

URBAN PLANNING AND ENVIRONMENTAL LAW QUARTERLY
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A recent United Nations report provides comprehensive evidence of extensive degradation and serious decline of the world’s ecosystems and wildlife species. The report should serve as a massive warning to Hong Kong’s government to improve its poor conservation record. But will it??

The Editors

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UN REPORT RINGS ENVIRONMENTAL ALARM BELLS

The Intergovernmental Service – Policy Platform on Biodiversity and Ecosystem Services (“**IPBES**”) in its meeting in Paris (29 April 2019 – 4 May 2019) approved a summary of its landmark report on the rapidly declining health of the World’s natural environment: *Global Assessment Report on Biodiversity and Ecosystem Services* (“**Report**”).

In this edition of UPELQ, we refer to several features of the Report to illustrate – yet again – just why it is imperative that Hong Kong’s government shoulders more responsibility for protecting the ecosystems and native wildlife of our region.

Broad conclusion of IPBES

IPBES Chair, Sir Robert Watson, said on the release of the Report:

“The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.

The Report also tells us that it is not too late to make a difference, but only if we start now at every level from local to global. Through ‘transformative change’, nature can still be conserved, restored and used sustainably – this is also key to meeting most other global goals. By transformative change, we mean a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.

The member States of IPBES Plenary have now acknowledged that, by its very nature, transformative change can expect opposition from those with interests vested in the status quo, but also that such opposition can be overcome for the broader public good.”

Preparation of Report

The Report is the first intergovernmental study of the world’s ecosystems and wildlife, and is the most comprehensive biodiversity and ecosystems assessment ever published. It was compiled by 145 experts from 50 countries, with additional contributions from 310 other authors. It took more than 3 years to write the Report, which examines and assesses environmental changes during the past 50 years. The authors reviewed approximately 15000 scientific and governmental publications, and collated first-hand evidence from indigenous communities as the bases for compiling the Report.

Key findings

Devastating overall loss of species

More than 1 million animal and plant species are threatened with extinction.

“The average abundance of native species in most major land-based habitats has fallen by at least 20%, mostly since 1900. More than 40% of amphibian species, almost 33% of reef-forming corals and more than a third of all marine mammals are threatened. The picture is less clear for insect species, but available evidence supports a tentative estimate of 10% being threatened. At least 680 vertebrate species had been driven to extinction since the 16th century and more than 9% of all domesticated breeds of mammals used for food and agriculture had become extinct by 2016, with at least 1,000 more breeds still threatened.”

Main destructive factors

The 5 “direct drivers of change in relative impacts” are ranked in a descending order:

*“(1) changes in land and sea use;
(2) direct exploitation of organisms;
(3) climate change;
(4) pollution; and
(5) invasive alien species.”*

The authors note that since 1980:

“Greenhouse gas emissions have doubled, raising average global temperatures by at least 0.7 degrees Celsius – with climate change already impacting nature from the level of ecosystems to that of genetics – (climate change) impacts are expected to increase over the coming decades, in some cases surpassing the impact of land and sea use change and other drivers.”

Governments are not addressing the problem

Alarming (but not surprisingly) the authors opine that:

“Global goals for conserving and sustainably using nature and achieving sustainability cannot be met by current trajectories, and goals for 2030 and beyond may only be achieved through transformative changes across economic, social, political and technological factors. With good progress on components of only four of the 20 Aichi Biodiversity Targets, it is likely that most will be missed by the 2020 deadline. Current negative trends in biodiversity and ecosystems will undermine progress towards 80% (35 out of 44) of the assessed targets of the Sustainable Development Goals, related to poverty, hunger, health, water, cities, climate, oceans and land (SDGs 1, 2, 3, 6, 11, 13, 14 and 15). Loss of biodiversity is therefore shown to be not only an environmental issue, but also a developmental, economic, security, social and moral issue as well.”

Other notable findings

Of the depressing mountain of adverse environmental findings in the Report, the authors highlight the following.

“

- *Three-quarters of the land-based environment and about 66% of the marine environment have been significantly altered by human actions. On average these trends have been less severe or avoided in areas held or managed by Indigenous Peoples and Local Communities.*
- *More than a third of the world’s land surface and nearly 75% of freshwater resources are now devoted to crop or livestock production.*
- *The value of agricultural crop production has increased by about 300% since 1970, raw timber harvest has risen by 45% and approximately 60 billion tons of renewable and nonrenewable resources are now extracted globally every year – having nearly doubled since 1980.*
- *Land degradation has reduced the productivity of 23% of the global land surface, up to US\$577 billion in annual global crops are at risk from pollinator loss and 100-300 million people are at increased risk of floods and hurricanes because of loss of coastal habitats and protection.*
- *In 2015, 33% of marine fish stocks were being harvested at unsustainable levels; 60% were maximally sustainably fished, with just 7% harvested at levels lower than what can be sustainably fished.*
- *Urban areas have more than doubled since 1992.*
- *Plastic pollution has increased tenfold since 1980, 300-400 million tons of heavy metals, solvents, toxic sludge and other wastes from industrial facilities are dumped annually into the world’s waters, and fertilizers entering coastal ecosystems have produced more than 400 ocean ‘dead zones’, totalling more than 245,000 km² (591-595) – a combined area greater than that of the United Kingdom.*
- *Negative trends in nature will continue to 2050 and beyond in all of the policy scenarios explored in the Report, except those that include transformative change – due to the projected impacts of increasing land-use change, exploitation of organisms and climate change, although with significant differences between regions.”*

Massive scale of loss of nature

The authors highlight the tragic, massive scale of decline of the world’s wildlife and nature. They observe:

- Since 1970, trends in agricultural production, fish harvest, bioenergy production and harvest of materials have increased, in response to population growth, rising demand and technological development, this has come at a steep price, which has been unequally distributed within and across countries. Many other key indicators of nature's contributions to people however, such as soil organic carbon and pollinator diversity, have declined, indicating that gains in material contributions are often not sustainable.
- The pace of agricultural expansion into intact ecosystems has varied from country to country. Losses of intact ecosystems have occurred primarily in the tropics, home to the highest levels of biodiversity on the planet. For example, 100 million hectares of tropical forest were lost from 1980 to 2000, resulting mainly from cattle ranching in Latin America (about 42 million hectares) and plantations in South-East Asia (about 7.5 million hectares, of which 80% is for palm oil, used mostly in food, cosmetics, cleaning products and fuel) among others.
- Since 1970 the global human population has more than doubled (from 3.7 to 7.6 billion), rising unevenly across countries and regions; and per capita gross domestic product is four times higher – with ever-more distant consumers shifting the environmental burden of consumption and production across regions.
- The average abundance of native species in most major land-based habitats has fallen by at least 20%, mostly since 1900.
- The numbers of invasive alien species per country have risen by about 70% since 1970, across the 21 countries with detailed records.
- The distributions of almost half (47%) of land-based flightless mammals, for example, and almost a quarter of threatened birds, may already have been negatively affected by climate change.”

