

As earth's wildlife species disappear at an alarming rate, Hong Kong continues unabated its significant contribution to this environmental tragedy. In this edition we consider recent alarming data which paint a grim wildlife picture.

The Editors

CONTENTS

FEATURE:	Page	Living Pl
WHAT HOPE FOR OUR WILDLIFE?	. 1	for Natur beings an climate c
TOWN PLANNING	. 3	Drawing summary
WEST KOWLOON CULTURAL DISTRICT (WKCD)	5	on the "I caring hu largely in protection Agricultu
HONG KONG BRIEFING	6	Key elem
ADVISORY COUNCIL ON THE ENVIRONMENT		"If you w it's not p Harvestir
(ACE)	8	Let's loo The answ
CLIMATE CHANGE	8	wild anin
REGIONAL & INTERNATIONAL	11	Weigh al serve us.
PROSECUTION STATISTICS		Between animals o were 40 y

WHAT HOPE FOR OUR WILDLIFE?

Living Planet Report 2018: Aiming Higher, produced by World Wildlife Fund (WWF) and Let's Work for Nature, is a chilling reminder (although it should not be needed) of the environmental havoc human beings are causing, both through direct exploitation of earth's sensitive ecosystems and over-arching climate change.

Drawing on key findings in the report, an Australian environmentalist, Jane Rawson, has provided a stark summary of the drastic, selfish and senseless impact human activities in the past 40 years or so have had on the "public face" of our ecosystems: the wild life. It makes chilling reading for any fair-minded, caring human inhabitant of the planet we share with wild life, and should be compulsory reading for the largely ineffective and/or misguided or dishonest bureaucrats who run the world's environmental protection agencies, such as Hong Kong's comatose Environmental Protection Department (EPD) and Agricultural, Fisheries and Conservation Department (AFCD).

Key elements of Ms. Rawson's article (The Australian, 15th September 2018) are as follows.

"If you weigh every backboned animal on land, you get the biomass of terrestrial vertebrates. (I know it's not physically possible but, for more on how it is calculated, read Vaclav Smil's 2013 book, Harvesting the Bioshpere: What We Have Taken from Nature.)

Let's look at that biomass today. What is the ratio of humans, domesticated animals and wild animals? The answer is shocking: 65 per cent domesticated animals, 32 per cent humans. Less than 3 per cent is wild animals.

Weigh all the vertebrates on land and 97 per cent of that weight is us and the animals we've invented to serve us.

Between 1970 and 2012, according to the World Wildlife Fund, the population of non-human vertebrate animals on Earth dropped by 58 per cent. There are half as many individual non-human animals as there were 40 years ago. The human vertebrate population, in that time, doubled. Lose an Irrawaddy dolphin, get a human; lose a mountain pygmy possum, get a human; lose a Siberian tiger, get a human; lose a kakapo, get a human; lose a forest elephant, get a human; lose a Philippine eagle, and so on.

The WWF report Living Planet (is that sarcastic?) tells us "a billion fewer birds inhabit North America today compared to 40 years ago. In Britain, certain iconic species have fallen by 90 per cent. In Germany, flying insects have declined by 76 per cent over the past 27 years. Almost half of Borneo's orangutans died or were removed between 1999 and 2015. Elephant numbers have dropped by 62 per cent in a decade, with on average one adult killed by poachers every 15 minutes."

The report goes on. By 2020 (tomorrow, basically), the animal population will have dropped by almost 70 per cent.

Let's pretend for a minute that we're talking about the human population. Imagine if, between 1970and 2020, the human population dropped by two-thirds. All those people gone. We would suspect something had gone wrong. We even might try to do something about it.

There is only the tiniest whisper of wildness left on the landmasses of this planet and it is on the brink of gong silent. Everything - all of it - will soon be us. This news is just awful. But does it matter? What I mean is, does it matter so much that we will do anything about it?

For most people, this problem is invisible. The causes are so much a part of our modern way of life. The potential solutions are radical. While we think wild animals are important for all sorts of reasons, there's a chance we will figure out a way to carry on without them.

In 2016, Nature published a paper looking at the various threats to threatened species. Sean Maxwell and his co-authors wanted to know whether climate change was the biggest risk. They looked at 8688 species. Of those, 6241 are threatened by "overexploitation": we are killing too many of them or harvesting too many of the things they need to survive. Logging is killing 4049 of them (the swift parrot, for example); hunting, 1680 (snow leopards); fishing, 1118 (the southern bluefin tuna). Many creatures, including Asia's incredible pangolins, are dealing with more than one of these things. The forest they live in is being cut down and they are being hunted.

Coming in a close second is agricultural activities. More than 5400 species are on the brink thanks to farming. Crops are pushing 4692 of them out of their homes (far eastern curlews); livestock farming affects 2267 of them (northern hairy nosed wombats); timber plantations and aquaculture threaten others.

It is not just the space we've taken up, it's the chemicals used to keep down pests and the lack of habitat for insects that other species rely on to survive.

Birds are particularly affected by agriculture: 74 per cent of 1469 globally threatened birds are in a bad state because of the land we use to grow crops and the methods we use to keep those crops alive.

If we're not growing food where their food once was, we're knocking over the houses of wildlife to build our own. Urban development threatens 3014 species.

The report's researchers found that climate change is causing problems for 1688 species, with its droughts, its storms, its extreme temperatures.

So what kills animals? Everyday human activity. The stuff that keeps us alive and the stuff that makes our lives worth living. And the stuff we do even though it makes none of us happy (war, which threatens 121 species).

There are things we could do to put the brakes on this carnage. The main one would be to let non-human animals have half the Earth's landmass just for them. We could still keep half.

Considering that we're one species and they're – well, no one really knows, but let's say about 31,000 species, if we are talking about vertebrates that live on land – then half for them and half for us seems, if not fair, at least fairer than us having the 75 per cent we now inhabit. (If we were to limit ourselves to a 31 thousandth of the land mass, we'd get Bali. Bali's nice, but it might be crowded.)

Scientists and environmental groups have put forward proposals for how this might be done – which parts of the earth could be restored to habitat, and how and when – the ecology of it all.

The question is, how do we get humans to agree this is a good idea?"

China's insatiable appetite for endangered and threatened species is the single most significant direct consumption threat to the survival of many species of wild life. Habitat loss and climate change are the most serious general causes of the rampant destruction of a vast range of fauna and flora.

Hong Kong is not a large geographical area, but unfortunately it punches above its weight in the league of environmentally destructive communities. An example is our continuing trading and local consumption of shark fins (why does the government not simply ban shark fins from dinner menus?), while trading in ivory has not yet been stopped.

Despite overwhelming scientific evidence of the demise of fauna and flora species world-wide, which has been available long before the *Living Planet Report*, the EPD and AFCD have a poor record of initiating and enforcing robust conservation measures. As said, shark fins are still freely imported and traded, and the ban on ivory trade – which the government reluctantly only recently agreed to – will not be imposed for another year at least. [Why on earth would any half civilised administration deliberately delay a ban which should have been implemented decades ago?]

Hong Kong's six marine parks occupy less than 1% of our territorial seas. For years the AFCD has said it is considering the possibility of creating more marine parks, but, as per usual with the AFCD, nothing has actually happened!

Most of Hong Kong's once extensive coral gardens have been substantially destroyed. On land, the AFCD has done little to eradicate invasive species: e.g. pigs, buffalo, deer etc. Indeed, in their ecological ignorance, they recently released in country parks wild pigs (which are not native to Hong Kong and are extraordinarily destructive of ecosystems they invade) caught in urban areas.

On another environmental front, on 1st November 2018, the Environment Minister announced that 'the long awaited waste disposal charging scheme will not be implemented until at least 2020 - more than 16 years since the government announced it would introduce such a scheme to help combat our enormous waste problems, and years after other developed economies have implemented such schemes.

It took many years to convince the AFCD (or, government) to ban trawling, which is an obviously highly destructive fishing method. Why? As usual, the delay was due to business interests (the fishing industry, not property developers this time) which in their selfish ignorance and perceived self-interest, lobbied against the ban.

Conclusion

The depressing list of examples of the EPD's and AFCD's systemic inertia is a lengthy one, which we cannot adequately address here. It is a forlorn hope, but perhaps the directors of these departments might be moved by *Living Planet* to at least consider working more resolutely towards justifying their *raison d'être*: protecting and conserving the environment!!

Tong Yan San Tsuen Outline Zoning Plan approved

On 14 September 2018, the Chief Executive in Council approved the draft Tong Yan San Tsuen Outline Zoning Plan (the "OZP").

The Planning Scheme Area of the OZP, covering approximately 647 hectares, is bounded by Castle Peak Road - Hung Shui Kiu to Ping Shan Sections to the north, Yuen Long New Town and Tai Tong area to the east, Lam Tei and Yick Yuen area to the west and the range of hills leading to Tai Lam Country Park to the south.

