

**URBAN PLANNING AND
ENVIRONMENTAL LAW
QUARTERLY**

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The world's natural environment continues to be degraded at an alarming rate due to damaging human activities, population growth and a general lack of will on the part of political and industry leaders to implement meaningful measures to halt and reverse environmental degradation. In this edition we review the fourteen most serious global environmental problems, as assessed by respected environmental NGO, Earth.Org, with particular focus on the extinction of fauna and flora species.

The Editors

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KEY GLOBAL ENVIRONMENTAL PROBLEMS

In January 2023 *Earth.Org*, a well-known and respected non-governmental environmental organization, issued a report summarising what it considers to be the fourteen most serious environmental problems affecting the global community, mainly in connection with climate change. The following is an abridged version of the report.

Climate change

Since the industrial revolution of the late 19th and early 20th centuries, global emissions of greenhouse gases have increased dramatically, due to our exploitation of the earth natural resources (in particular, extracting and burning fossil fuels) to fuel perceived economic development.

Increased emissions of greenhouse gases have led to a rapid and steady increase in global temperatures, which in turn is causing catastrophic events all over the world – from Australia and the US experiencing some of the most devastating bushfire seasons ever recorded, to locusts swarming across parts of Africa, the Middle East and Asia, decimating crops, and a heatwave in Antarctica, where temperatures have risen above 20 degrees for the first time.

Scientists are constantly warning that the planet has crossed a series of tipping points that could have catastrophic consequences, such as: advancing permafrost melt in Arctic regions; the Greenland ice sheet melting at an unprecedented rate; accelerating a sixth mass extinction of fauna and of flora; and increasing deforestation in the Amazon rainforest, just to name a few.

Climate change is also causing tropical storms and other weather events, such as hurricanes, heatwaves and flooding, to be more intense and frequent than seen before. However, even if all greenhouse gas emissions were halted immediately, global temperatures would continue to rise in the coming years. That is why it is absolutely imperative that we start now to drastically reduce greenhouse gas emissions, invest in renewable energy sources, and phase-out fossil fuels as fast as possible.

Poor governance

According to economists like Nicholas Stern, the climate crisis is a result of multiple market failures.

Economists and environmentalists have urged policymakers for years to increase the price to be paid for activities that emit greenhouse gases (one of our biggest environmental problems), the lack of which constitutes the largest market failure. For example, carbon taxes would stimulate innovations in low-carbon technologies.

According to the 2019 OECD Tax Energy Use Report, current tax structures are not adequately aligned with the pollution profile of energy sources. For example, the OECD suggests that carbon taxes on coal mining are not harsh enough. A carbon tax has been effectively implemented in Sweden; the carbon tax is US\$127 per tonne and has reduced emissions by 25% since 1995, while its economy has expanded 75% in the same time period.

Further, the United Nations is not capable of dealing with the climate crisis. The UN was established after the 2nd World War to prevent another world war and is not fit for purpose in the climate change context. Anyway, members of the UN are not mandated to comply with any suggestions or recommendations made by the organisation. For example, the Paris Agreement--an agreement within the United Nations Framework Convention on Climate Change-- requires that countries have to reduce greenhouse gas emissions significantly so that global temperature rise is below 2 degrees Celsius by 2100, and ideally under 1.5 degrees. But signing on to it is voluntary, and there are no real repercussions for non-compliance. Further, national equity remains a contentious issue, whereby developing countries are allowed to emit more in order to develop to the point where they can develop technologies to emit less, which allows some countries, such as China, to exploit this concession.

Food waste

A third of the food intended for human consumption- approximately 1.3 billion tons – is wasted or lost each year. This is enough to feed 3 billion people. Food waste and loss account for a third of greenhouse gas emissions annually; if it was a country, food waste would be the third highest emitter of greenhouse gases, behind China and the US.

Food waste and loss occurs at different stages in developing and developed countries; in developing countries, 40% of food waste occurs at the post-harvest and processing levels.

Biodiversity loss

The past 50 years have seen a rapid increase in human consumption, population, global trade and urbanisation, resulting in humanity using more of the Earth's resources than can be replenished naturally.

A recent WWF report found that population sizes of mammals, fish, birds, reptiles and amphibians have experienced a decline of an average 68% between 1970 and 2016. The report attributes this biodiversity loss to a variety of factors, but mainly land-use changes, particularly the conversion of habitats, like forests, grasslands, and mangroves, into agricultural systems. As well, animals such as pangolins, sharks and seahorses are significantly affected by the illegal wildlife trade, and pangolins are critically endangered because of it.

More broadly, a recent analysis has found that the *sixth mass extinction* of wildlife on Earth is accelerating. More than 500 species of land animals are on the brink of extinction and are likely to be lost within 20 years, the same number lost over the whole of the last century. Scientists say that without the human destruction of nature, this rate loss would have taken thousands of years.

Pausing here, we refer to an exhaustive study and report by a group of eminent ecological scientists (*G. Ceballos, Paul Ehrlich, Peter Raven etc.*) in 2019-2020 which stated that the ongoing *sixth mass species extinction* is the result of human related destruction of component fauna and flora population resulting in eventual extirpation of entire species.