Role of indigenous people

More than 25% of global land is traditionally owned or managed by indigenous people. These areas include approximately 35% of formally protected land (e.g. national parks) and the same percentage of terrestrial areas which have very low human intervention.

The authors note that regional and global environmental protection programmes currently do not benefit from explicit consideration of views, perspectives and rights of traditional landholders.

Raw numbers paint a tragic environmental picture

The Report summaries key, “raw” data to illustrate the extent of earth's unfolding environmental tragedy. some of these are.

“General

- 75%: terrestrial environment “severely altered” to date by human actions (marine environments 66%)
- 47%: reduction in global indicators of ecosystem extent and condition against their estimated natural baselines, with many continuing to decline by at least 4% per decade
- 28%: global land area held and/or managed by Indigenous Peoples, including >40% of formally protected areas and 37% of all remaining terrestrial areas with very low human intervention
- +/-60 billion: tons of renewable and non-renewable resources extracted globally each year, up nearly 100% since 1980
- 15%: increase in global per capita consumption of materials since 1980
- >85%: of wetlands present in 1700 had been lost by 2000 – loss of wetlands is currently three times faster, in percentage terms, than forest loss.

Plant and animals

- 8 million: total estimated number of animal and plant species on Earth (including 5.5 million insect species)
- Tens to hundreds of times: the extent to which the current rate of global species extinction is higher compared to average over the last 10 million years, and the rate is accelerating
- Up to 1 million: species threatened with extinction, many within decades
- >500,000 (+/-9%): share of the world's estimated 5.9 million terrestrial species with insufficient habitat for long term survival without habitat restoration
- >40%: amphibian species threatened with extinction
- Almost 33%: reef forming corals, sharks and shark relatives, and >33% marine mammals threatened with extinction
- 25%: average proportion of species threatened with extinction across terrestrial, freshwater and marine vertebrate, invertebrate and plant groups that have been studied in sufficient detail
- At least 680: vertebrate species driven to extinction by human actions since the 16th century
- +/-10%: tentative estimate of proportion of insect species threatened with extinction
- >20%: decline in average abundance of native species in most major terrestrial biomes, mostly since 1900 +/-560 (+/-10%): domesticated breeds of mammals were extinct by 2016, with at least 1,000 more threatened
- 3.5%: domesticated breed of birds extinct by 2016
- 70%: increase since 1970 in numbers of invasive alien species across 21 countries with detailed records
- 30%: reduction in global terrestrial habitat integrity caused by habitat loss and deterioration
- 47%: proportion of terrestrial flightless mammals and 23% of threatened birds whose distributions may have been negatively impacted by climate change already
- >6: species of ungulate (hoofed mammals) would likely be extinct or surviving only in captivity today without conservation measures

Marine environment

- 33%: marine fish stocks in 2015 being harvested at unsustainable levels; 60% are maximally sustainably fished; 7% are underfished
- >55%: ocean area covered by industrial fishing
- 3-10%: projected decrease in ocean net primary production due to climate change alone by the end of the century
- 3-25%: projected decrease in fish biomass by the end of the century in low and high climate warming scenarios, respectively

- >90%: proportion of the global commercial fishers accounted for by small scale fisheries (over 30 million people) – representing nearly 50% of global fish catch
- Up to 33%: estimated share in 2011 of world's reported fish catch that is illegal, unreported or unregulated
- >10%: decrease per decade in the extent of seagrass meadows from 1970-2000
- +/-50%: live coral cover of reefs lost since 1870s
- 100-300 million: people in coastal areas at increased risk due to loss of coastal habitat protection
- 400: low oxygen (hypoxic) coastal ecosystem 'dead zones' caused by fertilizers, affecting >245,000 km²
- 29%: average reduction in the extinction risk for mammals and birds in 109 countries thanks to conservation investments from 1996 to 2008; the extinction risk of birds, mammals and amphibians would have been at least 20% greater without conservation action in recent decade
- >107: highly threatened birds, mammals and reptiles estimated to have benefitted from the eradication of invasive mammals on islands

Forest

- 45%: increase in raw timber production since 1970 (4 billion cubic meters in 2017)
- +/-13 million: forestry industry jobs
- 50%: agricultural expansion that occurred at the expense of forests
- 50%: decrease in net rate of forest loss since the 1990s (excluding those managed for timber or agricultural extraction)
- 68%: global forest area today compared with the estimated pre-industrial level
- 7%: reduction of intact forests (>500 sq. km with no human pressure) from 2000-2013 in developed and developing countries
- 290 million ha (+/-6%): native forest cover lost from 1990-2015 due to clearing and wood harvesting
- 110 million ha: rise in the area of planted forests from 1990-2015
- 10-15%: global timber supplies provided by illegal forestry (up to 50% in some areas)
- >2 billion: people who rely on wood fuel to meet their primary energy needs."

Climate change

The Report considers climate change as a factor in diminishing ecosystems and wildlife. A summary of the authors' comments is:

“

- 1 degree Celsius: average global temperature difference in 2017 compared to pre-industrial levels, rising +/-0.2 (+/-0.1) degrees Celsius per decade
- >3 mm: annual average global sea level rise over the past two decades
- 16-21 cm: rise in global average sea level since 1900
- 100% increase since 1980 in greenhouse gas emissions, raising average global temperature by at least 0.7 degree
- 40%: rise in carbon footprint of tourism (to 4.5Gt of carbon dioxide) from 2009 to 2013
- 8%: of total greenhouse gas emissions are from transport and food consumption related to tourism
- 5%: estimated fraction of species at risk of extinction from 2°C warming alone, rising to 16% at 4.3°C warming
- Even for global warming of 1.5 to 2 degrees, the majority of terrestrial species ranges are projected to shrink profoundly.”

Conclusion

We shall not try to sum up Hong Kong's role to date in conserving ecosystems and native wildlife. In short, it is essentially a dismal record of inaction, or severely delayed action: e.g. the ivory ban; near useless and un-enforced idling engine ban; disgraceful facilitation of the sharks' fin trade and other threatened marine species etc..