Specified Zones are:-

- 3.32 hectares are zoned "Comprehensive Development Area" for comprehensive development for residential use with the provision of open space, (1)commercial and other supporting facilities;
- (2) 22.69 hectares are zoned "Residential (Group A)" for high-density residential developments, including two sites for public housing developments;
- (3) 61.93 hectares are zoned "Residential (Group B)" for residential developments;
- 12.78 hectares are zoned "Residential (Group C)" for residential developments; (4)
- 48.19 hectares are zoned "Residential (Group D)" for residential developments; (5)
- 59.86 hectares are zoned "Village Type Development" to designate both existing recognised villages and land suitable for village expansion; (6)
- 14.80 hectares, are zoned "Industrial" for general industrial development; (7)
- 10.51 hectares are zoned "Industrial (Group D)" for industrial development; (8)
- (9) 4.75 hectares are zoned "Open Storage" for open storage purposes;
- 0.44 hectares are zoned "Petrol Filling Station" to reflect existing petrol filling stations; (10)
- 14.35 hectares are zoned "Government, Institution or Community" primarily for the provision of government, institution or community facilities serving (11) the needs of local residents and/or a wider district, region or the territory;
- (12)1 hectare is zoned "Open Space" for the provision of outdoor open-air public space for active and/or passive recreational uses;
- (13) 101 hectares to the west of Kung Um Road are zoned "Undetermined" to cater for the continuing demand for open storage, which cannot be accommodated in conventional godown premises;
- 129.22 hectares are zoned "Green Belt" to define the limits of urban and sub-urban development areas and to contain urban sprawl as well as to provide (14)passive recreational outlets; and
- (15)129.11 hectares are zoned "Conservation Area" to protect and retain the existing natural landscape, ecological or topographic features.

[Town Planning Board Press Release, 14/09/2018]

Lam Tei and Yick Yuen Outline Zoning Plan approved

On 26 October 2018, the Chief Executive in Council approved the draft Lam Tei and Yick Yuen Outline Zoning Plan (OZP).

The planning scheme area of the OZP covers about 474.93 hectares of land in the southwestern part of the North West New Territories. It is bounded by Hung Shui Kiu New Development Area and Yuen Tau Shan in the north, Tan Kwai Tsuen in the northeast, Tai Lam Country Park in the east and southeast, the Tsing Shan Firing Range in the west, Fu Tai Estate, Tsz Tin Tsuen and Po Tong Ha in the south.

Specified Zones are:-

- (1)0.69 hectares are zoned "Commercial";
- (2)6.99 hectares are zoned "Comprehensive Development Area" for comprehensive development/redevelopment of the area for residential use with the provision of commercial, open space and other supporting facilities; 9.54 hectares are zoned "Residential (Group B)" for suburban medium-density residential developments;
- (3)
- (4) 2.52 hectares are zoned "Residential (Group C)" for low-rise and low-density residential developments;
- 20.36 hectares are zoned "Residential (Group D)" for improvement and upgrading of existing temporary structures in the rural area to permanent (5)buildings;
- 11.56 hectares are zoned "Residential (Group E)" primarily for phasing out existing industrial uses through redevelopment for residential use; (6)
- 102.78 hectares are zoned "Village Type Development" to reflect existing recognised and other villages and provide land suitable for village expansion (7)and reprovisioning of village houses affected by government projects;
- 5.78 hectares are zoned "Government, Institution or Community" to provide a wide range of government, institution and community facilities; (8)
- (9)1.93 hectares are zoned "Open Space" for outdoor open-air public space for active and/or passive recreational uses;
- 29.66 hectares are zoned "Other Specified Uses" for specific uses including quarry, refuse transfer station as well as petrol filling station; (10)
- 110.68 hectares are zoned "Green Belt" to define the limits of urban and suburban development areas and to provide passive recreational outlets; and (11)
- 152.43 hectares are zoned "Conservation Area" to protect and retain the existing natural landscape, ecological or topographical features of the area. (12)

[Town Planning Board Press Release, 26/10/2018]

Lau Fau Shan and Tsim Bei Tsui Outline Zoning Plan approved

On 26 October 2018, the Chief Executive in Council has approved the draft Lau Fau Shan and Tsim Bei Tsui Outline Zoning Plan (OZP).

The planning scheme area of the OZP covers about 677.74 hectares in the north western corner of the North West New Territories. The southern boundary is demarcated by Sha Kong Wai, the Hung Shui Kiu New Development Area Tin Shui Wai New Town, Ng Uk Tsuen and Yuen Long Industrial Estate, whilst the north is bounded by Deep Bay.

Specified Zones are:-

- 4.27 hectares are zoned "Commercial/Residential" for commercial and/or residential developments; (1)
- 8.33 hectares are zoned "Residential (Group C)" for low-rise and low-density residential developments; (2)
- (3)5.70 hectares are zoned "Residential (Group D)", which is intended primarily for improvement and upgrading of existing temporary structures in the rural area to permanent buildings;
- (4)11.89 hectares are zoned "Residential (Group E)" primarily for phasing out existing industrial uses through redevelopment for residential use;
- (5) 53.26 hectares are zoned "Village Type Development" to designate both existing recognised villages and areas of land considered suitable for village expansion;
- 3.38 hectares are zoned "Government, Institution or Community" to provide a wide range of government, institution or community facilities; (6)
- (7) 36.41 hectares are zoned "Recreation" for development of active and/or passive recreation and tourism/eco-tourism;

- (8) 81.82 hectares are zoned "Other Specified Uses" for specific uses including comprehensive development and wetland enhancement as well as a helicopter landing pad;
- (9) 203.21 hectares are zoned "Green Belt" to define the limits of urban and suburban development areas and to provide passive recreational outlets;
- (10) 78.41 hectares are zoned "Conservation Area" to conserve the ecological value of the wetland and fish ponds in the Deep Bay Area;
- (11) 55.99 hectares are zoned "Coastal Protection Area" to conserve, protect and retain the natural coastlines and the sensitive coastal natural environment; and
- (12) 77.91 hectares are zoned "Site of Special Scientific Interest" covering the mangroves at the coastal areas of Tsim Bei Tsui and Inner Deep Bay, and the Tsim Bei Tsui Egretry.

[Town Planning Board Press Release, 26/10/2018]

Ping Shan Outline Zoning Plan approved

On 26 October 2018, the Chief Executive in Council approved the draft Ping Shan Outline Zoning Plan (OZP).

The planning scheme area of the OZP covers approximately 355.82 hectares in the western part of the North West New Territories. It is bounded by Tin Shui Wai New Town and Hung Shui Kiu New Development Area in the west, Castle Peak Road in the south, Yuen Long New Town in the east and the fish ponds in Lau Fau Shan and Tsim Bei Tsui in the north.

Specified Zones are:-

- (1) 25.09 hectares are zoned "Comprehensive Development Area" for comprehensive development/redevelopment of the area for residential use with commercial, open space and other supporting facilities;
- (2) 6.91 hectares are zoned "Residential (Group A)" for high-density residential developments;
- (3) 3.91 hectares are zoned "Residential (Group B)" for suburban medium-density residential developments;
- (4) 4.54 hectares are zoned "Residential (Group E)" primarily for phasing out existing industrial uses through redevelopment for residential use;
- (5) 86.08 hectares are zoned "Village Type Development" to reflect existing recognised and other villages and provide land suitable for village expansion and reprovisioning of village houses affected by government projects;
- (6) 19.32 hectares are zoned "Open Storage" to cater for the demand for open storage uses and to regularise the existing open storage uses in the area;
- (7) 12.73 hectares are zoned "Government, Institution or Community" to provide a wide range of government, institution or community facilities;
- (8) 3.46 hectares are zoned "Open Space" for outdoor open-air public space for active and/or passive recreational uses;
- (9) 37.17 hectares are zoned "Recreation" for recreational developments for the use of the general public;
- (10) 61.24 hectares are zoned "Green Belt" to define the limits of urban and suburban development areas and to provide passive recreational outlets;
- (11) 70.23 hectares are zoned "Conservation Area" to protect and retain the existing natural landscape, ecological or topographical features of the area; and
- (12) 1.68 hectares of land are zoned "Other Specified Uses" to facilitate provision of complementary heritage and cultural tourism related facilities or uses.

[Town Planning Board Press Release, 26/10/2018]

Ha Tsuen Fringe Outline Zoning Plan approved

On 26 October 2018, the Chief Executive in Council has approved the draft Ha Tsuen Fringe Outline Zoning Plan (OZP).

The planning scheme area of the OZP covers about 341.15 hectares of land in the western part of the North West New Territories. It is bounded by the Hung Shui Kiu New Development Area and the Kong Sham Western Highway in the east, Lau Fau Shan and the coast of Deep Bay in the north, Tsing Shan Firing Range in the west and Yuen Tau Shan in the south and southwest.

