zoned "Green Belt (1)". As well, an area of 1.95 hectares is zoned "Conservation Area" which is aimed to conserve the existing natural landscape and ecological and topographical features and to protect the sensitive natural environment from adverse effects of development.

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

[*Town Planning Board Press Release*, 19/07/2013]

Approved Cha Kwo Ling, Yau Tong, Lei Yue Mun Outline Zoning Plan amended

The TPB has announced amendments to the approved Cha Kwo Ling, Yau Tong, Lei Yue Mun OZP. The amendments involve the following:-

- 1) The rezoning of a site at the junction of Pik Wan Road/Ko Chiu Road from "Government, Institution or Community" to "Residential (Group A)";
- 2) The rezoning of a site at Lei Yue Mun Path from previously mainly falling within "Government, Institution or Community" zone to "Residential (Group A) 6";
- 3) The rezoning of a site at the roundabout of Lei Yue Mun Path from previously mainly falling within "Green Belt" zone to "Government, Institution or Community"; and
- 4) Some sites are also zoned to reflect existing uses related to road/railway/highway-related facilities.

[*Town Planning Board Press Release*, 16/08/2013]

WEST KOWLOON CULTURAL DISTRICT (WKCD)

Train rumblings might annoy patrons of West Kowloon arts hub

Underground rumbling from passing trains might disturb patrons of facilities at the West Kowloon Cultural District ("WKCD"). An environmental impact assessment indicates that noise from two railway lines running under the arts hub will exceed the specified

maximum noise level for three key venues. An art critic added that vibration from these railway lines could cause an even bigger concern. The West Kowloon Cultural District Authority (“WKCD”) in response says that the problems will be offset by the design of the buildings.

It has been assessed that maximum noise levels from the West Rail line in the Xiqu Centre for traditional opera will reach 32 decibels, against a specified maximum level of 25 decibels. The Tung Chung Line will generate up to 56 decibels of noise at the M+ Museum and Lyric Theatre, against the specified maximums of 35 and 25 decibels respectively.

An engineer familiar with rail work commented that 56 decibels could be compared to the noise at construction sites without pile-driving, whilst 32 decibels should be relatively quiet. All three venues meet the requirements for continuous noise level, but not the maximum level.

The WKCD says ground-borne noise-control measures are incorporated into the designs and construction of the cultural facilities built above the railways. Given the railways' proximity to the arts hub, at-receiver noise and vibration control measures, such as building isolation or box-in-box installations, will be required in the design of relevant arts and cultural venues. It is added that there will entail no extra development costs for the WKCD.

On noise and vibration level concerns, some members questioned the appropriateness of the location of the M+ Museum. The Authority responded that the problems could be alleviated by improving the MTR tracks or laying noise-absorbing material in the venues. With either method, the cost should not be too high and should be shouldered by the Authority. The MTR says it would contact the Authority for more information on the issue.

[*South China Morning Post*, 14/09/2013]

WKCD abandons winning design

The WKCD has shelved the design which won the international competition for the master-plan for the 40ha WKCD. Forster + Partners' competition-winning City Park entry, will, however, not be adopted, despite its potential to transform Victoria Harbour's reclaimed edge into an important Asian hub for artistic exchange.

According to the WKCD, the government has decided to seek interest in an alternative approach that would transform the fully landscaped park into quality green open space with a cluster of modular arts and cultural facilities and 'pop-up' catering facilities, so that the Park could be delivered in much more compressed program. These facilities will include a modular theatre, a Black Box theatre and an outdoor stage.

[*ArchDaily*, 13/08/2013]

West Kowloon Cultural District could be downsized

Following construction of the first facilities in the WKCD, it is highly possible that the project will be downsized for pragmatic reasons.

The WKCD has committed to using the original HK \$21.6 billion in funds approved

by the Legislative Council to fund five anchor cultural facilities and a park. But, there is only a firm commitment to fund the first phase of construction: the Chinese opera centre; M+; the eastern portion of the West Kowloon park, including an arts pavilion to be used by M+; Freespace; a black box theatre and an outdoor stage in the form of an acoustic shell; and a supposedly temporary modular performance venue seating 1,200 people. Without any guaranteed future funding, which will have to be approved by the LegCo, the second phase of construction could be stuck in limbo.

The WKCD estimates that the project is likely to be downsized for pragmatic reasons. An early criticism by the arts community was that any planned cultural district should be allowed to grow organically. Facilities could be added to the site over time, as and when needed.

The lack of public transportation to the site itself is the main logistical obstacle to establishing the WKCD. The MTR owns a large area of the site near Austin Road to build its own infrastructure for the high-speed cross-border rail link. This was played down when the funding for the train project was passed by Legco.

It is suggested that the government may propose a longer timeframe to develop the site, similar to the arts community's original demand for an organic approach. This approach would provide a world-class museum, some smaller but useful performance venues and the possibility of an enlarged and magnificent harbourside park, all with the flexibility for change in the future.

[*South China Morning Post*, 09/07/2013]

HONG KONG BRIEFING

Artificial breach at Lung Mei

The group opposing the development of an artificial breach at Lung Mei in Hong Kong, *Save Lung Mei Alliance*, has applied for judicial review of the decision to allow the project to proceed.

The artificial beach proposal dates back to 2010 when the Environmental Protection Department and the Executive Council approved a permit to develop the beach at Lung Mei. The approval was soon challenged by an environmental protection group in Hong Kong based on Section 14(3) of the *Environmental Impact Assessment Ordinance* (Cap. 499) in 2012. After review, the Executive Council refused to revoke the permit. Then, the Civil Engineering and Development Department granted a work contract in June 2013 to Welcome Construction Limited for the construction work.

Failure to revoke the development permit has not discouraged the *Save Lung Mei Alliance*, which has recently lodged an application for judicial review of the project. The application was heard on 12th August 2013. *Save Lung Mei Alliance* argues that: (i) the permit was granted on the basis of a 2009 environmental impact assessment report that included inaccurate information without taking into consideration the project's impact on an endangered seahorse, *hippocampus kuda*; (ii) the assessment was misleading and inaccurate by stating the ecological value of

marine life around Lung Mei area was not high; and (iii) the assessment failed to mention there were other rare species, including fingered dragonet fish and longhorn cowfish at Lung Mei.

Justice Au Hing-cheung has reserved his decision.

[*The Standard*, 13/08/2013]

Country parks or accommodation?

An official committee reviewing long-term housing policy has announced that the government plans to build 470,000 public flats in the next ten years. In view of the limited land supply in Hong Kong, Development Secretary Paul Chan Mo-po wrote on his blog that Hongkongers should discuss whether public housing should be built in our country parks.