Perhaps the one, reasonably shining light is our country parks system, which was established by the colonial government in 1978. But, as against that, Hong Kong has a pitifully inadequate number of marine reserves.

Unfortunately, there is nothing in the government's deeds and words to suggest it will begin to give environmental issues (as versus business people's interests) the priority they need and deserve!.

TOWN PLANNING

Tsing Yi Outline Zoning Plan amended

The Town Planning Board announced amendments to the approved Tsing Yi Outline Zoning Plan (OZP) on 14 June 2019.

The amendments mainly involve the rezoning of a site to the southeast of Tsing Sheung Road from "Other Specified Uses" ("OU") annotated "Marine-related Uses" to "OU" annotated "Container Related Uses", and incorporation of related land and sea areas into the planning scheme area and zoning the areas as "OU" annotated "Container Related Uses" for barge berthing with supporting container storage and ancillary facilities.

The Notes and Explanatory Statement of the OZP will also be amended to reflect the above amendments and update the general information regarding various land use zonings, where appropriate.

[Town Planning Board Press Release, 14/06/2019]

Kai Tak Road/Sa Po Road Development Scheme Plan published

The Town Planning Board announced the publication of the draft Urban Renewal Authority (URA) Kai Tak Road/Sa Po Road Development Scheme Plan (DSP) No. S/K10/URA1/1 on 5 July 2019.

The scheme area covers about 0.53 hectares and is designated as "Residential (Group A)". High-density residential developments with the provision of a sunken plaza and underground public vehicle park to serve the community are the focus of the scheme.

Under section 25(9) of the Urban Renewal Authority Ordinance, the draft DSP replaces the approved Ma Tau Kok Outline Zoning Plan in relation to the area delineated and described in the draft DSP.

[Town Planning Board Press Release, 05/07/2019]

Queen's Road West/In Ku Lane Development Scheme Plan approved

The Chief Executive in Council recently approved the draft Urban Renewal Authority (URA) Queen's Road West/In Ku Lane Development Scheme Plan (DSP).

Town Planning Board said on 19 July 2019 that the approved DSP provides a statutory land use planning framework to guide the implementation of the URA Queen's Road West/In Ku Lane Development Scheme.

The Development Scheme Area covers a total area of 2 046 square metres. The Area comprises a row of tenement buildings, the In Ku Lane refuse collection point and public toilet, a five-a-side soccer pitch (being part of the Li Sing Street Playground), government lanes and a pavement area. The Area is broadly bounded by the Ko Shing Building and In Ku Lane to the north, Kam Yu Mansion and Largos Residences to the east, Queen's Road West to the south and No. 153 Queen's Road West and the Li Sing Street Playground to the west.

The area is zoned "Residential (Group A)23", which was primarily intended for high-density residential development with a government refuse collection point and public toilet, a neighbourhood elderly centre sub-base and a public open space.

The lowest three floors of a building or in the non-residential portion of an existing building will cater for commercial activities. The maximum building height of the area is restricted to 130 metres above Principal Datum, or the height of the existing building, whichever is the greater.

[Town Planning Board Press Release, 19/07/2019]

Town Planning Board releases digital planning data

In keeping with the government's open data policy, the Town Planning Board released the digital planning data of statutory plans currently in force as open data for free public access on 22 July 2019.

The digital planning data covers planning scheme areas, land use zonings, building height control and amendments to statutory plans.

[Town Planning Board Press Release, 22/07/2019]

ADVISORY COUNCIL OF THE ENVIRONMENT (ACE)

Summary of Minutes of the 236th Meeting of the ACE held on 10 June 2019

The main items of the meeting were to review the Seventh Technical Memoranda for allocation of emission allowances for power plants.

The Chairman informed members that *ACE Paper 7/2019* sought members' views to further tighten emission allowances for power plants in Hong Kong beginning 1 January 2024, by way of issuing a new Technical Memorandum (i.e. the Eighth TM) under Section 26G of the *Air Pollution Control Ordinance* (Cap.311).

Allocation of emission allowances

A member observed that there was a noticeable gap between actual emissions and emissions allowances for the first three TMs and enquired whether the government should take a more aggressive approach in the setting of emission allowances.

The government replied that in setting the First TM, power companies had to explore the feasibility of retrofitting emission control devices or using low-emission coal for some of their existing coal-fired generating units to comply with the emission caps. With the progressive tightening of the emission allowances and the room for further retrofit becoming smaller, it was much more challenging for power companies to meet the tightening emission allowances. Therefore, to maximise the use of gas-fired generating units was one of the key measures adopted by power companies to meet the emission allowances.

Incentives for emission reduction

The Chairman enquired whether there were any incentives to encourage power companies to achieve emissions lower than the emission caps set for a certain year due to technological advancements and availability of low-emission fuels.

The government replied that power companies would incur a penalty for failing to meet emission allowances set under the TM as well, power companies had made efforts to improve the energy efficiency of their generating units and to reduce their emissions, which could lower operational costs and lower the requirement of additional power generation units.

Electricity consumption

A member enquired whether the forecast of a 4% reduction in electricity demand by the two power companies for the period of 2024 to 2025 was made with reference to the Hong Kong's Climate Action Plan 2030+.

The government explained that the reduction of electricity demand in 2024/2025 was made with reference to that of 2022, when setting the Seventh TM.

Renewable energy

A member noted that the projected emissions under the adoption of Best Practical Means (BPM) requirements would be offset by the level of renewable energy (RE) intake, which means the higher the RE intake level, the lower the emission cap would be. That member expressed concern that this might disincentive the power companies from developing more RE.

The government advised that it would be difficult to estimate the timing as to when Hong Kong could reach its full, realisable RE potential, as this would be subject to many external factors, including the participation and contribution of the community at large. Further, the government had taken the lead in promoting RE, which included developing waste-to-energy facilities and exploring the development of large-scale RE systems in reservoirs and landfills. RE targets had also been set for new government buildings. The government had also been creating favourable conditions to encourage private sector to adopt RE.

Effectiveness of TMs in reducing emissions

A member commented that the government should present the implications of emission reductions from the power plants with regard to the improvements in the air quality, health benefits and contributions to combating climate change.

The government advised that while it was difficult to differentiate air quality improvements attributable to the reduction in power plants' emissions from other emission sources. Sulphur dioxide (SO₂) is mainly emitted from marine vessels and power plants and hence could serve as an indicator of the effectiveness of tightening power plants' emissions. The concentration of SO₂ in ambient air was reduced by 57% over the last 10 years, showing that the tightening of emission allowances on power companies and controlling emissions from marine vessels were effective in improving air quality.