Specified Zones are:-

- (1) 17.35 hectares are zoned "Residential (Group D)" for improvement and upgrading of existing temporary structures in the rural area to permanent buildings;
- (2) 1.56 hectares are zoned "Government, Institution or Community" for provision of government, institution or community facilities;
- (3) 50.35 hectares are zoned "Agriculture" to retain and safeguard good quality agricultural land/farms/fish ponds for agricultural purposes;
- (4) 16.34 hectares are zoned "Green Belt" to define the limits of urban and suburban development areas and to provide passive recreational outlets;
- (5) 123.22 hectares are zoned "Conservation Area" to protect and retain the existing natural landscape, ecological or topographical features of the area; and
- (6) 30.27 hectares of land along the Deep Bay coast stretching from Sha Kong Tsuen to Ngau Hom Sha are zoned "Coastal Protection Area" to conserve, protect and retain the natural coastlines and the sensitive coastal natural environment.

[Town Planning Board Press Release, 26/10/2018]

Tin Shui Wai Outline Zoning Plan approved

On 26 October 2018, the Chief Executive-in-Council approved the draft Tin Shui Wai Outline Zoning Plan (OZP).

The planning scheme area of the OZP covers approximately 406.23 hectares in the north western part of the North West New Territories. It is bounded by the Inner Deep Bay Site of Special Scientific Interest and Tin Tsz Road to the northeast and east, Mong Tseng Tsuen and Mong Tseng Wai to the north, Lau Fau Shan to the northwest, Hung Shui Kiu New Development Area to the west and Sheung Cheung Wai to the south.

Specified Zones are:-

- (1) 3.44 hectares are zoned "Commercial", which is intended primarily for commercial developments;
- (2) 13.98 hectares are zoned "Comprehensive Development Area" for comprehensive development/redevelopment of the area for residential use with commercial, open space and other supporting facilities;
- (3) 101.6 hectares are zoned "Residential (Group A)" for high-density residential developments;
- (4) 37.78 hectares are zoned "Residential (Group B)" for medium-density residential developments;
- (5) A site zoned "Undetermined" with an area of 1.86 hectares had been developed into a residential development;
- (6) 27.91 hectares are zoned "Government, Institution or Community" to provide a wide range of government, institution and community facilities;
- (7) 42.69 hectares are zoned "Open Space" for outdoor open-air public space for active and/or passive recreational uses;
- (8) 5.86 hectares are zoned "Other Specified Uses" for specific uses including Light Rail terminus, sewage pumping station, electric sub-station, telephone exchange, bus depot and bus terminus;
- (9) 61.52 hectares covering the Hong Kong Wetland Park Special Area are zoned "Country Park"; and
- (10) 3.75 hectares are zoned "Conservation Area" to protect and retain the existing natural landscape, ecological or topographical features of the area.

[Town Planning Board Press Release, 26/10/2018]

On 26 October 2018, the Chief Executive in Council approved the draft Tseung Kwan O Outline Zoning Plan (OZP).

The planning scheme area of the OZP, covering approximately 718 hectares, is located at the southern part of Sai Kung District. It is bounded by Clear Water Bay Peninsula to the east, Junk Bay to the south, the Lam Tin and Sau Mau Ping areas to the west, and Tseng Lan Shue and Hong Kong University of Science and Technology to the north.

Specified Zones are:-

- 38.72 hectares are zoned "Comprehensive Development Area", which is intended for comprehensive development including an MTR depot, an MTR (1)station, associated property development and supporting community facilities as well as comprehensive redevelopment for low-density residential use;
- (2)20.07 hectares are zoned "Commercial/Residential";
- 152.23 hectares are zoned "Residential (Group A)" for high-density residential developments; (3)
- 4.49 hectares are zoned "Residential (Group B)" for medium-density housing developments; (4)
- (5)
- 0.66 hectares are zoned "Residential (Group C)" for low-rise residential developments; 4 hectares are zoned "Residential (Group E)" to phase out existing industrial uses through redevelopment (or conversion) for residential use on (6) application to the Board;
- (7) 22.03 hectares are zoned "Village Type Development" to reflect existing recognised and other villages, and to provide land considered suitable for village expansion and reprovisioning of village houses affected by government projects;
- 142.56 hectares are zoned "Government, Institution or Community" to provide facilities serving the needs of the local residents and/or a wider district, (8)region or the territory;
- (9)190.8 hectares are zoned "Open Space";
- 65.85 hectares are zoned "Recreation" for active and/or passive recreational and tourism/eco-tourism uses; (10)
- 225.69 hectares are zoned "Other Specified Uses" for specific uses including a waterfront site reserved for water sports and recreational facilities, a pair (11)of finger piers for the berthing of recreational/pleasure vessels and kaidos, commercial/residential developments with public transport interchange, the Tseung Kwan O Industrial Estate, the deep-waterfront industry, a proposed desalination plant, a bus depot, an explosives store, petrol filling stations, the landing steps, the sewage treatment works, a cemetery, an underground desilting compound, and the proposed ventilation building for the Tseung Kwan O - Lam Tin Tunnel; and
- 753.06 hectares are zoned "Green Belt" to define the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as (12)well as to provide passive recreational outlets.

[Town Planning Board Press Release, 26/10/2018]

Kwun Tong (South) Outline Zoning Plan approved

On 9 November 2018, the Chief Executive in Council approved the draft Kwun Tong (South) Outline Zoning Plan (OZP).

The planning scheme area of the OZP, covering approximately 387 hectares, is located within the Kwun Tong District in East Kowloon. The planning scheme area can be separated into two main portions in terms of land use. The portion to the southwest of Kwun Tong Road is one of the major employment centres in the main urban area, i.e. the Kwun Tong Business Area (KTBA), which is under transformation to meet the changing needs of the non-polluting industrial and business sectors; whereas the portion to the north east of Kwun Tong Road and Lei Yue Mun Road is predominantly occupied by residential developments, particularly public housing estates.

Specified Zones are:-

- 46.82 hectares are zoned "Other Specified Use (Business)" to encourage the transformation of the area into a business district comprising a mixture of (1)commercial, office and non-polluting industrial uses;
- 1.21 hectares are zoned "Commercial (1)" to provide commercial facilities for the workers; (2)
- 5.06 hectares are zoned "Comprehensive Development Area (1)" and "(2)" for for residential, government and/or commercial uses with the provision of (3) open space and other community and supporting facilities;
- 137.73 hectares are zoned "Residential (Group A)" for private housing developments; (4)
- 14.46 hectares are zoned "Residential (Group B)" for public housing developments; (5)
- 44.93 hectares are zoned "Government, Institution or Community" to cater for the needs of the local residents and/or a wider district, region or the (6) territory;
- 41.43 hectares are zoned "Open Space" for both active and passive recreational uses; (7)
- 28.50 hectares are zoned "Green Belt"; and (8)
- (9) 67.26 hectares are reserved for road and nullah.

[Town Planning Board Press Release, 9/11/2018]

WEST KOWLOON CULTURAL DISTRICT

West Kowloon Cultural District to push boundaries on performances

When Alison Friedman, artistic director of performing arts at the West Kowloon Cultural District Authority (WKCDA), was asked how she would draw the line for artistic freedom, she replied that WKCDA is artistic-led and that the artistic is at the heart of the district. She says that when determining whether a play can be staged, her first questions would be whether it has a good script and who the creative team is.

At the same time, she admitted that the situation is uncertain. Although she has never been told she cannot stage a play that crosses the Chinese government's "red line", she would not give a firm answer on whether she may or not.

Ironically, Friedman noticed a lot more self-censorship in Hong Kong than in China. She said that includes an unwillingness to present anything that might not sell at the box office.

Friedman is driven by her belief in the ability of the arts to bring people together and generate understanding. She believes that it is important to have empathy at this moment of our worlds and she hopes that art can act as a bridge and help people see more nuances and different sides of things, and to reduce fear of the unknown.

It is her team's mission to push the boundaries as far as what may or may not be shown in Hong Kong and they have already made their mark at the Hong Kong International Black Box Festival in October. The programme line-up includes *MDLSX*, a play which explores the fluidity of gender, and *Five Easy Pieces*, which features child actors talking about a Belgian paedophile and murderer.

Of the seven performing arts venues planned for the West Kowloon Arts District, only three have finishing dates. They are the Xiqu Centre, the Freespace black box theatre and the Lyric Theatre complex. But Friedman's team has already set up partnerships with musicians and will soon hire a head of music.

[SCMP, 29/10/2018]

The 27th Meeting of the Consultation Panel of the West Kowloon Cultural District Authority: Update on the development of the Xiqu Centre

The Xiqu Centre, designed to be a world-class platform for the conservation, promotion and development of Chinese traditional opera with over 1,300 seats, will announce its grand opening on 20 January 2019.