Chan's blog shocked environmentalist in Hong Kong. Former Observatory director Lam Chiu-ying, who helped C.Y. Leung formulate environmental policies in his election manifesto, described the idea of developing country parks as a "cancer cell". However, Chan's suggestion was backed by the Long Term Housing Strategy Steering Committee. Committee member Lau-ping Cheung said use of country parks for public housing could be discussed because the concept of country park planning is not an "absolute science".

However, Director of Planning Ling Kar-kun stressed the importance of country parks in Hong Kong and that other options could be considered first, such as rural land and conservation areas. Committee member Michael Choi Ngai-min agreed with the idea that other options could be considered, such as vacant farmland and the green belt. The recent debate reflects a need for a balance between conservation and residential construction.

[*South China Morning Post*, 16/09/2013]

Tai Long Sai Wan judicial review

Tai Long Sai Wan villagers successfully applied for legal aid to challenge the government's plan to include their Sai Kung homes in a proposed Sai Kung East Country Park. The plan is to designate 17 hectares of land in Sai Kung as country park, including privately owned sites in Sai Wan Village.

Villagers fear that once their homes are included in the country park, building of new houses within the area will become increasingly difficult, as new building will require approval from the Country and Marine Park Board. During the public consultation period, the Board did receive objections to the plan. The plan was finally endorsed because the Board considered that including the Tai Long Sai Wan area in the park would enhance overall park management and protect the natural landscape of the scenic beach and its surroundings.

North Sai Kung Rural Committee vice-chairman Joseph Mo Ka-hung said the villagers hope to file the application for a judicial review before the end of September and he hopes that the plan will be withdrawn before the outcome of the judicial review. Heung Yee Kuk chairman Lau Wong-fat said the New Territories indigenous inhabitants' body would support the villagers' action.

In September 2013, former Commissioner of Police Tang King-shing was named the new chief of the Board. He was asked if he would support the continued expansion of country parks such as the case of Tai Long Sai Wan in Sai Kung. Tang replied that "How we did things in the past does not mean that we must do the same nowadays. We should actively look at what the problem really is, its context and what other considerations we need to take into account."

[*South China Morning Post*, 27/08/2013 and 11/09/2013]

Hong Kong's PM2.5 levels six times above WHO standards

Earlier this week, Hong Kong experienced very high levels of air pollution, due to a continental airstream associated with Tropical Cyclone Trami that was pushing air down from the mainland.

On Wednesday, Clean Air Network's monitoring station in Sheung Wan showed PM2.5 levels that were nearly six times higher than the World Health Organisation (WHO)'s recommended standard, at 121 ug/m³ (The WHO's recommended 24-hr average level is 25 ug/m³).

Roadside stations in Central, Causeway Bay and Mong Kok registered "Very High" Air Pollution Indexes on Thursday morning.

[*Clean Air Network*, 23/08/2013]

Central-Wan Chai Bypass to cut through Victoria Park

Many studies have shown that urban vegetation can affect air quality through lowering temperatures and improving energy efficiency in buildings, and also by producing oxygen and absorbing noxious air pollutants.

A 2011 study by HKUST revealed that green lungs, such as Victoria Park, dramatically reduce nitrogen dioxide levels in the surrounding area. So what would happen if a slip road for the new Central-Wan Chai Bypass were to be built right into the park?

Work on the highway was approved in 2009, but district councilors and government advisors did not appear to be aware that the bypass would cut into Hong Kong's largest urban park.

Development plans show that the highway would reduce the park's size by 20,000 square feet and strip it of 350 trees; 250 trees will be transplanted within the park and another 40 will go to other sites in the bypass project. However, 60 trees will simply be cut down and even the transplanted trees could face obstacles in being comfortably accommodated, given that Victoria Park is crowded enough as it is.

[*Clean Air Network*, 23/08/2013]

Ta Kwu Ling landfill leak

Effluent from Ta Kwu Ling, which might contain a high level of ammonia, has leaked from a rubbish dump in North District into nearby rivers and contaminated water used by farmers for irrigation. The leak occurred after a supposedly impermeable layer at the base of a holding lagoon at the landfill was damaged which allowed contaminated leachate to seep into the Kong Yiu Channel which flows into the Shenzhen River and

then to Deep Bay, where the Mai Po nature reserve is located. The leak was first reported by the contractor on 28 July 2013 but was only disclosed by the government in late August 2013.

Officials said that a few farmers were using water from the concrete-lined channel for irrigation, and the leak was dammed and some effluent was diverted into waste pools, whilst the remainder had been transferred in trucks to an off-site treatment plant operated by the Drainage Services Department.

Professor Jonathan Wong Woon-chung, a waste specialist with Baptist University, said the impact of the leak is difficult to measure without knowing the scale of it. He added that landfill effluent, usually containing a high level of ammonia and low level of oxygen, would hurt vegetation and soils. Professor Wong commented that there might be a question as to the construction quality of the lagoon.

At least two water samples were collected outside the landfill. One, taken on 29 July 2013, contained raised levels of pollutants that were still within the legal limit. But another one taken on 5 August 2013 exceeded the limit. Inspection was conducted following the leak at two other landfills, Tuen Mun and Tseung Kwan O, and no irregularities were found.

[*South China Morning Post*, 29/08/2013]

Plan to evict residents in To Kwa Wan

A tenement on Kai Ming Street in To Kwa Wan is considered unsafe by the Buildings Department. Residents of the tenement have to move out of their homes within three weeks to allow further investigation of the tenement's main structure. In addition, the Buildings Department will strengthen structural supports of balconies and the main structure of the tenement, and will separate the balconies from the main structure to prevent residents from using the fragile structures.

A Buildings Department spokesman described that plan as "less disturbing to residents" because the new plan defers the demolition of the balconies until the Department completes the investigation; and if the balconies and the main structure are found to be dangerous, they can be demolished them in one go.

Although the plan is described as "less disturbing", residents are not promised assistance with relocation under this new plan. Residents are angry that they have been given short eviction notice and they vowed to resist the closure order obtained by the Department.

The Urban Planning Authority chairman Victor So Hing-woh visited the site on 29th August 2013. If the Authority is to step in and compensate residents, they will not have to move back to the tenement until the whole block is pulled down. If the Authority does not, residents will have to move back and wait for the result of the investigation.

[*South China Morning Post*, 30/08/2013]

Removing old buses will save lives

Replacing Hong Kong's ageing buses with those meeting newer, more stringent emission standards could help save hundreds of lives, a study shows.

The study, published in the peer-reviewed *Journal of Benefit-Cost Analysis*, says that 1,260 lives can be saved in the next 13 years if the city's 5,170 buses built to Euro I, II and III standards are replaced now with cleaner Euro V models.