LEGISLATION DIGEST

Conservation of Antarctic Marine Living Resources Bill

The Executive Council advised and the Chief Executive ordered that the Conservation of Antarctic Marine Living Resources Bill (“**CAMLR Bill**”) should be introduced into the Legislative Council on 4 July 2018. The CAMLR Bill is for the implementation of the Convention on the Conservation of Antarctic Marine Living Resources (“**CCAMLR**”) and its Conservation Measures (“**CMs**”) in Hong Kong.

The CAMLR Bill aims to provide the legal basis for implementation the CCAMLR, and to provide for the general powers for the Director of Agriculture, Fisheries and Conservation (“**DAFC**”) and DAFC's authorized officers, while two Regulations will be made to implement the relevant CMs.

The new legislation will empower the Secretary for Food and Health to make regulations for implementing CMs and related matters. Meanwhile, the Government target to make two Regulations, after the CAMLR Bill is passed, to implement (i) the Toothfish Catch Documentation Scheme; and (ii) port inspection and control.

In order to collect views of relevant stakeholders on the implementation of the CCAMLR in Hong Kong, the Government organized meetings and engagement forums with trading companies, importers, wholesalers, retailers, representatives of seafood trade and catering associations, environmental groups and a Government advisory body (the Fish Marketing Advisory Board) from January to March 2018. The implementation of the CCAMLR is welcome by all the parties consulted.

[*Legislative Council Brief*, June 2018]

WEST KOWLOON CULTURAL DISTRICT

Sinkhole, leaks and flooding at West Kowloon Cultural District

Cracks in a cofferdam have caused flooding, a sinkhole and subsidence at the construction site of the West Kowloon Cultural District. The problem could add more uncertainty to the multibillion-dollar project, already plagued by cost overruns and political controversy.

On the 25th July, the West Kowloon Cultural District Authority (“**WKCDA**”) was made aware of flooding at the construction site of the Lyric Theatre Complex, as well as a large basement area linking several planned performing venues.

Immediate remedial action was taken by the contractor, Gammon Construction, and the leak was plugged in the morning. The WKCD alerted the Buildings Department and the situation was being monitored.

Officers of the Buildings Department found sinking and flooding on the construction site, yet they did not find any structural safety issues. The Department requested the contractor to submit a report on the sinking and to continue monitoring the safety of nearby buildings.

Ngai Hok-yan, geotechnical engineer, said the condition was serious. He believed that the welding of the cofferdam wall was deficient, such that pressure from soil and water could easily lead to cracks and, thus, the leakage. But, he added that the supporting structure at the flooded site appeared to have remained intact and there should be no problem with the design.

After about a month of monitoring, construction works on the site resumed outside the incident area on 26th August following a satisfactory review by the Buildings Department.

Regarding the subsidence, investigation at the affected area is still on-going, and a full account of the incident would be provided to the Legislative Council “in due course”, as the WKCD announced in a public statement.

[SCMP, 25/07/2019; SCMP, 26/08/2019]

The 28th Meeting of the Consultation Panel of the West Kowloon Cultural District Authority: Update on the progress of the Art, Commerce and Exhibitions (ACE) Development Package

The West Kowloon Cultural District Authority has been pushing forward with the Art, Commerce and Exhibitions (ACE) Project.

The ACE Project will be located within a vibrant downtown art district, addressing a growing demand for space from art fairs, exhibition and convention organisers which are known to have difficulty securing space to allow them to enter into or expand in Hong Kong.

The ACE Project comprises an exhibition centre of 47,045 square metres gross floor area (GFA) with hotel and rental offices (total GFA of 81,066 square metres) and embedded retail, dining and entertainment facilities (GFA of 6,894 square metres) in the adjacent U-shaped site.

The exhibition centre is expected to provide a platform to support cultural and creative industries for particular major art-themed events, such as art fairs and art exhibitions, which face keen competition with other hirers for existing exhibition spaces. The main hall will be able to accommodate various kinds of performances, with a seating capacity of not less than 10,000 persons in concert mode, which will be column free and meet suitable acoustic standards.

The hotel will benefit from the demand created by the exhibition centre, and other facilities in the West Kowloon Cultural District, and represents a unique harbour-side development opportunity. There are also opportunities to make use of the operating synergies between the hotel and the exhibition centre to maximise commercial outcomes by attracting functions and events as well as providing facilities, such as meeting rooms and banquet facilities. The hotel will support the ACE Project for a wide range of meetings, incentive travels, conventions and exhibitions opportunities.

[West Kowloon Cultural District Authority Paper, 02/09/2019]

HONG KONG BRIEFING

Our damaging appetite for sand

Worldwide, we are gobbling up sand – which a just-published report from the United Nations calls “the unrecognized foundational material of our economies” – at such a rate that we are “exceeding natural sand replenishment rate”. And as we do it, we are causing unmeasured environmental harm to rivers, lakes, shorelines and even corals.

Our appetite for cement (25 percent of which is sand), asphalt for road building, glass and different kinds of “aggregates” (a combination of crushed rock, sand and gravel) to underpin land reclamation has apparently tripled over the past couple of decades. Let’s not even talk about military landing strips in the South China Sea, or the “Lantau Tomorrow Vision”.

As always, when it comes to demand for natural resources of almost any kind, China plays a starring role. Of the total global aggregates consumption, estimated at nearly 50 billions tonnes a year, China – which uses half of the world’s supply of concrete – accounts for a large share. China, India and the rest of Asia together account for 67 percent of global production, according to the UN report, “Sand and Sustainability: Finding New Solutions for Environmental Governance of Global Sand Resources”.

Put in perspective, 50 billion tonnes is approximately 7 tonnes for every person on the planet.

Confusingly, desert sand does not count. Apparently, the wind smooths desert sand grains so much that they are no good for cement-making or as aggregate in land reclamation.

The World Wide Fund for Nature (WWF) says up to 50 billion tonnes of sand and gravel are mined every year, and the trade is fraught with illegal practices and “sand mafias”, as the people extracting the aggregate don’t ask where it is going, and the buyers don’t ask where it has come from. In India, the illegal trade is valued at US\$2.3 billion a year. In Jamaica, an entire white-sand beach disappeared. In Morocco, the UN estimates that smugglers strip 10 million cubic metres of sand every year – accounting for half of the country’s annual sand production.

But a huge proportion of production, and the environmental harm, comes from legal, but poorly regulated sources. In China, Poyang Lake in Jiangxi is the country's largest freshwater lake, but it is also understood to be the source of 9 percent of China's sand supply – approximately 236 million cubic metres per year.