The West Kowloon Cultural District Authority (WKCDA) will present the Cantonese opera classic, The Reincarnation of Red Plum ($\overline{\mu}$ textar ($\overline{\mu}$), which celebrates the 60th anniversary of its premiere and commemorates the 60th anniversary of the passing of the Cantonese opera playwright master, Tong Dik Sang; and marks the commencement of a three-month Opening Season.

A series of Spring Festival Showcase by the Hong Kong Cantonese Opera Chamber of Commerce (香港粵劇商會) will be presented in February 2019 to continue WKCDA's initiative of promoting xiqu during the Lunar New Year. The Opening Season will be concluded by a master selection of excerpts from award-winning artists of the renowned Plum Blossom Award Art Troupe of the Chinese Theatre Association (中國戲劇家協會 梅花獎藝術團) in March 2019.

Other WKCDA-produced special programming will be staged throughout the opening year. The facilities at the Xiqu Centre will be open for hirers' programmes after completion of the opening season in the first quarter of 2019.

[West Kowloon Cultural District Authority Paper, 15/11/2018]

HONG KONG BRIEFING

Typhoon Mangkhut fills up landfill

One month after Mangkhut, fallen trees and branches are still widely to be found around the city. Following the historical typhoon, the Development Bureau received over 50,000 reports of fallen trees and was still uncertain when all the tree waste will be cleared. The huge amounts of vegetation waste cover 10 hectares of the old Kai Tak runway. On 19 October 2018, the Environmental Protection Department confirmed that the waste was to be sent to a landfill.

However, workers on the site reported that over 7,000 tonnes of wood waste, equivalent to 78 per cent of the annual amount of green waste in Hong Kong's three landfills, had been dumped at West New Territories Landfill in Nim Wan since 28 September. The department said that the collection area will be closed "at a suitable juncture" when the tree waste will have to make way for Kai Tak's development. After the collection area is closed, the department will send tree waste directly to landfills in Tuen Mun and Ta Kwu Ling.

Tree experts and green groups earlier criticised the government for its failure to handle the reusable wood properly. They raised concerns about a lack of policy and planning regarding waste vegetation. Tree expert, Professor Jim Chi-yung, blamed the failure to re-use the materials on several negative factors which include: not sorting the materials at source by tree part, size and nutrient content for potential use as compost; not selecting for potential timber use; and the mixing of materials with ordinary municipal waste by some contractors.

Professor Jim said that basic natural and ecological knowledge should be promoted by the government. For example, leaves and twigs should be collected and kept separately for composting and to make organic fertiliser and soil conditioner.

[SCMP, 21/10/2018]

Hongkongers say "no" to rubbish bins in countryside

An online survey conducted in September 2018 reveals Hongkongers' support for removing trash cans at camping, barbecue and picnic sites ranged from 45 per cent to 75 per cent. There were increases of between 7 and 16 percentage points in comparison with the figure of last year. The study was released by environmental group Green Power; 555 people in total responded to the study. The study was to coincide with the 26th Clean Up the World day organised by the United Nations.

The group suggested removing all rubbish and recycling bins at some picnic spots to encourage Hongkongers to pick up their own litter, and further submitted that the government "actively consider" suspending sales of non-environment friendly packaging, such as plastic-bottled beverages and disposable plastic tableware.

However, some citizens constantly report that public habits in waste disposal had remained "generally the same" for the past three years. They claim that these environment friendly ideas are "merely picking on the powerless like us" and the government's support should be more than just "paying lip service".

[SCMP, 21/10/2018]

Transport management and vehicle emissions

1. Phase out Euro IV diesel commercial vehicles by the end of 2023

CAN (*Clean Air Network*) welcomes the government's recently announced plan to phase out all Euro IV diesel commercial vehicles (DCV), which accounts for 23% of total DCV, by the end of 2023. Replacing all Euro IV DCV with Euro VI DCV would make significant improvement to roadside air quality. CAN urges the government to set up a timeline for electrification of commercial vehicles in HK. Full electrification should be achieved no later than 2040, with reference to London's timeline.

2. Electronic Road Pricing (ERP) Pilot Scheme details announced in the 1st half of 2019

CAN believes that the ERP pilot scheme can effectively discourage people from driving during peak hours and improve traffic congestion and roadside pollution.CAN recommends that the polluters-pay principle should be incorporated and adopted in the scheme, meaning that vehicles that emit more pollutants should pay a higher fare.

CAN opposes government decision to increase parking lot, especially for private cars in central business district. CAN believes the decision is contradictory to the policy objective of ERP, which aims at reducing vehicular demand in central business district during peak hours.

3. Retrofitting Euro IV and Euro V franchised buses with selective catalytic convertors

Since most selective catalytic convertors cease to function in 1.5 to 2 years, CAN believes that this captioned measure would have little effect on emission reduction. CAN urges the government to fully electrify all franchised buses no later than 2036. The Chief Executive should consider to expand current low emission zone and tighten emission requirement to zero-emission buses. CAN estimates that the introduction of zero-emission buses into low emission zone would be a net reduction of 650 tonnes of nitrogen oxides per year¹, which roughly amounts to total emission of nitrogen oxides of all private cars in Hong Kong.

Regional Ozone and VOC control

4. Collaborating with the Guangdong Provincial and Macao SAR Governments to include volatile organic compounds (VOC) as a regular monitoring parameter in the Pearl River Delta (PRD) Regional Air Monitoring Network

CAN supports all evidence-based policy recommendations. Monitoring the emission of VOC is only the first step of tackling the current high level of ozone. We believe that the Government should establish an emission reduction target for ozone in their study on "post-2020 air pollutant emission reduction targets and concentration levels for Hong Kong and Guangdong".

Marine pollution

5. Mandating vessels to use low sulphur fuel within Hong Kong waters starting January 2019

To align with international trend on emission control for vessels, CAN believes that Hong Kong should take the lead in the Pearl-River Delta region and continue to push for the use of fuel with less sulphur content, from 0.5% to 0.1%, which is in line with the timeline and regulation proposed by the International Maritime Organization.

6. Pilot scheme for local ferries to ascertain the viability of green technologies in the local context

CAN welcomes the captioned scheme. CAN has long been advocating for the development of on-shore power supply in Hong Kong. Electric ferries or green ferries using on-shore power would help reduce the air pollution exposed by people commuting by water.

[Can Newsletter, November 2018]

Obsession with "growth" blinds city to reality

The proposed artificial island off Lantau raises several important issues that the government and its advisers seem to be ignoring ("Hong Kong 'could make trillions of dollars' in Lantau reclamation deal", October 22).

The UN's latest Intergovernmental Panel on Climate Change report unequivocally states that we have just 12 years to reduce our carbon emissions by 45 percent to minimize severe climate disruption ("Hong Kong's annual global warming bill is HK\$22 billion", but do we have the will to pay it?", October 21).

Nasa cites 97 percent of actively publishing climate scientists as saying climate-warming trends over the past century are likely due to human activities.

The sixth mass extinction is well underway, with numbers of animals declining drastically worldwide, with pollinating and other insect-related numbers down 70 per cent, and bird numbers down 50 percent, in parts of Europe, mostly due to agricultural and development-driven habitat destruction.

Food will be negatively affected. And meat and fish consumption, along with the consumption of materials, will need to be drastically reduced, as will the creation of plastic waste.

The continued pursuit of ever-increasing economic growth under the current consumption model is, frankly, suicidal.

More practically, given there is a global shortage of sand, where will we get the millions of tonnes of sand needed for reclamation ("Funding for artificial island studies to be sought as Hong Kong officials press ahead with 'Lantau Tomorrow Vision'", October 18)?

Hong Kong remains fixated on growth and blind to reality. Please wake up.

[SCMP - letter from Richard Fielding, honorary professor, School of Public Health, University of Hong Kong, 26/10/2018]

Hong Kong's new energy vehicles need support from the government

According to government statistics in 2016, commercial vehicles --such as public transportation and goods trucks-- made up only 20 per cent of the of the total vehicle fleet, they still accounted for about 95 per cent of all vehicular emissions. These emissions include respirable suspended particulates and nitrogen oxide. The Environmental Protection Department admitted that the annual roadside nitrogen dioxide concentration was still at a level twice its Air Quality Objectives.

Despite the government's efforts to provide tax waivers and funds to support the use of electric commercial vehicles, their relatively short battery life and long charging time still make them unpopular. The department reported that the biggest challenge comes from taxi owners. Electric taxis take four hours to charge. One charge a day would never be enough.