At an estimated cost of HK\$15 billion split evenly between the government and bus operators, the bus replacement would generate HK\$26 billion in "net economic benefits" for Hong Kong by 2026, including lower hospital costs and regained productivity, the study says. The government already plans to phase out all pre-Euro V buses within 18 years and under this plan Euro IV models would stay on the roads in the meantime.

Leung arrived at his figure by calculating the decrease in mortality rate per decrease in air pollutants such as nitrogen dioxide, which is toxic by inhalation, and PM10, fine air particles which can penetrate deep into the lungs. His work was based on 2010 study by the Boston-based Health Effects Institute, which found natural-cause mortality in Hong Kong to increase 0.9 and 0.6 per cent respectively for every nitrogen dioxide and PM10 increase of 10 micrograms per cubic meter of air. He used Hospital Authority data, which recorded an average of 39,900 deaths from natural causes between 2008 and 2010.

Seventy per cent of Hong Kong's franchised bus fleet are Euro II buses or lower. Euro II buses alone can emit twice as much nitrogen dioxide and PM10 as Euro V buses, Leung said.

The Hedley Environmental Index estimated there were at least 195 premature deaths and 400,000 doctor visits last month and eight million doctor visits in 2011 as a result of bad air.

[*South China Morning Post*, 17/09/2013]

Laws put rare fish at risk

The laws protecting biodiversity in Hong Kong are outdated and in urgent need of review to save rare species in the wild, says a University of Hong Kong report.

Rare native fish are particularly at risk as none of the five ordinances related to animal protection provide legal protection for them, adds the report by the Faculty of Law, *A Review of Hong Kong Wild Animal and Plants Protect Law*.

Amanda Whitfort, an associate professor in the department, said the government was responsible for protecting native species. "The paradise fish is surely one of the rare local species that should be put on the list of protected animals under the Wild Animals Protection Ordinance but in fact it is not," she said.

Sham Chung, Sai Kung, is the most important habitat for the fish, but plans for a golf course put in under threat for years.

The Wild Animals Protection Ordinance, last reviewed in 1996, lists 22 categories of animals under protection – none of which are fish. *The Fisheries Protection Ordinance* regulates fishing methods only. It was revised last year to ban trawling.

The Marine Parks Ordinance protects eight categories of animals, most of which are also

covered under the *Wild Animals Protection Ordinance*. Likewise, the *Marine Parks Ordinance* makes no mention of fish.

"When you go into detail, the legislation empowers [the Director under] the *Fisheries Protection Ordinance* to list marine species under protection, but this has not been done," Whitfort said.

In addition, the *Forest and Countryside Ordinance*, last revised in 1993, lists 27 rare plants for protection – but only when they grow on government land.

The report suggests the creation of a new list for all types of threatened animals and plants, including freshwater fish, marine fish and invertebrates. This would be regularly reviewed and the data used to update the lists of protected species under the relevant ordinances.

Professor Whitfort said the report had been submitted to the Agriculture, Fisheries and Conservation Department yesterday. A department spokeswoman said the bureau was preparing a Biodiversity Strategy and Action Plan.

[*South China Morning Post*, 18/19/2013]

Scrapping polluting diesel vessel

The Environment Bureau will introduce a scheme to phase out more than 80,000 pre-Euro IV commercial diesel vehicles in three phases, excluding franchised buses, in accordance with the vehicles' emissions standards. In addition, renewal of vehicle licence will not be allowed for those operators of old diesel vehicles the emissions of which are regarded as carcinogenic by the World Health Organisation.

The scheme was previously reviewed and a revised scheme may be implemented. Under the revised scheme, owners of the vehicles who wish to replace or scrap their old vehicles may receive subsidies. The subsidies may be raised from 30 percent to 40 percent of cost of replacement. The timetable to phase out the vehicles in three phases may also be postponed by one year to 2017, 2018 and 2020.

Despite the increase in the subsidies amount, operators are concerned that they will not be able to afford new vehicles even with the subsidies. There are also concerns how an individual operator could continue to make a living under the scheme. The government might also need to seek extra funding from Legco to implement the revised scheme. Despite all the concerns, the revised scheme will be tabled in Legco for discussion on 2nd October 2013.

[*South China Morning Post*, 18/09/2013]

ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

Summary of minutes of the 193rd Meeting of the Advisory Council on the Environment held on 17 June 2013

Briefing by the Secretary for the Environment on the "Blueprint for Sustainable Use of Resources 2013-2022"

Members were briefed on the major initiatives in the *Blueprint for Sustainable*

Use of Resources 2013-2022 (the Blueprint) published in May 2013. Comments on the Blueprint made at the meeting included:-

1. It would be more appropriate for the government to give the Blueprint to ACE for discussion before releasing the document to the community. It was explained that the Council had been consulted on different components of the Blueprint, e.g. food waste, municipal solid waste (MSW) charging, landfilling and incineration during recent years. The Blueprint incorporates ACE's views and sets out an inter-related waste management strategy and presents a comprehensive system of waste reduction, charging, handling, treatment and disposal.
2. The waste reduction target is too conservative compared with other Asian cities. It was pointed out that waste reduction could be higher if MSW charging could be advanced to 2015. Another member agreed that the government should implement the MSW charging in Hong Kong as soon as practicable.
3. A member suggested the government consider providing compensation or financial incentives to solicit support of local residents in accepting waste treatment facilities. The government could explore the idea of sorting wastes on a district basis, e.g. group the existing 18 district councils into 3-4 geographical constituencies, and provide subsidies for each constituency to have its own waste handling facilities in the area.
4. In regards to MSW charging, a cap-and-trade system was recommended using the "polluter pays" concept. Parties who generated less pollution could sell their quota to the "more polluting parties" at a profit. The setting up of Community Green Stations (CGSs) by non-governmental organisations (NGOs) instead of private contractors was another option to create more drive to save the environment.
5. The government pointed out that the success of other Asian cities in reducing waste had been due to the introduction of waste infrastructure in parallel, coupled with having extensive farming industries to make use of resources generated from food waste. The situation in Hong Kong could not be compared directly with these cities, but the government is confident that it can achieve a coherent waste management policy. The government will keep an open mind on compensation and inventive proposals to parties affected by waste treatment facilities. On MSW charging, the government has engaged the Support Group to the Council for Sustainable Development (SDC) to draw up details of the scheme.
6. The government plans to set up CGSs in five geographical constituencies at the initial stage. Each CGS will incorporate green building designs as a model for others to follow. The green stations will be the logistical hub for recycling operations, where NGOs could liaise with local communities, such as residential estates, schools and commercial and industrial establishments to collect recyclables for processing. CGSs could shoulder part of the logistics costs for businesses in the recycling sector. Secondly, CGSs would play a role in public education and community engagements by reaching out to local residents, schools and community groups.
7. The government mentioned that the selection of NGOs to operate CGSs will be through open tender. Connections with local organisations and experience in operating other recycling centres will be an advantage for selection. NGOs interested in running CGSs will be briefed in the upcoming months.
8. Amember updated ACE on the progress of the SDC's Waste Charging Focus Group (Focus Group). It was pointed out that the cap-and-trade idea had some pertinent issues to be sorted out before implementation, e.g. whether there should be a minimum level of waste to be exempted from MSW charging, and whether the charging fees should be imposed per household or per building. The Focus Group will include relevant questions in the Invitation for Response (IR) document to collect views from the community.
9. A member said that the recycling of newspaper, paper products and aluminium beverage cans is viable, but not plastic and wood products. The government suggested setting up a local recycling chain and allowing the industry to become a sustainable business. The government should also review the effectiveness of the three-coloured recycle bin system and the role of recycling businesses.
10. A member considered that a 40% reduction per capita in waste generation was not an easy target to achieve. With the three landfills having a limited remaining lifespan of 2-6 years, it was important for the government to have a macro view of the whole waste management strategy and secure support of the community for the plan to succeed.
11. On waste recycling, the current financial model should be reviewed. Firstly, the recycling industry in Hong Kong was not paid for treating the waste and the trade could not sustain operations on its own. Secondly, Hong Kong's recycling industry largely focused on collection and packaging of waste for export for treatment. Local recyclers should get more involved in the initial processing and treatment of waste. Thirdly, the government has assumed the coordinating role for recycling and has commissioned consultants/contractors to perform the work. This outsourcing system has discouraged market competition. The government should devolve its role to the recyclers, who would in turn encourage the setting up of inter-related industries in Hong Kong on their own. The government said it would implement some Producer Responsibility Schemes (PRS) and the Waste Electrical and Electronic Equipment (WEEE) scheme to support recycling.
12. There have been cases where NGOs applying for funding for environment-related initiatives were rejected as they were registered as a social welfare