Between 2011 and 2013, China consumed more cement than the United States through the entire 20th century.

The world's biggest sand importer by far is Singapore, which has used land reclamation to add 130 square kilometers (20 percent) to its land area in the past 40 years. This has required between 517 million tonnes (Singapore's figures) and 637 million tonnes (neighbouring suppliers' figures) since 2000. Singapore accounted for over 9 percent of sand trade worldwide last year.

As global sand prices have risen from US\$3 a tonne in the 1990s to US\$190 per tonne in the 2000s, illegal activity has thrived. Indonesians complain that 24 sand islands have disappeared off Sumatra.

This provides some interesting context for Lam's "Lantau Tomorrow Vision", which would involve reclamation requiring in the region of 260 million cubic metres of fill material, depending on how high above sea level she wants her vision to be. At current sand prices, the bill for sand and fill alone could be between HK\$48 billion and HK\$60 billion.

Development Secretary Michael Wong Wai-lun insists that costs would be lower, and that locally sourced construction waste would be used for "a considerable percentage of the amount of fill". Since Hong Kong at present produces about 15 million tonnes of construction waste a year – enough to reclaim 60 hectares of land, according to Wong — it would require many years of supply to satisfy the reclamation needs of Lam's vision.

By comparison with the Lantau Tomorrow Vision, the Hong Kong Airport Authority's challenge in getting enough aggregate to complete the 650 hectare platform for the third runway seems modest, but a headache nonetheless.

Demand for sand is estimated to rise to at least 60 million tonnes a year by 2030.

[SCMP, 25/05/2019]

Disappointing new air-quality goals

More than 70 percent of Hong Kong residents are not satisfied with the government's proposed tightening of the city's five-year air-quality goals, a survey shows.

While the proposal lowered the maximum amount of two pollutants allowed in the air per day, the government's move to raise the number of times that limit could be exceeded in a year would "drastically increase public health risks", green groups said yesterday.

The proposal was approved by the Advisory Council on the Environment in March despite criticism from green groups. It is now open for a three-month public consultation, which will conclude on October 11.

The phone survey found 73 percent of the 574 respondents were against raising the tolerance of breaches. Forty-six percent thought the proposal would cause air quality in Hong Kong to deteriorate, while half were dissatisfied with the current air quality.

Under the proposal, the 24-hour concentration limit for two pollutants, PM2.5 and sulphur dioxide, would be lowered from 75 microgrammes per cubic metre to 50 microgrammes and 125 microgrammes to 50 microgrammes, respectively.

PM2.5 are fine suspended particulate matters in the air that can enter deep into the lungs and cause a range of respiratory illnesses – from asthma to even cancer. Sulphur dioxide also causes breathing problems.

But the government proposal would raise the number of times the PM2.5 limits could be exceeded in a year from the current nine days to 35 days.

The government's proposal also does not address the limits for five other monitored pollutants – including ozone, which can cause lung damage, and nitrogen oxide, which contributes to climate change. The survey found 59 percent were against the narrow scope of the proposal.

The lowered limits are still at least two times higher than the World Health Organisation's air-quality guidelines. In March, the government told the Advisory Council it could not meet the WHO guidelines because large infrastructure projects would then be unable to pass environmental impact assessments.

Clean Air Network urged the government to set more effective policies to combat air pollution.

[SCMP, 02/08/2019]

[Editors' Note: This is yet another illustration of the government's reluctance to tackle our air quality – and general environmental – problems.]

Supermarkets have been inconsistent in the use of plastic wrapping for produce

A Greenpeace survey in June 2019 revealed that Hong Kong's supermarkets are inconsistent in their use of plastic wrapping for produce across their stores and even add extra layers to existing packaging from suppliers.

The survey, conducted at 56 supermarket outlets, including Wellcome, ParknShop, Fusion and City'super, found that at least half of more than 12,100 products analysed had extra layers of cling wraps added in store. Most of these products were already packaged by the suppliers.

Many of the extra plastic wrappings were unlabelled, which made it hard for customers to recycle.

Ironically, another survey conducted by the group earlier this year revealed that 70% of consumers preferred shopping in plastic-free supermarkets.

[SCMP, 09/08/2019]

New scheme for a plastic-free city

Greenpeace piloted a plastic-free community initiative in Sha Tin in May, which was supported by 180 small stores and restaurants in the district.

Participating shops have put up stickers to indicate they are plastic-free friendly, and offer discounts to customers who opt for less plastic, by bringing their own shopping bags, or not asking for plastic utensils when ordering take-away food.

Participating consumers indicated that by having these “plastic-free” stickers at the shops, they feel more comfortable with requesting waiters to put food in their own lunchboxes when they order take-away food, because they now know for certain that the shops welcome customers who go plastic free.

The group also launched another awareness campaign in the community, in which residents took part in a plastic-free picnic in Shek Mun by bringing their own bowls and containers to buy food and drinks from participating shops.

Greenpeace says it looks forward to creating more plastic-free communities in the future, and will next focus on Tai Po, the district next to Sha Tin.

[SCMP, 24/08/2019]

Environmental impacts of tear gas

Hong Kong has seen months of street protests and political unrest sparked by opposition to the now-shelved extradition bill, which would have allowed transfers of criminal suspects to mainland China for trial.

As demonstrators adopted a “flash mob” approach to stage their protests in different areas, including those with more residences, tear gas has been fired by riot police in at least 13 of the 18 districts in the city. Over 3,000 tear gas canisters have been fired since June.

A group of about 40 local chemical engineers collected more than 200 samples since August, from areas including Admiralty, Sheung Wan, Kowloon Bay, Tsuen Wan and Sham Shui Po. They have found potentially harmful tear gas residue lingering on various surfaces up to three weeks after the chemicals are fired by police during clashes with protesters. They also found that tear gas can spread as far as 250 metres away from the sites. They are concerned that the gas chemicals may pose health hazards to citizens, especially children and the elderly.

A survey conducted by doctors found that more than 100 journalists covering the protests had reported health problems, such as breathing issues and skin allergies, following repeated exposure to the gas.

A mother with her infant who were exposed to tear gas when they were returning home said that rashes began to develop on the infant’s chest and back, and they became more serious after the infant came into contact with a backpack exposed to the gas.

Professor David Hui, an expert in respiratory medicine at Chinese University of Hong Kong, said children in general could take in more tear gas than adults. Yet, he said not many long-term problems had been identified, though there were a few cases where people had asthma for two to three years after coming into contact with the harmful gas. He added that tear gas could cause skin irritation in both adults and children.