However, Professor Hung Wing-tat, an adviser of the Hong Kong Society for Transportation Studies, claimed that providing more charging stations could be the solution and stations could be set up at places where taxi drivers change shifts. He said that the most important part is to find a place that is convenient for them to charge the cars. Meanwhile, he reiterated the need for government's strong participation in support of developing new energy vehicles for public transport.

¹ The emission factor of franchised buses is adopted from a EPD paper list below. Carol Wong. (2016). Recent Findings in On-board Vehicle Emission Measurement and Modelling in Hong Kong. Retrieved from <u>https://www.polyu.edu.hk/cee/MOVE2016/4c-04-WONG.pdf</u>

During the meeting of the Advisory Council on the Environment on 3 December 2018, council members suggested the government should push harder on replacing traditional commercial vehicles with electric vehicles, which have no tailpipe emissions.

[SCMP, 04/12/2018]

ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

Summary of Minutes of the 232nd Meeting of the ACE held on 8 October 2018

The main item of the meeting was to update progress on the promotion of the Charter on External Lighting.

Mr. Paul Wong, Principal Assistant Secretary for the Environment (Energy), Environment Bureau (ENB), briefed Members on the Progress Report in respect of the Promotion of the *Charter*, including the background and implementation progress of the *Charter*. He informed Members that proactive actions have been taken by the ENB to promote the *Charter*. At the same time, he advised Members that ENB had also re-organised the Working Group for the promotion of the *Charter*.

In response to a question regarding the effectiveness of the *Charter*, Mr. Wong advised that, as recommended in the task force's report to the government in 2015, the effectiveness of the *Charter* should be reviewed two years after its implementation. The recommendation has been accepted by the government by reorganising the Working Group into the WGEL in 2018. The WGEL will evaluate the effectiveness of the *Charter* and provide advises on measures to better manage external lighting.

In response to an enquiry on parameters for assessing the effectiveness of the charter, Mr.Wong said that the level of compliance of *Charter* participants could serve as one of the indicators. On-site compliance checks conducted in the past two years, indicate over 99% of the participants had met the pledge. A survey will also be conducted to assess public perception of external lighting. Overseas regimes and experience in regulating external lighting could also be studied in order to assess if these results might assist Hong Kong in dealing with the problem of external light pollution. However, the use of portable light sensing device has failed to record reliable and consistent readings, and WGEL will keep exploring options to objectively assess the effectiveness of the *Charter*.

Members also discussed complaints against external lighting. In response to Members' concern over light pollution in Hong Kong, Mr. Wong accepted that a survey of public perception of the extent of light nuisance and the *Charter* could be included as a part of the review of the *Charter*.

In respect of the energy use data, Mr. Wong stated that the amount of energy used by external lighting installations would be insignificant according to the findings of a consultancy study in 2009. Measures to minimise light nuisance to nearby residents should be the focus of the *Charter*. The EPD will relay the complaints regarding light nuisance caused by external lighting to corresponding responsible persons and invite those persons to sign up to the *Charter* and take appropriate measures to minimise negative impacts of their lighting installations. The EPD believes that positive response has been given by those persons in respect of its suggestions.

At the end of the meeting, a Member also suggested that the EPD provide ACE with a breakdown of complaints statistics to enable assess the validity of the complaints, the affected districts and timing of lighting nuisance. Mr. Wong told the members that an update will be provided to Members in due course, following the completion of the review of the *Charter*.

CLIMATE CHANGE

Diverse forests combat climate change

Forests with a diverse mix of trees can absorb more than twice as much carbon as areas with just a single species, research in Jiangxi has found -a discovery that could help in the fight against climate change.

More than 150,000 trees were planted on a hillside in the province in 2009 for the study. Sixteen tree species were planted on the Jiangxi hillside across 53 hectares. Over eight years, researchers found that an average of 32 tonnes of carbon was absorbed per hectare in the above-ground biomass, or living organisms, of the species-rich forest, according to the results published in *Science*. Single-species forests, in contrast, captured an average of only 12 tonnes of carbon per hectare.

The experiment near Xingangshan was the first involving a large cultivated forest to find out if a greater diversity of tree species led to increased greenhouse gas absorption, a process that can help to mitigate climate change.

More than 60 scientists from China, Switzerland and Germany were involved in the research, trying to prove a hypothesis based on observations in the field.

"By only observing natural forests, it was impossible to conclude that higher biodiversity was the cause of the higher productivity [absorption of carbon]," said Ma Keping, one of four lead authors of the study and a botanist with the Chinese Academy of Sciences.

"By planting 150,000 trees ourselves, we could control the conditions and prove that a forest with a large number of tree species is more productive than a monoculture.

Increasing the number of tree species in existing forests world-wide by 10 per cent could reduce carbon at a level that would cost US\$20 billion a year to achieve through other methods.

The experiment measured forest productivity by determining how much carbon was stored in the above-ground biomass in the research areas. The team did this by cutting down about 100 trees, working out their biomass volume and how much carbon had been stored in it.

They found that about 47 per cent of the tree trunks and branches contained stored carbon. By measuring the height and diameter of the trees, they could calculate how much carbon they had captured – an indication of how much carbon dioxide they had absorbed from the atmosphere.

Plants absorb carbon dioxide from the air through their leaves and convert it to organic carbon compounds in the process of photosynthesis. When forests store more carbon, they help to reduce greenhouse gases.

Ma said the results highlighted the need to increase forest diversity in any plan to fight climate change by planting more trees.

There are major reforestation programmes planned and under way worldwide with the aim of protecting the climate. On the mainland, 1.5 million hectares of forests were planted annually between 2010 and 2015, though they were mainly fast-growing monocultures, according to the study.

"The study shows that forests are not all the same when it comes to climate protection – monocultures achieve not even half of the desired ecosystem service," Schmid said. "The full level of mitigation of global warming can only be achieved with a mix of species. Species-rich forests also contribute towards protecting the world's threatened biodiversity."

Such forests were also less vulnerable to disease and extreme weather events, which were becoming increasingly frequent as a result of climate change, Schmid said.

[SCMP, 05/10/2018]

Last moment before "irreversible" climate change effects

A recent IPCC special report indicates that global temperatures could reach an irreversible tipping point within 12 years if the world fails to reduce use of fossil fuels and the amount of carbon dioxide released into the atmosphere. In order to avoid the worst effects of climate change, the UN panel's researchers advise that "human caused" carbon dioxide emissions need to be cut by nearly half of 2010 levels by applying "rapid, far-reaching and unprecedented changes in all aspects of society".

Global temperatures have already risen an average of 1 degree Celsius above levels before the industrial age. Although the average person might not feel significant change from an additional half a degree warmer, increased global average temperatures are predicted to wipe out coral reefs and melt Antarctic ice sheets, that could potentially rise sea levels and cause horrific consequences.

However, the Trump government will not support aggressive climate policies, evidenced by the decision to withdraw the U.S. from the Paris Climate Agreement. The Trump administration is rolling back most of the climate-oriented policies proposed during the Obama administration. Instead, the Trump administration tends to protect coal producers and claims that relying only on renewable energy like natural gas is a potential national security risk.

[ABC News, 08/10/2018]

Europe's courts are holding governments to account for climate change

When 50,000 protesters headed to the ancient Hambach Forest west of Germany's Cologne city last weekend, interest was so great that traffic on one of the country's high-speed autobahns came to a standstill. While traffic jams aren't normally something to celebrate, in this case the planned protest turned into a party after it was announced that a court had just temporarily blocked one of Europe's powerful energy companies, RWE, from continuing to clear away one of Germany's oldest forests to make space for a coal mine.

The rescue of the forest's thousand-year-old trees was celebrated as a rare victory by environmental activists over European governments that have almost all ignored their own emissions targets in recent years. While support in European election campaigns this year for environmental parties has been on the rise from Sweden to Germany, it appears that there is another group forcing the governments to obey their own laws: judges.

Courts in Germany and other European Union countries are posing a growing challenge to governments and business interests in regard to climate change in recent months, as scientists have stepped up their warnings that the world has little time left to prevent a human-made global disaster.

Recently, an appeals court in the Netherlands ordered officials to cut greenhouse gas emissions more rapidly than so far envisioned, handing a victory to 900 citizens who had sued the government. Last month, a German court banned all old diesel vehicles from the city center of Frankfurt, after Germany's top administrative court had found earlier this year that the highly polluting cars could be restricted from accessing busy roads across the country. Similar decisions could follow; a Berlin court is expected to make a similar ruling on the same grounds in the near future.

Several other lawsuits are still being processed, including one by a group of litigants from France, Germany, Sweden and other countries who argue that the E.U.'s failure to force member states to dramatically cut greenhouse gas emissions violates the law.