organisation under HAB. These NGOs gave up and turned to the Community Chest for funding as they were unclear about which government funds would be appropriate for applying funding requests. A lot of NGOs were willing to undertake environment-related initiatives but were confused as to the sources of potential funding. The government replied that it was reviewing the priority areas under the ECF as a result of the new injection of funding and would announce the new arrangements.

13. To address the concerns of Tsung Kwan O residents in relation to the proposed extension of the SENT landfill, the government had put in place measures which include: reducing the tipping area; putting up a Posi shell to cover the site; cleaning refuse collection vehicles and trucks in and out of the landfill; cleaning roads leading to the landfill; introducing mobile deodorisers; and tapping landfill gas. The waste collection trade will also be required to retrofit their refuse collection vehicles with tailgates and sunk tanks.
14. The government assured Members that ACE has always been the Administration's principal advisory body on environmental policies. The Blueprint had outlined the inter-related policy initiatives in a comprehensive manner, and each of the components are drawn up after extensive public engagements. ACE supported landfill extensions on the basis that Hong Kong needed landfills as an integral part of the overall waste management strategy. As for the establishment of the proposed incineration plant, the government had also gone through an intensive process of selecting the right incineration technology and consulted ACE which supported the moving grate technology.
15. The meeting concluded that ACE in general supported the proposed extension of the landfills as an integral part of the Blueprint, on the understanding that only C&D waste would be deposited in the SENT Landfill, and that other necessary measures will be taken by the government to tackle odour and dust problems.

Retrofitting franchised buses with selective catalytic reduction devices (ACE paper 8/2013)

Members were briefed on the government's plan of retrofitting selective catalytic reduction (SCR) devices on Euro II and III franchised buses. Some points arising from that meeting are:-

1. A member welcomed the government's initiative to control the emission of nitrogen oxides. However, he expressed concern that the retrofit proposal requires a substantial financial outlay. The government was asked if it would consider expediting the phasing out of Euro II & III franchised buses, which could help reduce emissions more effectively, instead of retrofitting them with SCR, which would incur additional fuel consumption.
2. In response, the government said it is planning to retrofit buses which will have two or more years of serviceable

life after retrofit. The installation and product costs of a SCR device were estimated to be totally about \$250,000 per piece with a 5-year serviceable life. In comparison, the cost of a new Euro V bus was about \$3 million. The reduction of NOx level by 63-81% after retrofitting would provide great environmental benefits. It was expected that the nitrogen dioxide level would meet the new Air Quality Objectives by 2020.

3. A member inquired whether the government would consider accelerating the retrofitting programme with initial funding application to replace buses with two years of remaining serviceable life first to maximise economic benefits of the programme.
4. The government explained that the present retrofitting programme was aggressive in view of the number of franchised buses to be retrofitted each year. The government has been liaising with franchised bus companies to identify qualified potential suppliers to take part in the retrofitting programme. The pre-qualification exercise was essential as it could ensure that the SCR devices selected will operate properly and bus service will not be compromised due to the retrofit.
5. The government says that operating costs of franchised bus companies were only one of the six factors to be considered under the Fare Adjustment Arrangement for franchised buses. The anticipated impact of fare increase arising from the retrofit proposal should be minimal. The government agreed that while it would bear the capital cost of installing SCRs, franchised bus companies would take up the subsequent costs of replacing the SCR filters and the related operational/maintenance costs.
6. In response to a Member's enquiry on the emission performance of retrofitted buses, the government indicated that there was little impact on the level of respirable suspended particulates, carbon monoxide and hydrocarbon. No significant level of ammonia slip was experienced during the trial programme.
7. The committee concluded that members were in support of the retrofit proposal.

CLIMATE CHANGE

Global warming leads to less rainfall in the future

In a recent edition of the journal *Nature*, researchers predict that global warming caused by man's greenhouse gas emissions will result in less rainfall in the future. Less precipitation also means an average increasing incidence of droughts. This finding is contrary to the experience in the Medieval Warm Period, during which increased solar radiation caused temperatures to rise at the same time as average rainfall.

Researchers explained in their report why man-made warming will cause less rainfall. Greenhouse gases are heat-absorbing. The gases stay in the layers of atmosphere and narrow the usual temperature difference between layers. A more stable atmosphere will be less conducive to rain.

Nevertheless, precipitation prediction is a global average which does not provide an estimate for rainfall levels in a particular region.

[*South China Morning Post*, 01/02/2013]

United Nation projects to curb global warming

Atmospheric carbon dioxide concentration has hit a record high this year. In view of this, UN's Intergovernmental Panel on Climate Change will publish an updated report on the physical basis of climate science.

The report will assess the feasibility of geo-engineering projects which include two main measures to curb global warming, namely carbon dioxide removal and solar radiation management.