The report notes that: *“The ongoing sixth mass extinction may be the most serious environmental threat to the persistence of civilization, because it is irreversible. Thousands of populations of critically endangered vertebrate animal species have been lost in a century, indicating that the sixth mass extinction is human caused and accelerating. The acceleration of the extinction crisis is certain because of the still fast growth in human numbers and consumption rates. In addition, species are links in ecosystems, and, as they fall out, the species they interact with are likely to go also. In the regions where disappearing species are concentrated, regional biodiversity collapses are likely occurring. Our results reemphasize the extreme urgency of taking massive global actions to save humanity’s crucial life-support systems.”*

The report authors added: *“The ongoing sixth mass species extinction is the result of the destruction of component populations leading to eventual extirpation of entire species. Populations and species extinctions have severe implications for society through the degradation of ecosystem services. Here we assess the extinction crisis from a different perspective. We examine 29,400 species of terrestrial vertebrates, and determine which are on the brink of extinction because they have fewer than 1,000 individuals. There are 515 species on the brink (1.7% of the evaluated vertebrates). Around 94% of the populations of 77 mammal and bird species on the brink have been lost in the last century. Assuming all species on the brink have similar trends, more than 237,000 populations of those species have vanished since 1900. We conclude the human caused sixth mass extinction is likely accelerating for several reasons. First, many of the species that have been driven to the brink will likely become extinct soon. Second, the distribution of those species highly coincides with hundreds of other endangered species, surviving in regions with high human impacts, suggesting ongoing regional biodiversity collapses. Third, close ecological interaction of species on the brink tend to move other species toward annihilation when they disappear- extinction breeds extinctions. Finally, human pressures on the biosphere are growing rapidly, and a recent example is the current coronavirus disease 2019 (Covid-19) pandemic, linked to wildlife trade. Our results reemphasize the extreme urgency of taking much expanded worldwide action to save wild species and humanity’s crucial life support systems from this existential threat.*

The Report has a serious and environmentally foreboding central message concerning biodiversity loss due to mankind's over-consumption and damaging uses of natural resources. *Life has now entered a sixth mass extinction. This is probably the most serious environmental problem, because the loss of a species is permanent, each of them playing a greater or lesser role in the living systems on which we all depend. The species extinctions that define the current crisis are, in turn, based on the massive disappearance of their component populations, mostly since the 1800s. The massive losses that we are experiencing are being caused, directly or indirectly, by the activities of Homo sapiens. They have almost all occurred since our ancestors developed agriculture, some 11,000 years ago. At that time, we numbered about 1 million people*

worldwide; now there are 7.7 billion of us, and our numbers are still rapidly growing. As our numbers have grown, humanity has come to pose an unprecedented threat to the vast majority of its living companions.

Today, species extinction rates are hundreds or thousands of times faster than the “normal” or “background” rates prevailing in the last tens of millions of years. The recent United Nations report on biodiversity and ecosystem services estimates that a quarter of all species face extinction, many within decades. When a species disappears, a wide range of characteristics is lost forever, from genus and interactions to phenotypes and behaviours.

For example, in a sample of 177 species of large mammals, most lost more than 80% of their geographic range in the last century, implying a very extensive extirpation of populations. Similarly, a recent study showed that 32% of more than 27,000 vertebrate species have declining populations. And the Living Planet Report found that roughly 70% of all individuals of vertebrate species have disappeared over the 50 years since 1970. Insects and other invertebrates have suffered huge losses also. About 75% of all flying insects in national parks in Germany disappeared in 25 years, and there are numerous signs that many species of insects are heading for the exit. Similar losses have been documented for various species of clams, snails, and starfish and for plants.

Examples documenting the ongoing biological annihilation are proliferating, each of them underlining the magnitude of the problem and the urgency of taking action. More than 400 vertebrate species became extinct in the last 100 years, extinctions that would have taken up to 10,000 years in the normal course of evolution. Among vertebrate species that have disappeared in historic times are the thylacine, the ivory-billed woodpecker and the Round Island burrowing boa. Champions of recent extinctions are amphibians, with hundreds of species of frogs and toads suffering population declines and extinctions: perhaps a fifth of the species extinct already or on the brink of extinction.

Plastic pollution

In 1950, the world produced more than 2 million tons of plastic per year. By 2015, this annual production had increased to 419 million tons. Plastic waste in the environment has become a major pollution problem. A report by science journal, *Nature*, determined that currently, approximately 14 million tons of plastic make their way into the oceans every year, harming wildlife habitats and the animals that live in them. The research found that if no action is taken, the plastic crisis will grow to 29 million metric tons per year by 2040. If we include microplastics in this, the cumulative amount of plastic in the ocean could reach 600 million tons by 2040.

Shockingly, *National Geographic* found that 91% of all plastic that has ever been made is not recycled, representing not only one of the biggest environmental problems of our lifetime, but another massive market failure. Considering that plastic takes 400 years to decompose, it will be many generations until it ceases to exist. There’s no telling what the irreversible effects of plastic pollution will have on the environment in the long run.

Deforestation

The Amazon Forest has an area of approximately 5.5 million square kilometres, covering 40% of the South American continent, and contains an estimated 390 billion trees. It is also one of the most biologically diverse ecosystems and is home to more than three million species of plants and animals. Despite efforts to protect forest land, legal deforestation is still rampant. Approximately a third of global tropical deforestation occurs in Brazil’s Amazon Forest, amounting to 1.5 million hectares each year. The world has been chopping down 10 million hectares of trees every year to make space to grow crops and livestock, and to produce materials such as paper.