[Standard, 11/09/2019; SCMP, 26/08/2019]

CLIMATE CHANGE

World is unprepared for global warming

The world’s readiness for the inevitable effects of the climate crisis is “gravely insufficient”, according to a report from global leaders. This lack of preparedness would result in poverty, water shortages and soaring migration, with an “irrefutable toll on human life”, the report warned.

Trillion-dollar investment was needed to avert “climate apartheid”, where the rich escape the effects and the poor do not, but this investment was far smaller than the cost of doing nothing, the report said. The greatest obstacle is not money but lack of “political leadership that shakes people out of their collective slumber”, according to the study.

The report was produced by the Global Commission on Adaptation, convened by 18 nations.

It has contributions from the former UN secretary general Ban Ki-moon, he Microsoft founder, Bill Gates, environment ministers from China, India, and Canada, the heads of the World Bank and the UN climate and environmental divisions, and others.

Among the most urgent actions recommended are early warning systems of impending disasters, developing crops that can withstand droughts and restoring mangrove swamps to protect coastlines. Other measures include painting roofs of homes white to reduce temperatures.

Ban said: "I'm really concerned about the lack of vision of political leaders. They are much more interested in getting elected and re-elected, and climate issues are not in their priorities. We are seeing this in the US with President Trump".

The report concludes that severe effects are inevitable, and predicted that, unless precautions were taken, 100 million more people could be in poverty by 2030.

The number of people short of water each year will jump by 1.4 billion to 5 billion, causing competition for water, fuelling conflict and migration.

But the moral imperative alone will not drive change, he said, and the report also makes an economic case.

The report estimates spending US\$1.8 trillion by 2030 in five areas could yield US\$7.1 trillion in net benefits, by avoiding damages and increasing economic growth.

The report, which was released ahead of a UN summit on climate change later this month, focuses on early warning systems, climate-ready infrastructure and protection of mangrove forests, from Australia to Mexico.

[SCMP, 11/09/2019]

Australia refuses to transition away from extracting fossil fuels

Instead of transitioning away from extracting fossil fuels, Australia is doubling down on them. Australia is already the third largest fossil fuel exporter in the world, and it plans to double its coal exports, possibly drill for oil in the Great Australian Bight and open more farmland to fracking.

Australia has sought to play a leadership role among the Pacific Island nations since the Second World War. In 2015, the Suva Declaration was issued by Pacific Island nations, in which Australia is asked to stop building new coalmines. This request was repeated in the Nadi Bay Declaration in July 2019. However, prime minister Scott Morrison seemed either surprised or enraged that such a request would be included in the Pacific Island Forum declaration in Tuvalu. Morrison tried to interpret the Pacific's request to stop opening new coalmines as a demand to shut down Australia's entire resources industry.

In September 2019, world leaders will gather in New York to discuss the lack of progress on reducing global emissions. With its domestic emissions rising, Australia's determination to use dodgy carbon credits to meet the Paris commitments and now also the open revolt by the Pacific over Australia's plans to build new coalmines, the New York's meeting might be a little too icy for Morrison.

Although Morrison argues that what happens to Australia's coal and gas after they sell it is not Australia's problem, the rest of the world sees it in another way. Australia's perception is not the way the world sees those countries that export landmines, nuclear weapons technology or endangered species, either.

[The Guardian, 20/08/2019]

U.S. Democratic National Committee refuses to debate climate crisis

Recently, the Democratic National Committee has rejected calls for a debate on the climate crisis by voting down a resolution that would have dedicated one of the 12 Democratic debates entirely to the issue.

Calls for a DNC-sanctioned climate debate have been building for months. Despite the fact that climate has been one of the most important issues to likely Democratic voters in the 2020 presidential election, not much time has been spent on the topic in debates to date; only a scant 15 minutes in the first set of debates, and just over 20 minutes in the most recent two.

Party delegates met in late August in San Francisco to hear from 2020 candidates, hold fundraising events and tend to party business. In all of these meetings, the gathering's most urgent agenda items was to vote on resolutions to determine if a climate debate would take place.

Lengthy discussion took place following which a committee rejected the resolution that would have allowed for a party-sponsored climate debate, in a 17-to-8 vote. Some committee members worried that the DNC was treading on "dangerous ground" to even consider changing party rules to allow for the climate debate, while some others expressed concerns about opening a floodgate for single-issue events.

Christine Pelosi, a committee member, later submitted another amendment that would have allowed for a climate debate as well as other issue-specific debates tied to the party platform. However, that was also summarily dismissed. Pelosi and other climate advocates vowed to again bring the issue to the full DNC meeting floor.

The dissension highlights divisions between party leadership and a progressive base that is increasingly vocal about the urgent need to address the climate emergency.

[The Guardian, 22/08/2019]

EUROPE

Europe's rooftops the next solar hot spot

Europeans can massively expand low-cost solar generation just by tapping the space over their heads. That's the conclusion of researchers who used satellite imagery, electricity prices and lending data to assess the untapped energy potential of Europe's buildings.

Rooftop area three times the size of Luxembourg is available and could economically supply almost a quarter of Europe's power, according to a paper published in the October edition of *Renewable Sustainable Energy Reviews*.

The overwhelming majority of Europeans support shifting to clean energy to halt climate change, but governments have struggled to find solutions. Germany, the bloc's economic engine, expects to miss pledges it made to cut emissions despite record investments in solar and wind power.

Sluggish investment in upgrading power grids has created bottlenecks between regions that have deployed intermittent renewables and those that still rely on polluting fossil-fuel plants that run all the time.

The new research suggests that looking more closely at rooftop solar resources could help policy makers to plan more effectively, especially as an expected wave of electric vehicles enters the market and raises power demand.

"Rooftop systems can cover such an increased demand and if designed to produce electricity mainly for local consumption, side-effects such as grid congestion and dispatch cost will be avoided," researchers wrote.

There are about 7935 square kilometres of roofarea available in the bloc that could produce some 680,276 gigawatt-hours of electricity a year.

The plunging cost of solar power, which has hit cost parity with traditional power generation in many parts of the world, means electricity from rooftop panels could be economically priced, according to the report.

"The report could encourage governments to view support for rooftop solar as an easy political win, avoiding any tradeoffs between energy and land use and probably being popular with roof owners," wrote BloombergNEF solar analyst, Jenny Chase. Until now, building owners have been wary of the high up-front capital costs of solar panels compared with the longer-term power returns measured over 25 years, she said.

[*Australian Financial Review*, 04/09/2019]

CHILE

Chile's glaciers are disappearing

Rising temperatures and droughts are escalating the melting of Chile's ice masses, but copper mining, which accounts for 10% of the nation's GDP and more than half its exports, is the biggest threat.