Carbon dioxide removal can be achieved by various measures ranging from fertilising oceans with iron to encouraging the growth of plankton, which would absorb carbon dioxide and using chemicals to capture carbon dioxide directly from the air, then storing it in the sea or under ground.

Solar radiation management includes measures such as putting a giant mirror in space to reflect sunlight away from the earth, injecting sulphate particles or aerosols into the stratosphere, or salting clouds to produce more droplets of water which makes clouds appear whiter and brighter to reflect solar radiation.

Some concerns have been raised in relation to solar radiation management. First, the proposed management measures are expensive. For instance, shooting aerosols into the stratosphere could cost between US\$1 billion and US\$8 billion a year according to a study by US researchers last year. Second, if management measures were started but then terminated, there are high possibilities that temperatures would then rise rapidly.

[*Financial Times*, 20/09/2013]

United Nation stark warning over global warming

The UN Intergovernmental Panel on Climate Change has issued the fifth assessment report on the physical science of climate change. Scientists warn that humanity will cause global temperatures to rise by more than 2 degrees Celsius compared to pre-industrialisation inaction levels. Burning of fossil fuels and deforestation leads to warming around the globe. Land surfaces, oceans and the atmosphere are all affected.

The report reveals that humanity has emitted about half a trillion tonnes of carbon by burning fossil fuels over the past 250 years. It is expected that another half trillion tonnes will be released in the next few decades. This will increase the atmospheric carbon dioxide concentration and thus global temperatures.

Different measures have been suggested to curb global warming. The most direct measure is to reduce burning of fossil fuels, discussion of which will form the focus of the 2015 UN meeting. Other measures include theoretical geo-engineering projects, such as carbon dioxide removal and solar radiation management.

[The Guardian, 21/09/2013]

Marine life moves towards the poles

New research shows that rising ocean temperatures have pushed marine life to the poles at a rate of 7km per year. Surprisingly, land species are moving towards the poles at the lower rate of 6km per year, even though land temperatures have risen faster than ocean temperatures.

Study researcher Dr Christopher Brown, a post-doctoral research fellow at the University of Queensland, said that the study covered a wide variety of species, from plankton and ocean plants to predators such as seals, seabirds and big fish. He suggested reasons to account for the difference between marine and land species' migration. Marine life is able to move vast distances. Land animals can move to hills and valleys while land surface temperatures are changing. Therefore, marine life tends to move faster to the poles than land species.

Temperature change shortens winter and affects breeding patterns and plankton blooms now take place earlier than normal. This brings changes in marine life in oceans around the globe and across all different food chains. Temperature increase also endangers species like barnacles and shellfish, which are constrained to live on the coast, and in the worst cases causes extinction. Climate change not only adversely affects marine life but also humanity, said Dr Brown. For example, fisheries might need to move their ports to keep track of the species they would like to catch.

[The Guardian, 05/08/2013]

Greening of Greenland

Greenland is an autonomous country within the Kingdom of Denmark. Over three-quarters of the land on Greenland are covered by ice sheet. Scientists predict that climate change will turn Greenland green by 2100.

At the moment, there are only four indigenous tree species found on Greenland. However, researchers have concluded that a majority of 44 selected species of North America and European trees and bushes will probably flourish on Greenland in the future. Climate change will transform Greenland into a forest by the end of the century.

However, greening of Greenland will seriously impact its ecosystem. First, it will lead to a loss of Arctic animals and plants. Second, non-native flora species flourishing will disrupt and prevent the growth of local species.

Nevertheless, the transformation may bring commercial benefits to Greenland. For instance, it may provide new opportunities for Greenlanders in tourism and agriculture.

[The Guardian, 28/08/2013]

Toughest warning yet on warming

Scientists are meeting this week to prepare the strongest warning yet that climate change is man-made and will cause more heat waves, droughts and floods this century unless governments take action.

Scientists and officials from up to 195 governments convened in Sweden yesterday

to edit a 31-page draft that also tries to explain why the pace of warming has slowed this century despite rising human emissions of green-house gases. Their meeting continues until Thursday.

The *Intergovernmental Panel on Climate Change* (IPCC) will present an edited, summary report on Friday as a main guide for governments, which have agreed to work out a United Nations deal by the end of 2015 to avert the worst impacts. IPCC drafts say that human activities, primarily the burning of fossil fuels, are "extremely likely" – at least a 95 percent probability – to be main cause of warming since the 1950s. The likelihood is up from 90 per cent in the last report in 2007 and 66 per cent in 2001. "...there is high confidence that this has warmed the ocean, melted snow and ice, raised global mean sea level, and changed some climate extremes," the draft says of man-made warming.

Most impacts are projected to get worse unless governments sharply cut greenhouse gas emissions, it says. The report, by 259 authors in 39 countries, is the first of four due in the next year by the IPCC.

Governments trying to boost weak global economic growth have focused relatively little on climate change since failing to agree a UN deal at a summit in Copenhagen in 2009.

Scientists predict temperatures could rise by up to 4.8 degrees Celsius this century, but could be held to a rise of 0.3C if there were deep cuts in greenhouse gas emissions. Governments have promised to limit a rise in temperatures to 2 degrees C above pre-industrial times.

The draft report also says that sea levels, which rose 19cm in the 20th century, could rise by an extra 26cm to 81cm towards the end of this century.

[South China Morning Post, 24/09/2013]

REGIONAL & INTERNATIONAL

CHINA

Beijing implements new air pollution measures

The Chinese government has been increasingly alarmed by social unrest caused by environmental disasters and threats to public health, often the result of breakneck industrial expansion and mass migration to new cities.

Previously Beijing has tried everything to battle severe air pollution, from shutting factories to developing a massive subway system, but there has been little apparent beneficial effect. Beijing has now implemented new measures to reduce the density of harmful particles in the air by at least 25 percent by 2017, including:

- limiting the number of new vehicles on the roads and closing or upgrading the facilities of 1,200 companies;
- restricting the number of vehicles allowed in specific areas during certain times of the day, starting in 2014;
- placing tougher restrictions on the number of new vehicles allowed on the roads each year, which is intended

to curb annual increase in vehicle number to nearly zero;

- capping the number of vehicles in the city at six million as at the end of 2017, compared with 5.35 million as at the end of July 2013;
- reducing total vehicle fuel consumption by at least 5 percent from 2012 by promoting the sale of new energy and small vehicles;
- encouraging people to drive less frequently

China's Automobile Association said that besides Beijing, Shanghai and Guangzhou were already subject to new car sales restrictions, whilst eight more cities planned to follow suit.