Agriculture is the leading cause of deforestation. Land is cleared to raise livestock or to plant crops. This and mining are the main causes of global deforestation.

Air pollution

One of the most serious environmental problems today is outdoor air pollution. Data from the World Health Organisation (WHO) shows that an estimated 4.2 to 7 million people die from air pollution worldwide every year and that nine out of 10 people breathe air that contains high levels of pollutants. In Africa, 258,000 people died as a result of outdoor air pollution in 2017, up from 164,000 in 1990, according to UNICEF. Air pollution mostly comes from emissions from industrial sources and motor vehicles, as well as from burning biomass. Poor air quality is at times also due to dust storms.

In Europe, a recent report from the EU’s environment agency showed that air pollution contributed to 400,000 deaths in the EU in 2012 (the last year for which data was available).

In the wake of the COVID-19 pandemic, attention has been given to the role that air pollution has in transporting virus molecules. Preliminary studies have identified a positive correlation between COVID-19-related mortalities and air pollution and there is also a plausible association of airborne particles assisting the viral spread. This could have contributed to the high death toll in China, where air quality is notoriously poor, although more definitive studies must be conducted before such a conclusion can be drawn.

Rising sea levels

The climate crisis is warming the Arctic more than twice as fast as anywhere else on the planet. Today, sea levels are rising more than twice as quickly as they did for most of the 20th century as a result of increasing temperatures on Earth. Sea levels are now increasing an average of 3.2 mm per year globally and they will continue to rise up to about 0.7 metres by the end of this century. In the Arctic, the Greenland Ice Sheet poses the greatest risk for sea levels because melting land ice is the main cause of rising sea levels.

Meanwhile, the Antarctic continent contributes about 1 millimetre per year to sea level rise, which is a third of the annual global increase. Additionally, the last fully intact ice shelf in Canada in the Arctic recently collapsed, having lost about 80 square kilometres or 40% of its area over a two-day period in late July, according to the Canadian Ice Service.

The rise in global sea levels will have a devastating impact on those living in coastal regions. According to research and advocacy group, Climate Central, the increase in sea levels this century could flood coastal areas that are now home to 340 million to 480 million people, forcing them to migrate to safer areas, contributing to over-population straining resources in the areas they migrate to. Bangkok (Thailand), Ho Chi Minh City (Vietnam), Manila (Philippines), and Dubai (United Arab Emirates) are among the cities most at risk from sea level rise and flooding.

Ocean acidification

Increasing global temperatures have not only affected the surface, but are the main cause of ocean acidification. Our oceans absorb about 30% of carbon dioxide that is released into the Earth's atmosphere. As higher concentrations of carbon emissions are released due to human activities, such as burning fossil fuels, as well as knock-on effects of global climate change, such as increased rates of wildfires, so does the amount of carbon dioxide that is absorbed back into sea.

The smallest change in the pH scale can have a significant impact on the acidity of the ocean. Ocean acidification has devastating impacts on marine ecosystems and species and oceanic food webs. For example, coral reefs are seriously impacted by increased acidification which drives away algae and causes coral reefs to lose their natural vibrant colours. Some scientists have estimated coral reefs are at risk of being completely wiped out by 2050. Higher acidity in the ocean will obstruct coral reef system's ability to rebuild their exoskeletons and recover from these coral bleaching events.

Some studies have also found that ocean acidification can be linked as one of the effects of plastic pollution in the ocean. The accumulating bacteria and microorganisms derived from plastic garbage dumped in the ocean damage marine ecosystems and contribute towards coral bleaching.

Agriculture

Studies have shown that the global food system is responsible for up to one third of all human-caused greenhouse gas emissions, of which 30% comes from livestock and fisheries. Crop production releases greenhouse gases, such as nitrous oxide, through the use of fertilisers. 60% of the world's agricultural area is dedicated to cattle ranching, although it only makes up 24% of global meat consumption.

Agriculture not only takes up a vast amount of land, but it also consumes huge volumes of freshwater. Diminishing freshwater supplies is another significant global environmental problem. Whilst arable lands and grazing pastures cover one third of Earth's land surfaces, they consume three quarters of the world's limited freshwater resources.

Scientists and environmentalists have continually warned that we need to rethink our current food system; switching to a more plant – based diet would dramatically reduce the carbon footprint of the conventional agriculture industry.

Soil erosion

Globally, more than 68 billion tonnes of topsoil is eroded every year at a rate 100 times faster than it can naturally be replenished. Laden with biocides and fertiliser, the soil ends up in waterways where it contaminates drinking water and ecosystems downstream. Furthermore, exposed and lifeless soil is more vulnerable to wind and water erosion due to lack of root and mycelium systems that hold it together. A key contributor to soil erosion is over tilling. Although it increases productivity in the short term by mixing in surface nutrients (e.g., fertiliser), tilling is physically destructive to the soil's structure and in the long-term leads to soil compaction, loss of fertility and surface crust formation that worsens topsoil erosion.

With the global population expected to reach 9 billion people by mid-century, the Food and Agriculture Organization of the United Nations (FAO) projects that global food demand may increase by 70% by 2050. Around the world, more than 820 million people do not get enough to eat on a daily basis.

The UN secretary general António Guterres has said: *“Unless immediate action is taken, it is increasingly clear that there is an impending global food security emergency that could have long term impacts on hundreds of millions of adults and children.”* He urged countries to rethink their food systems and encouraged the adoption of more sustainable farming practices.