Ironically, the E.U. itself is preparing to sue member states over their failure to cut emissions. Germany, for instance, vastly exceeds its targets, which may soon turn out to be a costly endeavor. When E.U. member states exceed their emissions targets, they can purchase the right to emit more from other countries that have not exhausted their limits. That way, the E.U wants to keep overall emissions limited and provide an incentive to countries to lower emissions themselves. Unless it dramatically changes course, Germany may have to pay \$70 billion over the next decade to compensate for its additional emissions, according to some estimates.

Germany's problem is that despite its reputation for leading the way in promoting renewable energy sources, it continues to heavily rely on coal, one of the most polluting energy sources. Environmental researchers believe there's no easy fix.

"It's not just a technical shift. It's a societal shift," Rebecca Bertram, an energy expert with the Greens-party-aligned Heinrich Böll Foundation, told *The Washington Post* last year. "There are so many vested interests in keeping the old structures, and people will cling to them as long as they can."

Germany's prior commitments to reduce emissions also have faced a number of challenges, including the country's decision to give up nuclear energy following the devastating 2011 Fukushima disaster and a lack of transport routes that would distribute renewable energy produced in northern Germany's wind parks across the country.

But as courts are assuming a more influential role in regulating emissions, what may soon matter more than feasibility is legality.

[The Washington Post, 09/10/2018]

Victory for climate protection

A Dutch Court of Appeal has ruled that the Dutch government must do more to protect communities from the dangers of climate change. The Court, finding in favour of the Dutch NGO Urgenda, recognised the "grave danger" of climate change and called for the government to reduce greenhouse gas emissions to at least 25% lower than 1990 levels, by 2020.

This victory follows yesterday's release of a UN Intergovernmental Panel on Climate Change (IPCC) report, containing the sternest warnings yet about the terrifying threats posed by global climate change.

The Court ruled that the Netherlands is breaching its duty of care by "failing to pursue a more ambitious reduction" of greenhouse gas emissions and agreed with the lower court's ruling that the State must reduce its emissions.

ELAW celebrates the work of Urgenda. The decision will strengthen cases brought by ELAW partners around the world who are working to protect the climate through law.

[ELAW Press Release, 10/10/2018]

Climate litigation strategies

The damage that human beings are doing to the global climate may be one of the gravest injustices of all time. Some people are profiting enormously from damaging the climate, while others are bearing the costs. Many who will suffer the most are contributing almost nothing to the damage. Courts around the world are stepping up to address climate injustice and pushing governments to protect threatened communities and the environment.

Ten years ago, the United States Supreme Court recognised: "The harms associated with climate change are serious and well recognized." *Massachusetts v. EPA*, 549 U.S. 497 (2007).

More recently a Pakistani court urged: "From Environmental Justice...we need to move to Climate Change Justice." *Asghar Leghari v. Federation of Pakistan,* W.P. No.25501/2015, Climate Change Order (4 September 2015)

Courts around the world are considering an increasing number of climate cases. Citizens and organizations are turning to judicial systems : to protect the rights of those impacted by the changing climate; require governments to take bolder action to stop harmful emissions; urge governments to help communities adapt; evaluate climate impacts before approving projects; ensure governments keep commitments they have made in the international arena; hold corporations accountable; and more.

ELAW provides this brief overview of legal strategies to advance climate justice. We focus on legal arguments that can be supported by judgments from around the world.

Lawyers representing communities concerned about the climate will need to be creative because courts have limited experience in developing appropriate remedies for climate impacts. As this important area of environmental and human rights law evolves, ELAW is tracking decisions and new legal strategies that show promise for achieving climate justice.

[Note: For lawyers thinking about potential climate cases for the first time, we have a brief primer to help orient you and to some of the basic concepts.]

[ELAW Press Release, 14/10/2018]

Climate change will cause significant beer shortage

As the main ingredient of beer is barley, a grain which is sensitive to extreme drought and heat, climate change will definitely hurt beer lovers. According to a study published by Nature Plants, substantial decreases in barley crop yields caused by global warming will lead to beer shortages.

[CNN, 15/10/2018]

Prolonged heatwaves in the UK

The UK is currently experiencing heatwaves which are lasting twice as long as they did 50 years ago. As a result, "ice days" are disappearing and tropical nights occur more frequently. A recent study of climate extremes in the UK provided by the government explains that human emissions of carbon dioxide and other greenhouse gases are pushing weather patterns from the normal path. The new report reveals that warm spells are now prolonged when the maximum temperature of the year is above the 90th percentile. From 2008 to 2017, the average longest warm spell each year was 13.2 days, which is more than double that statistic for 1961 to 1990.

In October 2018, the UN's top climate body advised that the world is likely to face catastrophic impacts from climate change unless we are able to hold global temperature rises (to the end of this century) to 1.5C above pre-industrial levels. Flooding, droughts and extreme heat all becomes more prevalent.

To implement and strengthen the recommendations of the 2015 Paris agreement, the latest round of negotiations of the 24th session of the Conference of the Parties will be held in Poland in December.

[The Guardian, 02/11/2018]

Climate change aggravates California fires

Disastrous wildfires in both ends of California are now the most destructive and joint most deadly in California's history, resulting in at least 31 deaths and having burned through 111,000 acres.

In the northern reaches of California state, a conflagration, called the Camp fire, increased in size so quickly that it at one point was spreading at the rate of a football field every second. In the southern part, the Woolsey fire has burned 83,000 acres of the Los Angeles area and caused the evacuation of Malibu Beach.

Large wildfires thrive in several conditions, including favourable wind speed and direction, fuel, terrain and ignition, which can just be a trailer throwing up sparks by scraping on a road.

In general, climate change makes the conditions more favourable for wildfires. Fifteen out of the twenty largest wildfires in California's recorded history have occurred since 2000, as forests have become drier and warmer. Temperatures in the west have aggressively increased by double the global average since 1970. The western wildfire season has been lengthened by several months and large tracts of forests have consequently dried out.

According to a major climate assessment by several US states, climate change has made many forests more vulnerable to ecosystem changes and tree mortality due to fire, drought, disease outbreaks and insect infestations. The report notes that fire suppression techniques have also heightened the risk, and large, intense and also more frequent fires will increasingly affect western forests in the United States.

[The Guardian, 12/11/2018]

National Trust invest more than £30m in fossil fuel fund

The National Trust has more than £30m worth of investments in oil, gas and mining companies, which are held indirectly via a portfolio fund.

The Trust aims to decrease its own use of fossil fuels in respect of its estates in England, Wales and Northern Ireland. At the same time, it also proposes to generate 50% of its energy from renewable sources by 2020.

However, at the same time, National Trust has also been heavily criticised for undermining its good work with its huge investments in BP and Shell, both of which have fracking operations.

[The Guardian, 19/11/2018]

REGIONAL & INTERNATIONAL

CHINA

Water quality focus in Shenzhen

In late October 2018, Futian Bureau of Environmental Protection and Water Resources and Fubao Sub-district Office jointly launched an educational campaign w aimed at increasing the public's awareness of environmental protection laws. The campaign successfully reached out to 8 schools and 12 local communities.

In another environmental initiative, a new drainage system has been installed in 755 housing estates in Futian District. The new drainage system separates rain water (for re-use) and sewarage water.

[Shenzhen Daily, 07/12/2018]

Taiyuan expo encourages green development

In September 2018, an international energy industry expo was held in Taiyuan, capital of North China's Shanxi province. It is reported that the three-day expo attracted multi-billion yuan of investment and businesses from 30 countries and regions. Additionally, agreements for 42 major projects were signed at the expo, with a combined investment volume of 62.5 billion yuan (about \$9.1 billion).

Most of the projects are related to advanced equipment manufacturing, new energy vehicles, energy conservation, environmental protection and the coal and chemical industries.

The expo also highlighted Shanxi's ongoing energy transformation to clean energy and the promotion of waste recycling. In fact, Shanxi province has long been a leading producer of coal in China. However, since 2010, Shanxi has led the national campaign for promoting green development by, for example, promoting a wider use of "coal bed methane", which is an unconventional type of natural gas that has been recognised as a clean energy. By 2017, 105 counties and districts and many mining areas in the province had access to coal-bed methane, benefiting 18 million residents.

By 2020, China will see a significant reduction in coal consumption. Non-fossil energy is expected to account for 35 percent to 50 percent of total consumption by 2050, according to the Energy Research Institute of the National Development and Reform Commission.

[Xinhua, 03/12/2018]

AUSTRALIA

Australia fails on biodiversity

Australia has been named as one of the worst performers among a group of 100 nations, due to the absence of biodiversity measures in its climate change commitments, according to a new report by *World Wildlife Fund* (WWF). The report examines whether climate commitments from countries under the Paris agreement also offer benefits for biodiversity.

Whilst countries are not required to include biodiversity measures in their nationally determined contributions (NDCs), some activities, such as reducing deforestation and preserving habitat, have dual benefits for the climate and nature.