Other measures to be introduced in Beijing include ordering 1,200 polluting companies to upgrade or close some or all of their facilities by 2016. In regions or industries which fail to meet air pollution reduction targets, no new projects that emit major air pollutant will be given regulatory approval as of 2013. Companies in breach of environmental laws will be banned from receiving bank loans or fund-raising through initial public offerings, and will be denied value-added tax breaks, beginning this year.

[Reuters UK, 02/09/2013]

Guangdong coastal water quality is declining

Pollution in Guangdong's coastal waters continued to worsen in 2012, especially in the Pearl River Delta, which has affected offshore water quality in Hong Kong. The *Oceanic Environment Report 2012* revealed that 6.5 percent of the province's offshore water was rated "poorer than category four" last year. That was about a percentage point worse than that in 2011. Most of the category four water is concentrated in the Pearl River estuary.

The report further revealed that 910,000 tonnes of pollutants generated on land had been discharged into Guangdong's coastal waters last year. Twenty-six thousand tonnes of pollutants found at 28 monitored dumping spots had exceeded permissible pollution-discharge standards by 34 percent.

Sixteen red tides occurred in Guangdong last year, mainly in the waters of the Pearl River, Daya Bay, Dapeng Bay and waters around Zhanjiang. This is the most in five years. There are approximately 10 red tides per year in the province.

Four major industrial polluters named in the report were: state-owned Guangzhou Paper Group; Jialian Leather (China); Jiangmen City Hongjie Fine Chemical; and Guangdong Zhanhua Corporation Group.

Professor Ho Kin-chung, dean of the School of Science and Technology at The Open University of Hong Kong said that offshore water quality in Hong Kong's western and southern waters had worsened due to consistent high pollution levels found in the Pearl River every year. As a result, water quality around Tuen Mun, northern Lantau Island, Stanley, Clear Water Bay and Lamma Island has deteriorated. The deterioration had been particularly obvious in southern Hong Kong over the past decade, with total nitrogen rising consistently when the Pearl River was at its dirtiest.

[South China Morning Post, 16/05/2013]

Water and greenery for pedestrians in Qianhai special zone

Landscape architect Patrick Lau Hing-tat, who is from Hong Kong, is drafting the planning guidelines of the Qianhai special economic zone in Shenzhen. He said that rivers will be created and emphasis will be placed on the pedestrian environment. A network of waterways and green space would be drawn up first, and other infrastructure would be built around it. There will be a split of 50/50 between building space and greenery in developments near major waterways. As a result, pedestrians will be walking by the riverside under the shade of trees instead of walking close to vehicle emissions.

Mr. Lau's company, Earthasia Design Group, was also involved in the landscape designs for the Hong Kong Disneyland site and the Beijing Olympic Village.

Qianhai will span more than 15 square kilometres of reclaimed land. It will have three commercial districts intertwining with three artificial rivers. These rivers are continuations of the natural waterways flowing from the nearby mountains. About 20 parks will be distributed throughout the core areas of the financial centre. Wetland habitats will also be created to attract birds and insects. "Rain gardens" will help retain storm water for irrigation and link buildings within the districts. The channels will be accompanied by tree-lined walkways and bicycle tracks, whilst cars and trucks will be kept to the opposite riverbanks. Rivers Rain gardens are likely to reduce surface run-off and stress on the drainage system, and they will also lower air temperatures.

Mr. Lau commented that with creativity, the greening requirement will not cost developers any floor space. For example, a building can be split and the atrium can be turned into a piece of lawn. Vertical and rooftop gardens will also add to the green effect.

[*South China Morning Post*, 26/8/2013]

Coal is China's pollution problem

The visible effect of pollution in China is undeniable. Recently, in a two weeks period in Beijing, the city was covered by a hazy layer of grayish white smog. Air quality came in at around 300. According to the EPA, levels between 301 and 500 are considered "hazardous", meaning people should avoid all outdoor activity. Essentially, it's like breathing in the fumes from a forest fire. (For comparison, Boston's air quality is about 45.)

It appears that China, the world's largest producer of atmospheric carbon dioxide – accounting for nearly a quarter of global emissions – is starting to take this issue more seriously. In spring, the *Financial Times* reported that China is considering an absolute cap on carbon emissions in advance of the climate talks in Paris in 2015, though officials later stressed they were nowhere near a decision. The cap would be a remarkable policy shift for the country, which for years has resisted international efforts to limit greenhouse gas emissions, claiming that they unfairly thwart the economic growth of developing countries.

In China, coal is king. Chinese gross domestic product as a share of global GDP hovers around 14 per cent. But China's coal

consumption is 47 per cent of world consumption. As a source of energy, coal is cheap and widely available. It is also terrible for the environment. Coal plants are one of the top sources of carbon dioxide emissions, the primary cause of global warming. Burning coal is also a primary cause of acid rain, smog and toxic air pollution.

It's easy to say that China ought to shift towards renewable energy, such as solar, wind or hydroelectric power. The problem is that diversifying energy sources is always a relative concept. Renewable energy sources draw a lot of attention in the US, but in reality they represent only a small share of consumption. The share is even smaller in China. One case in point: while China is a major producer of solar panels, it hardly uses them at all.

The fact is that an absolute cap on carbon emissions holds the most promise for effectively easing China's reliance on coal and reducing its carbon footprint. There is no way to achieve this, however, without the country making dramatic changes to its growth strategy. It's a politically and economically complicated task, but it can be done. To achieve this, China must be committed to the following fundamental reforms:

- (1) China must stop its obsession with GDP growth. It is clear that blindly encouraging industry and consumption in ways that damage the earth and degrade the air is unsustainable, not to mention unhealthy and unnecessary.
- (2) China must change how it promotes political officials. Traditionally, they advance on the basis of how well they drive GDP growth. It has become the *de facto* measure of government achievement. This needs to change.
- (3) China needs to give more power to the private sector. This sector tends to be more energy efficient than the state sector because, generally speaking, private enterprises are concerned about costs and their future viability.
- (4) China should change the cost of capital. Cheap capital has been critical to China's emergence. But there are steep costs to this approach. The absurdly low interest rates offered by China's banks are, in effect, a tax on savers and a subsidy for industry. When capital is this cheap, it leads to overinvestment. And where you overinvest, you overuse energy.
- (5) China must strengthen its regulatory laws. Government enforcement remains a critical part of this solution. China must regulate private companies to ensure they uphold environmental laws.

[*South China Morning Post*, 02/10/2013]

JAPAN

Japanese radioactive leaks are serious

The rating of a leak of radiation-contaminated water at the tsunami-wrecked Fukushima Dai-ichi nuclear plant has been upgraded to a "serious incident" on an international scale by Japan's nuclear regulator. The Nuclear Regulation Authority, following consultation with the International Atomic Energy Agency ("IAEA"), raised the rating from Level 1 – an "anomaly" to Level 3 – a "serious incident".