In terms of water security, only 3% of the world's water is fresh water, and two thirds of that is tucked away in frozen glaciers or otherwise unavailable for our use. As a result, some 1.1 billion people worldwide lack access to water, and a total of 2.7 billion find water scarce for at least one month of the year. By 2025, two thirds of the world's population may face water shortages.

Fast fashion and textile waste

The world generates an estimated 92 million tonnes of textiles waste every year and that number is expected to soar to 134 million tonnes a year by 2030. Discarded clothing and textile, most of which is non-biodegradable, ends up in landfills, while microplastics from clothing materials—such as polyester, nylon, polyamide, acrylic and other synthetic materials—is leached into soil and nearby water sources. Monumental amounts of clothing textile are also dumped in less developed countries, as seen in Chile's Atacama (the driest desert in the world), where at least 39,000 tonnes of textile waste from other nations has been left to rot.

Overfishing

Over three billion people around the world rely on fish as their primary source of protein. About 12% of the world relies on fisheries in some form or another. Approximately 90% of individual fisheries are harvested by small scale fishermen using small nets or even rods, reels and lures.

Most people consume approximately twice as much food as they did 50 years ago and there are four times as many people on earth as there were at the close of the 1960s. This is one driver of the classification of 30% of commercially fished waters as “overfished”. This means that the stock of available fishing waters is being depleted faster than it can be replaced.

Overfishing comes with serious detrimental effects, including increased algae in the water, destruction of fishing communities, ocean littering and extremely high rates of biodiversity loss.

As part of the United Nations’ 17 Sustainable Development Goals (SDG 14), the UN and FAO are working towards maintaining the proportion of fish stocks within biologically healthy zones.

Mining

Mining is a significant cause of environmental problems, such as greenhouse gas emissions, large-scale clearance of native vegetation and pollution of water sources. Cobalt mining is a niche example of adverse environmental impacts caused by the mining industry at large.

Cobalt is a key component of batteries, which power electric vehicles for which there has been a such aimed surge in demand. The largest supplier of cobalt is the Democratic Republic of Congo (DRC), which produces approximately 20% of the world’s cobalt supply, mainly through artisanal mines.

There are serious environmental concerns with mining generally, of which DRC’s cobalt mining industry is an extreme example. Cobalt mining generates severe pollution which leaches into neighboring rivers and water sources. Dust from pulverising rock to extract the mineral causes air pollution and breathing problems for local communities.

Conclusion

Earth.Org stated the sadly obvious in concluding its report: - “*Whilst these are some of the biggest environmental problems plaguing our planet, there are many more that have not been mentioned, including destructive fishing practices, urban sprawl, toxic superfund sites and land use changes. There are many facets that need to be considered in formulating a response to the crisis, but they must be coordinated, practical and sufficiently far-reaching to make enough of a difference.*”

TOWN PLANNING

Draft Mong Kok outline zoning plan approved

The Chief Executive in Council has approved the draft Mong Kok Outline Zoning Plan (OZP), according to a spokesperson for the Town Planning Board. The approved OZP establishes a legal framework for land use in the Mong Kok area and will guide development and redevelopment activities. The planning scheme area covers approximately 147 hectares in West Kowloon and is bordered by Boundary Street to the north, the MTR East Rail Line to the east, Dundas Street to the south, and Sham Mong Road and Ferry Street to the west.

The approved OZP incorporates amendments from the draft Mong Kok OZP No. S/K3/35. These amendments include the removal of the maximum plot ratio restriction for the Commercial (“C”) zone, revisions to the maximum domestic plot ratio restriction for the Residential (Group A) (“R(A)”), Residential (Group A)3 (“R(A)3”), and Residential (Group E) (“R(E)”) zones, rezoning of various sites along character streets (such as Flower Market Road, Tung Choi Street, and Fa Yuen Street) from R(A) to “Other Specified Uses” annotated “Mixed Use,” and relaxation of building height restrictions for the C, R(A), R(A)3, and R(E) zones. These amendments aim to incorporate recommendations from the Urban Renewal Authority’s District Study for Yau Ma Tei and Mong Kok, as well as taking into account current uses and conditions.

The Notes and Explanatory Statement of the OZP have also been revised to reflect these amendments and update general information regarding land use zoning and planning circumstances as needed.

[*Town Planning Board Press Release, 09/06/2023*]

Approved outline zoning plans referred back for amendment

The Town Planning Board has announced that the Chief Executive in Council has referred three outline zoning plans (OZPs) to the Board for amendment. These plans are: the approved Ping Shan OZP; the approved Lam Tei and Yick Yuen OZP; and the approved Sha Tin OZP. The purpose of these amendments is to incorporate the latest land use proposals.

Under the provisions of the Town Planning Ordinance, each amended OZP will be exhibited for public inspection. The Ping Shan OZP was previously approved by the Chief Executive in Council in September 2022, whilst the Lam Tei and Yick Yuen OZP, as well as the Sha Tin OZP, were last approved by the Chief Executive in Council in November 2022.

[*Town Planning Board Press Release, 09/06/2023*]

DIGEST OF LEGISLATION

Producer Responsibility Scheme for Glass Beverage Containers

The Producer Responsibility Scheme for Glass Beverage Containers (GPRS) was implemented on 1st May. Its objective is to encourage stakeholders to assume responsibility for the proper collection and treatment of waste glass beverage containers, thereby reducing landfill pressure and promoting a local circular economy.