WWF is calling for more integration between the two: "Climate and biodiversity are intrinsically linked as climate change is one of the underlying drivers of habitat and biodiversity loss, while the deterioration of ecosystems and their services contributes to rising greenhouse gas emissions."

The report assessed the climate commitments of 100 countries and measured whether these also helped them meet global commitments on biodiversity. Australia was one of the worst performers among the group. Along with the United States and Canada, Australia was rated a zero because none of its commitments involved biodiversity measures.

"Australia's NDC is brief and focused on economy-wide targets, rather than detailed plan implementation," the report states.

By comparison, the report said countries in the Caribbean, Latin America, Southeast Asia and the Pacific were better at considering the significance of biodiversity, nature and forestry measures as part of their climate response.

Martin Taylor, a conservation scientist with WWF, said countries such as Indonesia were taking steps to reduce deforestation but "Australia is doing none of that".

"There's no commitment to end deforestation. In fact we've had an explosion in deforestation recently," he said. "We're not performing at all because climate isn't even mentioned in the NDC to the climate agreement."

The report was released as countries prepared to agree on a path way towards a new global framework for protecting biodiversity. New targets are set to be established at a summit in Beijing in 2020.

[The Guardian, 30/11/2018]

MALAYSIA

China's durian consumption threatens rare tiger

The habitat of one of the world's most endangered tigers is under threat, environmental groups say, as forests in Malaysia are cleared to meet increasing demand for durian, the divisively pungent fruit which is hugely popular in China.

Forest in the region of Raub in Malaysia, which has become a popular destination for Chinese and Singaporean tourists on "durian tours", are being burned and cleared to make way for plantations to grow the *Musang King* variety of the spiky fruit.

The region is home to the Malayan tiger, which is considered "critically endangered"; with fewer than 300 are left in the world. Environmental groups said that destroying their habit will have a "devastating" impact on the tigers' survival.

WWF Malaysia reports the Hulu Sempam area, where new plantations are planned, had been designated as an "expected tiger habitat". It is near a protected area where most of the tigers live. Malayan tigers are found only on the Malay Peninsula and in the southern tip of Thailand.

It is believed 1,213 hectares of forest in Hulu Sempam will eventually be cut down for a durian plantation by Perbadanan Setiausaha Kerajaan, a company linked to the government. The project on that site does not need permission from the forestry department, the Pahang Forestry Department confirmed.

Demand for durian in China has driven up prices and led to a surge in durian farming in Malaysia over the past year. Some predict they could replace palm oil as the country's biggest export.

However, just as palm oil has led to the destruction of the habitat of endangered wildlife, such as orangutans, campaigners fear the shift to durian will prove equally destructive for tigers.

[The Guardian, 26/10/2018]

PHILIPPINES

Race to save falling fish stocks

Dried fish, fried to a crisp with a splash of spiced vinegar, garlic fried rice and a runny egg yolk, is the kind of breakfast Filipinos who live abroad crave. The dish, often made with sardines, anchovies or round scad, uses dried seafood products that are staple in the Philippines, where they are cheap, widely available and local.

But a United nation report released in March this year projected that in 30 years all commercial fishing could cease in the Asia-Pacific region if existing threats to the region's biodiversity were not acted upon.

From plastic pollution to climate change, overfishing to damaged coral reefs, one of the country's most valuable resources is under threat – and a rising number of Filipinos are trying to address the problem.

According to the Philippine Bureau of Fisheries and Aquatic Resources (BFAR), the Country produces more than 4.5 million tonnes of seafood and aquatic plants a year from its rivers, seas and lakes, making it the world's ninth largest producer. But the volume of fish harvested has been falling since 2010.

One of the biggest threats to the sustainability of marine life is plastic pollution and the Philippines is now the third highest contributor to plastic pollution in the world's oceans, according to Greenpeace Philippines.

Another example of Philippines' degraded marine environment in Boracay. Filipino officials in April 2018 closed the resort island of Boracay – famed for its white sand beaches – after it was discovered most of the island's sewage flowed directly into the sea. The rapid decline in Philippine marine resources has prompted concerns over not only the nation's dried fish breakfast but the communities that depend on fish to survive.

BFAR data shows there are more than 1.6 million fishing operators in the Philippines, which has a population of 105 million. About 85 per cent are small-scale fishermen, with the rest commercial boats and aquaculture farms.

[SCMP, 30/11/2018]

INDONESIA

Plastic is killing marine ecosystem

A dead whale that washed ashore in Indonesia had a large lump of plastic waste in its stomach, including drinking cups, bottles and flip-flops, a park official has said, alarming environmentalists and government officials in one of the world's largest plastic-polluting countries. Staff from Wakatobi National Park found the rotting carcass of the 9.5-metres sperm whale late on Monday near the park in south eastern Sulawesi province.

Researchers from conservation group WWF and the Park's conservation academy found about 5.9kg of plastic waste in the animal's stomach, including 115 plastic cups, four plastic bottles, 25 plastics bags, two flip-flops, a nylon sack and more than 1,000 other assorted pieces of plastic. It was not possible to determine if the plastic had caused the whale's death because of the animal's advanced state of decay.

Indonesia, an archipelago of 260 million people, is the world's second-largest plastic polluter after China, according to a study published in the journal *Science* in January. It produced 3.2 million tonnes of mismanaged plastic waste a year, of which 1.29 million tonnes ended up in the ocean, the study said.

The Indonesia government is making efforts to reduce the use of plastic, including urging shops not to provide plastic bags for customers and teaching about the problem in schools nationwide to reducing plastic use by 70 per cent by 2025.

[SCMP, 22/11/2018]

EUROPE

European eels face oblivion

Billions of euros worth of critically endangered eels are being trafficked each year from Europe, ending up on tables in China and Japan in what campaigners say is "the largest wildlife crime on earth".

Stocks of European eel (*anguilla anguilla*) have plummeted 90 per cent in three decades as mankind has developed the wetlands and dammed the rivers it needs to grow and feed in, and experts fear criminal gangs smuggling the lucrative fish are pushing it towards oblivion.

Despite increased alarm of conservationists, hundreds of tonnes of eels are still legally and illegally fished each year. In France, which catches more of the fish than any other EU state, the issue has taken on political dimensions.

"There's around 10 per cent of stocks left compared to 30 years ago due to habitat loss and what we've done to the migration pathways in Europe," said Andrew Kerr, chairman of the sustainable Eel Group.

The eel's decline has provoked some action from governments and law enforcement agencies. It is now listed in the CITES international convention on trade in endangered species, resulting in strict national catch quotas.

The bloc's law enforcement agency, Europol, estimates as many as 100 tonnes of baby eels - known as glass eels for their translucent skin - are trafficked abroad each year: equivalent to around 350 million fish. Kerr said: "Price vary so you can only come up with brackets figures, but we're talking billions [of euros]. It's the biggest wildlife crime by value on Earth."

Charlotte Nithart, head of the Robin des Bois conservation group, said France's current legal eel quota -60 tonnes per year, of which 60 per cent must go to restocking efforts - was also contributing to the species' decline. "We want to cancel or at least dramatically reduce fishing quotas and reinforce the means to fight trafficking," she said.

As trafficking and other factors continue to undermine efforts to save the threatened species, there are fears for the future of the one of the world's most storied fish. "One of the sad things about today in general is how human beings are losing touch with nature, and the eel really symbolises this," Kerr said.

[SCMP, 22/11/2018]

NEPAL

Hope for Nepal's tigers

Thousands of camera traps have helped conservationists track Nepal's wild tiger population, which has nearly doubled in recent years as the big cats claw their way back from the verge of extinction.

After a nine-year push to protect tigers, an exhaustive census across 2,700 km of Nepal's lowlands completed earlier this year revealed the population has grown from 121 in 2009 to about 235 adult cats today. On the front line of the painstaking survey were trained locals in western Nepal's Bardia National Park where tiger numbers have increased nearly fivefold.

Nepal's southern lowlands, home to five national parks, were mapped into grids, each fitted with a pair of camera traps to record any tiger activity. More than 3,200 of these special camera traps were installed, some by field workers on the elephants to navigate the dense jungle. "It was not an easy process and risk as well," said Man Bahadur Khadka, head of Nepal's department of wildlife and national parks.

These cameras were equipped with sensors that triggered a photograph whenever movement or a change in temperature was detected. Soon the photos started to trickle in: lone tigers walking past, mothers with their playful cubs and the occasional tiger feasting on a flesh kill.

The census began in November 2017 and by last March, more than 4,000 images of tigers had been collected. "We then began analysing the photos," Khadka said. "Just like our fingerprints, tigers have unique stripes. No two tigers are alike.

Conservationists say that behind Nepal's success was a strategy to turn tiger-fearing villagers – who could earn thousands of dollars for poaching a big cat – into the animal's protectors.