The ratings are designed to inform the international community, and changing them does not affect efforts to clean up the leak by the government and plant operator Tokyo Electric Power Co ("TEPCO"). TEPCO has recovered some water that leaked from the tank, but contaminated water may have reached the sea through a rainwater gutter.

Hundreds of tanks were built by TEPCO to hold radioactive water, some of which was ground water, but hundreds more tonnes of contaminated water were believed to be entering the sea each day. Tonnes of water were sprayed into the reactors to cool them. TEPCO has struggled to contain the result and waste water. Japan's industry minister said that the government would take over clean-up efforts.

The 2011 Fukushima disaster was rated the maximum of 7 on the IAEA's International nuclear and Radiological Events Scale, the same as the 1986 Chernobyl accident.

[*Times*, 28/08/2013]

TAIWAN

Taiwan plans tortoise sanctuary

Taiwan plans to set up its first tortoise sanctuary, officials said. The new sanctuary will be established in October at the Feitsui Reservoir outside Taipei.

[*South China Morning Post*, 16/09/2013]

GERMANY

Increasing water pollution from coal mining

Greenpeace has led a campaign to halt an expansion of lignite mining in the German state of Brandenburg by the Swedish energy company Vattenfall because the iron content in the Spreewald waterways has increased despite recent efforts by the government to control it. Vattenfall has announced plans to develop brown lignite coal strip mines in Lausitz and intended to mine 204 million tonnes of brown coal at the site through 2050.

The waterways are recognised by the United Nations Educational, Scientific and Cultural Organisation as a Biosphere Reserve. They are a haven for storks, otters and dragonflies, and for many centuries have been used by the traditional Slavic inhabitants for small farmsteads. The waterways have been discoloured by reddish-brown sludge flowing from former East German lignite mines abandoned in the Lausitz region decades ago.

The Brandenburg state parliament approved a plan to combat the rusty discolouration of the River Spree in January and worked with the neighbouring state of Saxony to achieve this. Measures included the re-commissioning and construction of pit water purification systems and new management of a dam at Spremberg. A network of measurement points was created.

However, Niklas Schinerl, Greenpeace energy expert, commented that the measures were not enough to stem the tide of iron oxide flowing into the Spreewald system. Furthermore, Vittenfall's plan to open five new lignite mines in Brandenburg's Lausitz region would endanger the Spreewald and other waters for around 100 to 150 years. Therefore those plans must be shelved in order to preserve the Spreewald, located 60 miles southeast of Berlin.

The Brandenburg Ministry of Economic supported the Vattenfall expansion and disputed the findings of rising iron content in the Spreewald waterways of Greenpeace, alleging that their measurements were off-base.

[United Press International, 28/08/2013]

MONGOLIA

Government faces environmental challenge

Travel 13 kilometres north of Ulan Bator's city centre and you will find a new front in Mongolia's battle to develop the country: a gigantic tree nursery.

Operated by international tree-growing specialists, *Tree Global*, the nursery is capable of producing half a million trees a year, with potential for many more, and forms part of a newly conceived effort to put the country's environment at the forefront of policymaking. The challenge will be in encouraging a mining-focused economy to adopt measures to improve the environment but which do not contribute to the bottom profit line.

Covering 1.56 million square kilometres and regarded as a country of outstanding natural beauty, Mongolia has a sparsely populated landscape which is pockmarked by areas of degradation following decades of loosely regulated mining and industry.

In recent years, environmental impacts from ongoing urbanisation have also been felt, with sanitation, heating and transport infrastructure over-whelmed by demand. After last year's election and change of government, a Ministry of Environment and Green Development was created and elevated to one of four super ministries.

The government says that while "the country is overall in a relatively good environmental position, we face air pollution, river pollution, soil pollution, with mining, especially the large number of small-scale operations inherited from the 1990s. [There are] 600-plus sites that are degraded."

The impact is keenly felt in Ulan Bator, where many homes lack central heating and, during the sub-zero winter months, residents resort to burning scavenged rubbish and construction materials, resulting in noxious smoke and some of the worst air quality in Asia.

A World Bank study found residents' exposure to harmful PM2.5 particles was, on average, 10 times higher than Mongolian air quality standards. The burning of wood also contributes to deforestation, which exacerbates soil erosion and desertification in a steppe country where topsoil layers are thin and at risk.

Various initiatives are being implemented to tackle the problems. The package of reforms includes a series of incentives and penalties for misuse of water and waste disposal as well as tax benefits for firms investing in green technology. It also includes the introduction of environmental audits for mining projects and restrictions on mining activities.

By the end of this year, the government hopes to have a draft proposal ready for parliament that will upgrade overall environmental standards for mines. The goal is to reach European Union-level compliance.

[*South China Morning Post*, 25/09/2013]

MADAGASCAR

Sonar oil search causes whale deaths

Prospectors searching for undersea oil with a noisy high-frequency sonar probably caused the deaths of 75 melon-headed whales that stranded themselves off Madagascar, experts have concluded.

An independent panel of scientists found that sonar surveying by ExxonMobil in late May 2008 led to the sudden displacement of about 100 whales, of which at least three-quarters died.

The researchers described a "highly unusual event" in which whales became stranded in shallow waters in the Loza Lagoon system in northwest Madagascar in May and June of 2008. The culprit was named as a high-power, 12 kilohertz multi-beam echosounder system, or MBES, operated by an Exxon-Mobil vessel on 29 May about 65 kilometres offshore from the first known stranding.

The five-member scientific review panel said the vessel's MBES was "the most plausible and likely behavioural trigger for the animals initially entering the lagoon system". The sounds would have been "clearly audible over many hundreds of square kilometres of melon-headed whale deep-water habitat areas".

High-frequency echo sounders are often used to map the ocean floor and can be dangerous to smaller whales and dolphins, while the air-gun blasts that follow are lower frequency and may endanger large whales, according to NGO *Oceana*.

The evidence was compiled by the International Whaling Commission, the US Marine Mammal Commission, the US National Oceanic and Atmospheric Administration, the US Bureau of Ocean Energy Management, ExxonMobil, the International Fund for Animal Welfare, the Wildlife Conservation Society and the government of Madagascar.

[*South China Morning Post*, 28/09/2013]

WORLD

Illegal fishing is widespread

Illegal harvesting of ocean fish, i.e. seafood caught illegally and not reported to authorities or outside environmental and catch regulations – represents as much as US\$10 billion (HK\$77.6 billion) to US\$23 billion in global losses each year, non-profit conservation group *Oceana* estimated last month.