Under the *Product Eco-Responsibility Ordinance* (Cap. 603), suppliers of glass-bottled beverages must register with the Environmental Protection Department (EPD) before distributing products in Hong Kong. Failure to register may result in fines. Registered suppliers are obligated to submit returns, pay levies and provide audit reports. They can apply for levy exemptions by way of recovery and reuse arrangements.

The EPD has completed preparatory work, including stakeholder notifications and the development of an online submission system. Briefing sessions were conducted to explain requirements and assist stakeholders with registration. Over 900 supplier registration applications have been received, with some suppliers establishing reuse arrangements and obtaining levy exemptions. EPD staff have visited relevant premises to ensure compliance and will conduct investigations and enforcement actions against non-compliant merchants. Additional promotional activities will be launched to remind and support the trade in meeting their obligations.

The *Waste Disposal Ordinance* (Cap. 354) mandates obtaining licences for storing, treating, reprocessing, or recycling glass container waste. Importing or exporting such waste also requires permits issued by the EPD. Failure to comply can result in fines and imprisonment. The EPD has issued relevant waste disposal licences, including those for appointed glass management contractors.

[Press Release, Government of Hong Kong, 30/04/2023]

WEST KOWLOON CULTURAL DISTRICT

Hong Kong Palace Museum's autumn show

Distinctive 3,000-year-old statues and masks uncovered in mysterious ruins in Sichuan province will be exhibited at the Hong Kong Palace Museum in the autumn. According to the director of the Hong Kong Palace Museum, most of the exhibits had never been shown outside the province in southwestern China before.

The exhibition, "Gazing at Sanxingdui: New Archaeological Discoveries in Sichuan", will display a total of 120 pieces from a site only discovered in the 20th century and which some believe to be at the heart of the ancient and obscure Shu Kingdom.

Sanxingdui is considered as one of the most important archaeological discoveries of the last century. It was first unearthed in the late 1920s when a farmer stumbled across more than 400 jade relics while digging a trench. The breakthrough came in the 1980s, when local workers found two sacrificial pits containing more than 1,700 artefacts made of gold, jade, bronze and ivory, which were crafted in a style completely unknown in the history of Chinese art.

Six new pits were uncovered at the Sanxingdui site between 2020 and 2022, and archaeologists discovered in 2021 a gold mask dating back approximately 3,000 years, among jade tools and ivory relics, shedding light on a little-known ancient culture.

The Shu Kingdom is believed to have existed during the Bronze Age and was contemporaneous with the better-known Shang dynasty. Historians have not found any written records of the kingdom explaining its origin or the significance of the artefacts discovered in Sanxingdui.

But discoveries in recent years have shed new light on the civilisation, now understood to be technologically advanced with a prosperous economy and which may have lasted for thousands of years. The director of the Sichuan Provincial Institute of Cultural Relics and Archaeology hoped that the exhibition would help to expand Hong Kong people's understanding of the historic and cultural value of the Shu Kingdom.

[SCMP, 23/05/2023]

HONG KONG BRIEFING

Food waste collection trial scheme

The Environmental Protection Department (EPD) initiated a trial food-waste recycling scheme last October to install smart recycling bins in the participating Public Rental Housing (PRH) estates to collect food waste.

The smart recycling bins used in the trial scheme are equipped with odour abatement devices and adopt an impermeable and enclosed design; hence these smart recycling bins will not "generate strong odours" when the lids open. Moreover, odours will be dispersed in the air as the bins are usually installed in outdoor and fully ventilated places.

To further enhance the trial scheme, the EPD has been working with different local scientific research companies to explore the enhancement of smart food waste recycling technology. Recently, a local technology enterprise claimed to the EPD that it could adopt other methods to improve the performance of smart food waste recycling bins by further reducing food waste odours. The EPD then lent one of the smart food waste recycling bins located outdoors in one of the PRH estates to the enterprise for installing its device, using physical methods for a short-term academic research. The move aims to provide support to local enterprises for environmental research and development.

The EPD has been committed to examining various technologies with a view to further enhancing the efficiency of the smart food waste recycling system, and is open to exchanging ideas with the trade to promote the local development of relevant scientific environmental research.

[Press Release, Government of Hong Kong, 21/04/2023]

Uniformity urged in ESG definitions

A lack of globally consistent and clear definitions of what “green” and “sustainable” actually mean when it comes to projects and investment products has imposed extra burdens on asset managers struggling to meet compliance requirements, according to Fidelity’s head of sustainable investing.

Insufficient regulation of environmental, social and governance (ESG) data and ratings providers also heightens concerns about greenwashing, the act of making unsubstantiated sustainability claims.

Globally, managed sustainable funds amounted to US\$2.7 trillion at the end of March, of which US\$89 billion were domiciled in Asia, according to data from Morningstar. The global figure was just over US\$2.5 trillion at the end of last year.

In Hong Kong, the number of ESG funds authorised for sale by the Securities and Futures Commission (SFC) increased by more than 50 percent year on year to 188 at the end of March, SFC chief executive Julia Leung Fung – yee told the conference. Total assets under management rose by 6 percent to US\$150 billion.

The industry awaits more clarity later this month with the launch of two sets of international baseline requirements for corporate reporting of climate and sustainability risks and opportunities by the International Sustainability Standards Board.