Chile has one of the world's largest reserves of fresh water outside the north and south poles, but the abundant glaciers that are the source of that precious commodity are melting fast. That is not just an ecological disaster in the making, it is rapidly becoming an economic and political dilemma for the government of Latin America's richest nation.

A toxic cocktail of rising temperatures, the driest nine-year period on record and human activity, including mining, is proving lethal for the ice of Chile's central region. Built up over thousands of years, the ice mass is now retreating one metre per year on average.

More than 7 million people living in and around the capital, Santiago, rely on the glaciers for most of their water supply in times of drought. However, a government geologist warned that some glaciers will have disappeared in less than two decades from now, while the total volume of all glaciers in Chile will have shrunk by half by the end of the century. That is an acute problem since Chile, which has 80% of South America's glaciers, is also the country in the Americas most at risk of extremely high water stress, according to the World Resources Institute.

Chile's government is aware of the issue. A glacier unit was established in 2008 and tasked with producing an inventory of glaciers with the aim of protecting them and raising awareness of their importance. However, its resources are limited: it had a staff of just seven last year. So far, the unit has published only a single register of glaciers, in 2014, using decade-old data. The unit is due to issue a second inventory later this year allowing the first ever comparison of all Chile's glaciers.

Not everyone is content to wait. An opposition bill has been brought before parliament, which aims to lock in legal protection for glaciers. The bill proposes that all glaciers and their surroundings become protected areas; it would also ban non-scientific interventions and would make any violations of the rules a crime.

Yet, the Chilean President Sebastian Pinera's center-right government has come out against it, arguing that if implemented, the measures would harm Chile's economic development, and specifically its lucrative mining industry.

[*Taipei Times*, 19/08/2019]

Coal mine project shelved!

The remote island of Isla Riesco in southern Chile is the site of a controversial coal mine – Mina Invierno or “winter mine.” Coal is extracted here mechanically, but operators sought permission to start using explosives to blast for coal. Last week, the Valdivia Environmental Court canceled the license for the proposed blasting.

ELAW staff scientists and attorneys worked closely with partners at Fiscalía del Medio Ambiente (FIMA) to challenge the project.

Coal is a dirty, outdated fuel and a major source of greenhouse gases. ELAW Staff Scientists Dr. Mark Chernaik and Dr. Meche Lu estimated that Mina Invierno would emit 133,400 tons/year of greenhouse gas emissions (CO₂e).

ELAW staff submitted an Amicus Curiae brief supporting FIMA's arguments that climate impacts must be analyzed in the environmental impact statement (EIS), citing domestic and international court decisions from around the world.

Mina Invierno has a troubled history. In its six years of operation, the mine allegedly damaged a Kawéskar archeological site and polluted local surface water.

The environmental license for the proposed mining project was cancelled by the Valdivia Environmental Court due to a lack of essential information in the EIS about fossils and the potential impacts of blasting on these cultural assets.

[*Elaw Press Release*, 29/08/2019]

INDONESIA

Plastic straw ban upheld

The Indonesian Supreme Court has ruled that the Bali single-use plastic ban is reasonable. The ban has therefore survived judicial review. Therefore, all other localities in Indonesia now have authority to create their own local bans.

It was a timely collective action with the Indonesia Plastic Bag Diet (IDDKP), Environmental Law Scholar Association, and some amazing individuals, especially from the human rights field which achieved this welcome result.

ELAW is pleased to partner with the Break Free From Plastic movement to challenge the plastic menace in Indonesia and around the world.

[*Elaw Press Release*, 25/07/2019]

BRAZIL

Deforestation ‘explodes’ under new president

Deforestation in the Brazilian Amazon “exploded” in July, it has emerged, as President Jair Bolsonaro scoffed at his portrayal as Brazil’s “Captain Chainsaw” and mocked Emmanuel Macron and Angela Merkel for challenging him over the devastation. Bolsonaro ridiculed what he called his depiction as “Capitao Motoserra”, which is Portuguese for Captain Chainsaw.

Speaking in Sao Paulo this week, Brazil’s president attacked the leaders of France and Germany – who have both voiced concern about the surge in destruction since Bolsonaro took office in January.

The far-right populist repeated claims that his administration – which critics accuse of helping unleash a new wave of environmental destruction – was the victim of a mendacious international smear campaign based on “imprecise” satellite data showing a jump in deforestation.

But official data has laid bare the scale of the environmental crisis currently unfolding in the world’s biggest rainforest, of which about 60 percent is in Brazil.

According to a report in the *Estado de Sao Paulo* newspaper, Amazon destruction “exploded” in July, with an estimated 2,254 sq km offorest cleared, based on preliminary data gathered by Brazil’s National Institute for Space Research, the government agency that monitors deforestation. This vast area reportedly represents a 278 percent rise on the 596.6 sq km destroyed in July last year.

Romulo Batista, a Greenpeace campaigner based in the Amazonian city of Manaus, said the numbers – while preliminary – were troubling and showed a clear trend of rising deforestation under Bolsonaro. What was not yet clear was if the devastation was “going up, going up a lot, or skyrocketing”.

Batista blamed Bolsonaro’s “anti-environmental” discourse and policies – such as slashing the budget of Brazil’s environmental agency, Ibama – for the surge.

The spike in destruction under Bolsonaro, who was elected with the support of powerful mining and agricultural sectors, has shocked, but not surprised environmentalists.

During a visit to the Amazon last year Bolsonaro said that as president he would target “cowardly” environmental NGOs who were “sticking their noses” into Brazil’s domestic affairs.

[SCMP, 09/08/2019]

WORLD

Microplastic in Arctic ice

Tiny pieces of plastic have been found in ice cores drilled in the Arctic by a US-led team of scientists, underscoring the threat the growing form of pollution poses to marine life in even the remotest waters on the planet.

The researchers used a helicopter to land on ice floes and retrieve the samples during an 18 day icebreaker expedition through the Northwest Passage, the hazardous route linking the Pacific and Atlantic oceans.

The scientists found the material trapped in ice taken from Lancaster Sound, and isolated stretch of water in the Canadian Arctic, which they had assumed might be relatively sheltered from drifting plastic pollution.

The team drew 18 ice cores of up to two metres long from four locations and saw visible plastic beads and filaments of various shapes and sizes.

The scientists' dismay is reminiscent of the consternation felt by explorers who found plastic waste in the Pacific Ocean's Marianas Trench, the deepest place on Earth, during submarine dives earlier this year.