For example, the volume of shark fins traded in Hong Kong suggests that three to four times more sharks are being killed than official reports say; US\$292 million to US\$476 million worth of shark fins are sold each year in Hong Kong. As pirated fish are sold on black markets, specifics of the economic impact are tough to decipher. However, Washington-based *Oceana* looked at the records of fish catches country by country as reported to the United Nations, then compared those statistics to seafood sales in various world markets.

The report indicated that the illegal fish trade could account for 11 million to 25 million tonnes of seafood harvested each year, which is a minimum of 20% of the seafood catch worldwide.

Fishermen who comply with legal standards can also lose business when they sell in the same market as illegal operators who do not follow environmental or sanitary standards, the report found.

Illegal fishing targets some of the most expensive species, including: shrimp; fugu pufferfish; lobster; whole abalone and sea urchin. Penalties imposed on those caught fishing illegally are often a fraction of potential profit, the report found. It estimated also that the illegal trade threatens 260 million jobs dependant on marine fisheries.

[*Reuters News*, July 2013]

Members of ADVOCASIA



An Association of Asian Commercial Law Firms

Sydney, Australia

COLIN BIGGERS & PAISLEY

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

Brisbane, Australia

COOPER GRACE WARD

Level 21, 400 George Street
Brisbane
QLD 4000
Australia
Tel: (61) 7-3231-2444
Fax: (61) 7-3221-4356

Perth, Australia

KOTT GUNNING

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

Melbourne, Australia

MADDOCKS

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

Adelaide, Australia

NORMAN WATERHOUSE

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

Macau

**ANTÓNIO RIBEIRO BAGUINHO - LAWYERS
AND PRIVATE NOTARIES**

Av. da Amizade
555, Edif. Landmark
ICBC Tower, 13 Floor, Room 1308
Macau
Tel: (853) 28788128
Fax: (853) 28705351

Hong Kong, China

FRED KAN & CO.

Suite 3104-07, Central Plaza
18 Harbour Road
Hong Kong
Tel: (852) 2598-1318
Fax: (852) 2588-1318

Baotou City, China

JIANZHONG LAW FIRM

The Middle Part of Jianshe Road
Baotou, Inner Mongolia
P.R.China
Tel: (86) 472-7155473
Fax: (86) 472-7155474

Beijing, China

JINCHENG TONGDA & NEAL LAW FIRM

10th Floor, China World Tower
No. 1 Jianguo Menwai Avenue
Beijing 100004
China
Tel: (86) 10 5706 8585
Fax: (86) 10 8515 0267

Qindao, China

QINDAO LAW FIRM

22/F, Northern Tower, Golden Square
20 Hong Kong Road(M),
Qingdao, P.R.China
Postal Code 266071
Tel: 86-532-85023100
Fax: 86-532-85023080

Shanghai, China

SHANGHAI UNITED LAW FIRM

14/F, China Insurance Building
166 East Lujiazui Road
Shanghai, P.R. China
Postal Code 200120
Tel: (86) 21-68419377
Fax: (86) 21-68419499

Mumbai, India

DHRUVE LILADHAR & CO

61/62 Free Press House, 6th Floor
215, Free Press Journal Marg
Nariman Point
Mumbai 400 021
India
Tel: (91) 22-6760-6000
Fax: (91) 22-6760-6001

New Delhi, India

O.P. KHAITAN & CO.

Khaitan House B-1,
Defence Colony, New Delhi-110 024
India
Tel: (91) 11-4650-1000
Fax: (91) 11-2433-7958

Jakarta, Indonesia

ALFREDO ASSOCIATES

Mega Plaza 2nd Floor, Zone B
Jalan H. R. Rasuna Said Kav. C-3
Jakarta 12920, Indonesia
Tel: (62) 2-1527-9109

Tokyo, Japan

SOGA LAW OFFICE

2F, Yotsuya Y's Bldg.
7-6 Honshiocho Shinjuku-ku
Tokyo 160-0003
Japan
Tel: (81) 3-5919-3022
Fax: (81) 3-5919-3350

Kuala Lumpur, Malaysia

CHEANG & ARIFF

39 Court @ Loke Mansion
No. 273A, Jalan Medan Tuanku
50300 Kuala Lumpur, Malaysia
Tel: (603) 2691-0803
Fax: (603) 2693- 4475

Auckland, New Zealand

HESKETH HENRY

Private Bag 92093
Auckland
1142, New Zealand
Tel: (64) 9-375-8700
Fax: (64) 9-309-4494

Manila, Philippines

HERRERA TEEHANKEE &

CABRERA LAW OFFICES

5th Floor, SGV II Building
6758 Ayala Avenue
Makati City 1200, Philippines
Tel: (63) 2-813-7111
Fax: (63) 2-840-5555

Singapore

JOSEPH TAN JUDE BENNY LLP (JTJB)

No. 6 Shenton Way,
#23-08,
DBS Building Tower Two
Singapore 068809
Tel: (65) 6220-9388
Fax: (65) 6225 7827

Colombo, Sri Lanka

D.N. THURAIRAJAH & CO.

No. 16/3, Sulaiman Terrace
Colombo 00050
Sri Lanka
Tel: (94) 1-1250-3314
Fax: (94) 1- 1250-3313

Bangkok, Thailand

APISITH & ALLIANCE

57 Park Ventures Ecoplex, 9th Floor
Unit 907 Wireless Road, Lumpini
Pathumwan
Bangkok 10330
Thailand
Tel: (66) 2108-2860
Fax: (66) 2655-2265

Dubai, United Arab Emirates

LUTFI & CO.

901 Al Attar Business Tower

Sheikh Zayed Road

Dubai, United Arab Emirates

Tel: (97) 14-3798-298

Fax: (97) 14-3798-689

Ho Chi Minh City, Vietnam

LUATVIET ADVOCATES AND SOLICITORS

19th Floor Vincom Center

72 Le Thanh Ton Street

Ben Nghe Ward

Dist 1, Ho Chi Minh City

Vietnam

Tel: (84) 8-3824-8440

Fax: (84) 8-3824-8441

**Convictions under environmental legislation:
August to September 2013 (October 2013 data
not available)**

**[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:

August 2013

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

Three of the convictions were under the Air Pollution Control Ordinance, 10 under the Noise Control Ordinance, 1 under the Product Eco-responsibility Ordinance, 9 under the Waste Disposal Ordinance and 1 under the Water Pollution Control Ordinance.

The heaviest fine in August was \$30,000, assessed against a company that used powered mechanical equipment otherwise than in accordance with permit conditions.

September 2013

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

Five of the convictions were under the Air Pollution Control Ordinance, 2 under the Noise Control Ordinance, 13 under the Waste Disposal Ordinance and 1 under the Water Pollution Control Ordinance.

The heaviest fine in September was \$30,000, assessed against a company that installed furnaces without authorisation.

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