To help reduce greenwashing, the SFC was inspecting disclosures by fund managers to their investors to check whether they were consistent with practices in real life, Leung from the SFC said.

“An immediate priority is to provide guidance to the asset management industry on how they engaged ESG service providers,” she said.

The inspections included asking fund managers to provide evidence to support claims that they took climate risks into consideration during portfolio construction and risk management, said Anthony Wong, director of intermediaries supervision at the SFC.

[SCMP, 06/06/2023]

Initiative to protect corals

In a move to protect the local coral population, World Wide Fund for Nature Hong Kong has launched a “Reviving Our Corals” initiative. It aims to rescue and restore at least 1,000 detached coral fragments, or “baby corals”, in the northeastern waters of Hong Kong. There are also plans for research and development for protecting corals, raising awareness and promoting policies. Hong Kong’s 84 species are a vital part of the marine ecosystem, nurturing 25 percent of sea life in China, the WWF says.

However, human activity in recent years has caused severe damage. For example, the WWF associates a fall in coral coverage at Tolo Channel’s Knob Reef from 80 percent to its current 2 percent with the development of new towns in Sha Tin and Tai Po that began in the 1980s.

[SCMP, 14/06/2023]

Potential loss of bird haven near San Tin

Environmental groups have warned of the loss of a 248-hectare bird haven in an area near the border with mainland China designated for the development of an Innovation & Technology hub if no safeguards are imposed to protect the ecosystem.

The proposed “San Tin Technopole” plan for the New Territories could put at risk the survival of up to 117 bird species of special conservation value, such as the critically endangered Baer’s pochard and endangered black-faced spoonbill. According to environmental groups, the area of the bird reserve is 13 times the size of Causeway Bay’s Victoria Park.

The haven is within a recognized flyway, which is one of the major migratory routes for birds moving from New Zealand to Alaska. It supports 50 million migratory birds a year, including 32 threatened and 19 near-threatened species.

San Tin Technopole is a key part of the planned Northern Metropolis megaproject, promoted by the government as a new driving force for economic growth and integration with the mainland. About two-fifths of the San Tin Technopole, 248 hectares, which is part of the Northern Metropolis megaproject, is regarded as biologically sensitive, containing wetlands, fish ponds and water catchment zones.

The government launched a feasibility study of requirements for establishing a wetland conservation park system in the Northern Metropolis. The report is expected to be published in December. In the meantime, the government announced the San Tin Technopole proposal in May and began a three-month public consultation programme.

[SCMP, 20/06/2023]

Hong Kong must step up efforts to end bottle waste

Almost all of Hong Kong's polyethylene terephthalate (PET) plastic bottles continue to be thrown away, rather than recycled, despite plastic recovery schemes. Less than 1 percent were recycled in 2019, the latest year for which discrete PET figures are available, with the bulk – about 121 tonnes a day – ending up in a landfill. Many such plastic bottles are simply dumped on our beaches and nature trails, polluting our environment.

Since 2020, the Environmental Protection Department (EPD) has provided instead a combined figure for the disposal of all plastic bottles. Such a backward step in data transparency hinders the public monitoring of environmental issues in Hong Kong.

Given that PET bottles made up 63 percent of plastic bottle waste in 2019, I estimate that 127 tonnes of PET bottles were thrown away every day in 2021, the latest year for which figures are available. Plastics constituted only about 6 percent of all recyclables recovered from municipal solid waste; the specific rate for PET bottles is unknown.

Since the establishment of our environmental group, The Green Earth, in 2016, we have offered the authorities advice on effective strategies to tackle Hong Kong's serious plastic waste problem, which includes single-use PET bottles and cartons.

It was recently reported that the city's most advanced plastic recycling facility has been close to suspending operations since April due to insufficient feedstock. The large – scale plant only began operating at the EcoPark in January last year, and can produce food- grade recycled PET.

The Global Deposit Book 2022, published by international non-profit organisation ReLoop, indicates that a minimum deposit value of 7-9 US cents (equivalent to 55-70 Hong Kong cents) can help achieve a median return rate of 75 percent.

To tackle the drink packaging waste problem effectively, the EPD should refer to the successful approaches in the Global Deposit Book and submit a draft bill on producer responsibility to the Legislative Council immediately. To prevent existing and new recycling facilities from closing down and setting back the recycling effort, I propose that we fix the minimum recycling rate at 70 percent as a starting point and adopt a more incentivised deposit return approach.

[Abridged article by Edwin Lau Che-feng, Executive Director of the Green Earth, SCMP, 22/06/2023]

ADVISORY COUNCIL ON THE ENVIRONMENT (ACE)

Summary of Minutes of the 256th Meeting of the ACE held on 6 February 2023

The main item at the meeting was a discussion of the environmental impact assessment (EIA) report concerning the Kau Yi Chau Artificial Islands (KYCAI).

The chairman referred members to ACE Paper 1/2023 & 2/2023, which summarised updates on the preliminary proposals of the KYCAI.

The government provided an overview of preliminary proposals for the KYCAI that covered four key aspects, namely reclamation extent, broad land use, strategic transport infrastructure as well as possible financing options.

Urban planning and design

A few members supported the KYCAI project, highlighting its potential to alleviate congestion and improve quality of life. However, concerns were raised about marine habitat loss. The government assured members that water bodies in blue-green corridors would be considered open space, and building heights and underground facilities would be reviewed later.