In 2009, the government recruited hundreds of young volunteers to guard Nepal's national parks, patrolling against poachers, raising awareness and protecting the natural habitat.

[SCMP, 31/10/2018]

WORLD

Steep extinction rate since 1970s

Unbridled consumption has decimated global wildlife, triggered a mass extinction and exhausted Earth's capacity to accommodate humanity's expanding appetite, conservation group WWF warned.

From 1970 to 2014, 60 per cent of all animals with a backbone – fish, birds, amphibians, reptiles and mammals – were wiped out by human activity, according to WWF's *Living Planet* report, based on an ongoing survey of more than 4,000 species spread over 16,700 populations.

For freshwater fauna, the decline in population over the 44 years monitored was a staggering 80 per cent.

Regionally, Latin America was hit hardest, seeing a nearly 90 per cent loss of wildlife over the same period.

Another data set confirmed the depth of an unfolding mass extinction event, only the sixth in the last half-billion years.

Depending on which of Earth's life forms are included, the current rate of species loss is 100 to 1,000 times higher than only a few hundred years ago, when people began to alter Earth's chemistry and crowd other creatures out of existence.

Measured by weight, or biomass, wild animals today account for only 4 per cent of mammals on Earth, with human beings (36 per cent) and livestock (60 per cent) making up the rest. Ten thousand years ago that ratio was probably reversed.

"The statistics are scary," said Piero Visconti, a researcher at the International Institute for Applied Systems Analysis in Austria and one of 59 co-authors. "Unlike population declines, extinctions are irreversible."

For corals, it may already be too late. Back-to-back marine heat waves have already wiped out up to half of the globe's shallow water reefs, which support a quarter of all marine life.

Even if humanity manages to cap global warming at 1.5 degrees Celsius – mission impossible, according to some scientists – coral mortality is likely to be 70 to 90 per cent. A 2 degrees increase would be a death sentence, a major United Nations report concluded last month.

Half a century of conservation efforts have scored spectacular successes. There have been significant recoveries among tigers, manatees, grizzly bears, blue fin tuna and bald eagles. But the onslaught of hunting, shrinking habitat, population, illegal trade and climate change – all caused by humans – has been too much to overcome, according to Lambertini.

The pace of population increase also took off around 1950, the date scientists have chosen as the "gold spike", or starting point, for a new geological period dubbed the "age of man".

In looking for answers, conservationists are turning to climate change for inspiration. "We need a new global deal for nature," WWF International Director Lambertini said, noting two key ingredients in the 195-nation Paris climate treaty. "One was the realisation that climate change was dangerous for the economy and society, not just polar bears," he said.

Similarly, he argued, threatened ecosystem services long taken for granted – drinkable water, breathable air, heat absorbing oceans, forest that soak up carbon dioxide, productive soil – are worth tens of trillions of dollars every year.

"A healthy, sustainable future for all is only possible on a planet where nature thrives and forests, oceans and rivers are teeming with biodiversity and life," Lambertini said.

[SCMP, 31/10/2018]

SOUTH AFRICA

Court denies coal mine development application

The High Court in Gauteng, South Africa, has refused permission for a large new coal mine in the Mabola Protected Environment in the Mpumalanga grasslands. In 2016, without public consultation, two Ministers had given permission for the ill-advised project.

ELAW partner Catherine Horsfield at the Centre for Environmental Rights (CER) welcomed the judgement: "It confirms to government and to all developers proposing heavily polluting projects in environmentally sensitive areas in South Africa that exceptional circumstances must be shown to exist to justify that proposed development. South Africa is a water-stressed country, and the Mabola Protected Environment, where the coal mine would be located, has particular hydrological significance for the country as a whole."

ELAW has worked with CER for years to protect Mpumalanga Province, where nearly 60% of the lands have been licensed for mine prospecting and development – primarily for coal to be burned in power plants.

[ELAW Press Release, 17/11/2018]

SPAIN

Madrid bans polluting vehicles

Since late November 2018, only vehicles producing zero emissions are allowed to drive freely in downtown Madrid — making it a pollution pioneer in Europe.

Madrid's government has established a low-emissions zone that covers 472 hectares. All gasoline vehicles registered before 2000 and diesel ones registered before 2006 are banned from the area, unless they are used by residents of the area or meet other exemptions. The goal is to cut nitrogen dioxide levels by 23 percent in 2020 and put people — rather than the internal combustion engine — at the heart of transport policy.

There are some access under strict rules. Hybrids and liquefied petroleum gas vehicles are allowed into the area to park for a maximum of two hours, and more modern diesel and gasoline vehicles are allowed in to park in public carparks or private garages. Truck drivers are subject to a timetable: the oldest, most polluting trucks are admitted only from 7am to 1pm, whilst more modern ones would see that window extended until 9pm.

In fact, there have been similar moves in other major cities, At the end of 2016, the mayors of Paris, Athens and Mexico City joined Madrid in announcing plans to take diesel cars and vans off their roads by 2025; and in May, Hamburg became the first German city to ban some older diesel vehicles from two of its main roads.

[The Guardian, 30/11/2018]

USA

A review of California's carbon-credit market

The "carbon-offset credits trading" under California's cap-and-trade programme is part of the state's ambitious plan to reign in greenhouse gases.

Under the offset programme, everyone--ranging from dairy farmers trapping methane to timber companies embracing progressive logging practices, to nonprofits preserving natural landscapes-- may sell carbon credits and get paid for their efforts to fight climate change. Industrial polluters purchase those carbon credits to claim the ton-for-ton reductions in climate-warming emissions as their own. They use the offsets to stay in line with the state's strict environmental regulations, or voluntarily, to green up their public personas.

However, there are reports that many companies and nonprofits selling offsets did not shrink their carbon footprint as a result of the programme, which it casts doubts over the ability of the programme to fight climate change.

In some situations, groups maintained green business practices that long preceded the offset programme, but qualified to sell credits by pledging to continue those activities for decades to come. In other cases, companies received cheques for reducing their emissions but were largely motivated to green up their operations by other financial factors.

Proponents of the credits, including the California Air Resources Board, acknowledged the situation that the current approach does reward some businesses regardless of their underlying motives. But given enough time, they argued, the carbon credit programme has the potential to shift industry-wide practices.

[The San Diego Union-Tribune, 07/10/2018]

This Quarterly Report does not constitute legal advice given on any particular matter. Whilst all effort has been made to ensure completeness and accuracy at the time of publication, no responsibility is accepted for errors and omissions. Further information and enquiries in respect of this quarterly should be directed to Fred Kan & Co.

Members of ADVOCASIA



An Association of Asian Commercial Law Firms

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 Midlle 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

Guangzhou, Dongguan, China TRUST LAW FIRM 35F,Shun Tak Business Centre 246 Zhongshan Road 4 Guangzhou P.R.China 510030 Tel: (86) 20-83635488 Fax: (86) 20-83635444

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 LEGISPERITUS LAWYERS Mega Plaza 12th Floor Jl. HR. Rasuna Said Kav. C-3 Jakarta 12920, Indonesia Tel: (62) 2-1527-9109

<u>Tel Aviv, Israel</u> **RNC** 5th Kineret St. BSR Tower No. 3 Bene-Beraq 5126237 Tel: +972 (0)3-617-4000 Fax: +972 (0)3-617-4022

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

Incheon, Republic of Korea **K&L LAW FIRM** #201, Myong-in 28 Soseung-ro, 185 Beon-gil Nam-gu Incheon South Korea (402-876) Tel: +82 32 864 8300 Fax: +82 32 864 8301

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

Yangon , Myanmar JTJB MYANMAR CO LTD Suit No. 01-04, Union Business Centre, Nat Mauk Road, Bo Cho Quarter, Bahan Township, Yangon Myanmar Tel: +95 1860 3455

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

Phnom Penh, Cambodia BNG LEGAL No.64, Street 111 Sangkat Boeung Prolit Khan 7 Makara Phnom Penh Tel: (855-23) 212 414 Fax: (855-23) 212 840

<u>Macau</u> ANTÓ NIO 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 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: October and November 2018 (December 2018 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:

October 2018

Eighty-three convictions were recorded in October 2018 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Ten of the convictions were under the Air Pollution Control Ordinance, 1 was under the Hazardous Chemicals Control Ordinance, 15 were under the Noise Control Ordinance, and 57 were under the Waste Disposal Ordinance.

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

November 2018

Ninety-nine convictions were recorded in November 2018 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Fourteen of the convictions were under the Air Pollution Control Ordinance, 21 were under the Noise Control Ordinance, 57 were under the Waste Disposal Ordinance, and 7 were under the Water Pollution Control Ordinance.

The heaviest fine in November was \$50,000, assessed against a company which contravened the provisions of a licence.

Fred Kan & Co. Solicitors Suite 3104-06 Central Plaza 18 Harbour Road Wanchai Hong Kong