The plastic fragments – known as microplastic – served to highlight how the waste problem has reached epidemic proportions.

The United Nations estimates 100 million tonnes of plastic have been dumped in the oceans to date.

The researchers said the ice they sampled appeared to be at least a year old and had probably drifted into Lancaster Sound from more central regions of the Arctic.

The team plans to subject the samples to further analysis to support a broader research effort to understand the damage plastic is doing to fish, seabirds and large ocean mammals such as whales.

[SCMP, 16/08/2019]

TAIWAN

Levels of PM2.5 declined in southern Taiwan

On 22 August 2019, the Environmental Protection Administration (EPA) revealed that the levels of PM2.5 in Kaohsiung and Pingtung have fallen over the past four years.

In 2015, the EPA implemented several measures to reduce PM2.5 emissions, such as controlling emissions from fixed and mobile sources, promoting emissions-reduction policies in state-owned businesses, reducing diesel-powered vehicle emissions, promoting collective burning of joss paper and reducing the number of events at which joss paper is burned.

Thanks to these measures, overall air pollution has dropped from 198,403 tonnes in 2015 to 182,448 tonnes last year. In particular, the general density of PM2.5 in the Kaohsiung-Pingtung region has fallen by 20.4 % over the period, or from 23.5 micrograms per cubic metre (mcg/m³) in 2015 to 18.7mcg/m³ last year. The measures are expected to decrease air pollution emissions by 17,933 tonnes over the next four years, including 652 tonnes of particulate matter, 7,419 tonnes of sulfur dioxide, 8,666 tonnes of nitrogen oxide and 1,196 tonnes of volatile organic compounds.

[*Taipei Times*, 23/08/2019]

SRI-LANKA

Ninety percent of Sri Lanka's coral reefs are dead

On 3 July 2019, Sri Lanka's Marine Environment Protection Authority warned that the country had only 10% of live coral reefs remaining, as 90% have died due to pollution, illegal fishing methods and climate change.

Terney Pradeep Kumara, general manager of the Marine Environment Protection Authority urged that urgent steps be taken by the government to declare the remaining live coral reefs as "highly protected areas"; measures must also be taken to move these live corals to deeper seas. Kumara added that Sri Lanka, once rich in coral reefs, had lost 90% of its corals in recent years mainly due to illegal fishing methods, such as bottom trawling and dynamite blasting, climate change and high levels of waste dumped into the seas.

"We urgently now need to save the remaining 10%. At present what we are observing is that the remaining 10% is also facing a lot of difficulty due to high temperature levels," Kumara said. "Therefore, we expect all government agencies, private agencies and all the environmentalists to get together and help the government declare these reefs as highly protected areas and help transfer the living corals to deep areas to keep them alive," he added.

Kumara explained that saving the remaining live corals would improve the country's bio-diversity and help Sri Lanka attract more tourists, thus strengthening the economy.

[*The Macau Post Daily*, 04/07/2019]

ISRAEL

Passion for plastic pollutes beaches

In June 2019, a report published by the World Wide Fund for Nature ranked Tel Aviv's coastline as the third most polluted by plastic waste in the Mediterranean, behind Barcelona and southern Turkey. With approximately 4 million inhabitants, Tel Aviv is Israel's most populous metropolitan area.

In the upper-crust town of Herzliya, just north of Tel Aviv, Limor Gorelik of the environmental protection NGO Zalul, patrols the sands, offering beachgoers bamboo cups and reusable bags in a bid to wean them from single-use plastics. Gorelik blames Israel's passion for plastic on a lack of education and on deeply ingrained habits, such as using disposable tableware for family picnics. Observant Jews who want a beach front lunch on Saturdays are forbidden from washing the dishes afterwards, because their faith bans them from working on the Sabbath. "So they use disposable plastic," Gorelik says.

Independent researcher, Galia Pasternak, has analysed coastal plastic pollution in Israel. According to her data, 60% of the waste on the beach comes from the bathers themselves. Some is also borne by currents from Gaza and Egypt in the south or from Lebanon farther north.

In 2005, Israel's environmental protection ministry launched a programme offering local councils incentives for proven results in cleaning their beaches. Subject to regular inspection, councils that meet requirements get funding, while failing authorities face cuts or even prosecution. The ministry's strategy in recent years has also included public service messages on radio and online, along with fines, establishing recycling facilities and education.

[*Shanghai Daily*, 25/08/2019]

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Convictions under environmental legislation: June to September 2019 (October 2019 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:

June 2019

Sixty-one convictions were recorded in June 2019 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Eight of the convictions were under the Air Pollution Control Ordinance, 6 were under the Noise Control Ordinance, 7 were under the Public Cleansing and Prevention of Nuisances Regulation, and 40 were under the Waste Disposal Ordinance.

The heaviest fine in June was \$50,000, assessed against a construction company which used powered mechanical equipment without valid construction noise permit.

July 2019

Sixty-one convictions were recorded in July 2019 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Six of the convictions were under the Air Pollution Control Ordinance, 15 were under the Noise Control Ordinance, 1 was under the Public Cleansing and Prevention of Nuisances Regulation, 2 were under the Product Eco-responsibility Ordinance, 33 were under the Waste Disposal Ordinance, and 4 were under the Water Pollution Control Ordinance.

The heaviest fine in July was \$20,000, assessed against two companies which imported controlled waste without a permit and discharged waste/polluting matter into water control zones.

August 2019

Forty-nine convictions were recorded in August 2019 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Ten of the convictions were under the Air Pollution Control Ordinance, 20 were under the Noise Control Ordinance, 5 were under the Public Cleansing and Prevention of Nuisances Regulation, 12 were under the Waste Disposal Ordinance, and 2 were under the Water Pollution Control Ordinance.

Separately, two companies and one person were fined \$30,000, which was the heaviest fine in August, for using powered mechanical equipment not in accordance with the conditions of the relevant Construction Noise Permits and depositing waste unlawfully.

September 2019

Seventy-one convictions were recorded in September 2019 for breaches of legislation enforced by the Environmental Protection Department (EPD).

Four of the convictions were under the Air Pollution Control Ordinance, 2 were under the Dumping at Sea Ordinance, 10 were under the Noise Control Ordinance, 13 were under the Public Cleansing and Prevention of Nuisances Regulation, 35 were under the Product Eco-responsibility Ordinance, 6 were under the Waste Disposal Ordinance, and one was under the Water Pollution Control Ordinance.

A company was fined \$16,000, which was the heaviest fine in September, for using powered mechanical equipment not in accordance with the conditions of the relevant construction noise permit.

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