The housing ratio and the need for a healthy private housing market were discussed. Flexibility was assured in adjusting the 70:30 ratio of public to private housing.

Some members proposed making the artificial islands an international exemplar by incorporating innovative elements, people-oriented design, and integration of blue-green features with the built environment. Consideration was given to wind flow, air ventilation, and reducing the urban heat island effect.

KYCAI's location and its role as part of the expanded Harbour Metropolis were highlighted. The proposed CBD3 on Island A would synergize with the existing CBD at Central. Some members stressed the importance of designing the pedestrian and cycling network for an ageing population and inquired about opportunities for young people on the islands. Flexibility and increased open space ratios were emphasised, along with the provision of diversified employment opportunities.

Climate change impacts

Members expressed concerns about coastal hazards resulting from climate change, rising sea levels, and extreme weather events. The government submitted that the coastal risks for KYCAI had been assessed using design standards and the latest climate change forecasts. A preliminary proposal was formulated with a progressive adaptive approach, including a site formation level of 7.5m above the Principal Datum (mPD) on average, reaching a maximum of 9mPD in exposed areas. Coastal defence infrastructure, such as seawalls, would be designed with allowances for enhanced resilience in the future. To minimise risks to the public, building developments would be set back 20m to 30m from the shoreline. Expert panels and consultations with relevant authorities were conducted to ensure considerations of hydraulic, environmental, and climate change factors.

A member raised concerns about surface runoff and its impact on water quality, inquiring about stormwater storage and filtration before discharge. Another member suggested constructing artificial wetlands for coastal defence and ecological enhancement, citing examples from European countries. The government explained that the KYCAI project would adopt the "Sponge City" concept, integrating a sustainable urban drainage system for stormwater absorption, storage, filtration, and reuse. Measures like artificial wetlands, flood retention lakes, and porous pavement would be considered to enhance urban resilience against heavy rainfall. In response to a third member's question about the topography's ability to facilitate stormwater discharge, the government stated that the islands' formation levels would be designed to enable gravity-driven stormwater flow.

Environmental and ecological impacts

The government stated that the KYCAI project would adopt a non-dredged reclamation method using deep cement mixing technology. This method avoids the removal of marine deposits, minimising negative impacts on water quality. The same technology has been successfully used in other reclamation projects such as the Three-Runway System and Tung Chung New Town Extension.

Regarding compensation plans for the loss of marine ecological habitats due to reclamation, the government explained that details of mitigation measures would be proposed in the next stage as the Environmental Impact Assessment (EIA) process is ongoing. Regarding the idea of coral translocation, the government noted that the proposed reclamation extent already keeps the artificial islands away from coral communities of ecological value. Any consideration of coral translocation in the future would involve assessing factors like mortality rate and cost-effectiveness. Aircraft noise levels would also be assessed as part of the study.

Carbon neutrality

Members emphasised the importance of advance planning in the design stage to achieve carbon neutrality and suggested extending the district cooling system (DCS) to residential buildings on KYCAI. They also recommended promoting smart mobility like autonomous vehicles.

A member proposed exploring resource utilization and alternatives to enhance carbon sequestration and promote a circular economy. Concerns were raised about carbon emissions related to the deep cement mixing method for reclamation. The member suggested considering the reuse of locally available waste materials, such as inert construction and demolition (C&D) materials and bottom ash from waste treatment facilities, as filling materials. The Project Team expected to reuse at least half of the local inert C&D materials and would consult with experts to minimize carbon emissions.

The Project Team would align various initiatives on KYCAI with Hong Kong's Climate Action Plan 2050, focusing on decarbonization strategies. Initiatives being explored include renewable energy adoption, food waste/sewage sludge anaerobic co-digestion facilities, and green building design. The feasibility of DCS in residential buildings will be further studied. Comprehensive pedestrian and cycling networks with support for new energy and autonomous vehicles will be provided. Focus groups were established to formulate strategies concerning urban forestry, biodiversity, and carbon neutrality.

Transport network

Regarding transportation, the government stated that the strategic road would allow travel to the CBD in Central in less than 10 minutes, and the airport and Hong Kong-Zhuhai-Macao Bridge Hong Kong Port in less than 15 minutes. The strategic rail would take about 5 minutes to reach the proposed HKU Station and approximately 20 minutes to reach the proposed Hung Shui Kiu Station. The Project Team would collaborate with the Marine Department and stakeholders to discuss re-provisioning proposals for fairways and anchorage areas to ensure the continuity of port operations. The potential dredging of the seabed and its impact would be thoroughly assessed during the EIA process. Recognising its proximity to the airport, a member suggested exploring synergies between the development of KYCAI and the Airport City.

Financial analysis

The government provided an overview of the cost breakdown for the KYCAI project. A spokesman explained that approximately 30% of the estimated total cost of \$580 billion would be allocated to reclamation, 20% for local infrastructure within KYCAI such as sewage treatment facilities and roads-- and the remaining 50% for the proposed strategic road and rail links. It's important to note that the \$580 billion estimate does not include the cost of housing development. The government also mentioned that based on the assumption of creating 270,000 employment opportunities through the project, the associated economic activities were projected to generate around \$200 billion of economic activity annually once the KYCAI is fully developed. In light of this discussion, another member suggested that the government should disclose the cost estimates to provide transparency.

CLIMATE CHANGE

Reducing emissions at California's ports

Danny Gamboa, 49, a Californian truck driver who, along with his three kids, suffers badly from asthma. A third-generation trucker, he grew up a couple of blocks from the gargantuan city-within-a-city created by the combined ports of Los Angeles and Long Beach.

Home to one of the busiest logistics systems in the world, the two ports occupy 15,000 acres of land and water, and act as a key gateway between American and Asia. Every year they handle billions of dollars of trade. They also contain oil storage and refining facilities, and these combined activities have belched out vast quantities of emissions.

Nobody tracked what this did to the local communities, let alone the planet, but the cost is now clear. "Everyone around me had asthma or other respiratory diseases." Gambos says.

Can anything be done to clean up this mess? The challenge is enormous. In recent years, many of us have become accustomed to assuming that we can order whatever we want, from anywhere in the world, without ever confronting the reality of what needs to happen in order for products to be delivered to our doors.

Seeing the port operations at close quarters is both overwhelming and humbling. The seemingly endless vista of containers, ships, cranes and trucks expands across the horizon, turning the theoretical concept of global trade into a physical, overpowering reality. And that underscores a bigger point: if we are going to decarbonise our world and curb climate change, we cannot continue to ignore the messy industrial logistics that most of us prefer to keep out of sight.

Those running the two ports of Los Angeles are keenly aware of this: they have pledged to reach zero emissions in cargo handling operations by 2030 and create a zero-emissions trucks fleet by 2035. This month, Gene Seroka, head of the Port of Los Angeles, revealed that the facility had spent more than \$500mn in the past two decades on infrastructure and cutting emissions. *“Since 2006, we’ve reduced the tailpipe exhaust by 90 per cent,”* Seroka told local TV.

But, he added: *“It’s that last 10 percent that’s been elusive, where we really have to leap now from fossil fuels into alternative zero-emission energy.”*

Feverish innovation is now emerging, namely to develop zero emission mobility tech, both among established companies and venture backed start-up funds.

Gambos’ truck is powered by hydrogen fuel cells. This form of green technology has so far received less attention than vehicles powered by electric batteries, partly because competitors, such as Tesla and Rivian, are adept at grabbing publicity. But Gill Pratt, a senior Toyota executive, says: *“We think that hydrogen holds out more promise than electric batteries for big vehicles.”* Hydrogen allows much faster refuelling and is far lighter than electric batteries.

However, Pratt also admits: *“We don’t know with certainty what tech solution will be best since there is still so much innovation occurring, so we are exploring several alternatives.”*

Other companies, such as Volvo, are developing electric trucks, while shipping group Maersk is embracing electric and hydrogen powered vessels.

At Long Beach another innovation, methane, is now being collected from sewage and piped into the port as an additional form of green energy.

This is encouraging. But it is unclear whether these innovations will be adopted fast enough, on a big enough scale, to slow climate change, let alone reverse the damage. These days Gambos is an evangelist for his hydrogen truck. But as we drive around the port, the acrid smell of fumes still hangs in the air. *“I have to carry my [asthma] inhaler all the time,”* he says.

[*Financial Times*, 06/05/2023]

Companies must increase decarbonisation efforts

Companies in the Asia – Pacific region must step up their decarbonisation efforts, as their current trajectory would cause the world to warm by close to 3 degrees Celsius, according to sustainability data and ratings provider Morningstar Sustainalytics.

Included in its coverage of 4,000 mostly listed, medium and large companies from across the world are 1,650 Asia – Pacific entities under its “low-carbon transition rating” assessment. The region’s average transition score was similar of 2.9 degrees, said Nick Cheung, CEO of Morningstar Asia.

“This is quite concerning,” he said in an interview. *“Based on the way these companies are managing their carbon emissions, we don’t see how the world can achieve the 1.5 – degree target as committed by nations under the Paris Agreement. If industries do not step up their decarbonisation efforts, this target is almost meaningless.”*

The implied global warming trajectory as indicated by Morningstar’s ratings of the 4,000 companies excludes the impact of small firms, which typically make up the bulk of business in most economies. This is a cause for worry.

The climate transition rating is based on some 85 metrics assessing companies’ impact on climate. It measures a company’s alignment with the global ambition to limit global warming to 1.5 degrees by achieving net-zero emissions by 2050.

The ratings take into account metrics such as a company’s existing full supply chain emissions, decarbonisation targets, climate mitigation strategies, the use of carbon pricing to guide decisions and quality of climate risks and opportunities disclosure.

Within the Asia-Pacific, only 22 percent of the rated companies were on a trajectory of two or below, while half were rated at between two and three degrees, 17 percent were in the three to four degree category and 11 percent in the above four degree rating slot, Cheung said.

Until March 31, just one out of the 4,000 rated companies, Switzerland-based Novartis Pharmaceuticals, was on the desired 1.5 degree pathway.

In late 2021, the International Organisation of Securities Commissions urged regulators to address the lack of transparency in ESG rating methodologies and potential conflicts of interest between ratings providers and the companies being rated.

South Korea published new guidelines for ESG evaluation agencies on May 27, whilst Japan and India have already introduced regulatory frameworks.

Hong Kong's Securities and Futures Commission, which has yet to publish guidelines, has been considering drawing upon different codes of practice from different jurisdiction.

[SCMP, 13/06/2023]

Renewable energy assets for Shenzhen listing

China Resources Power (CRP), a major power producer in mainland China and listed in Hong Kong, has received approval from the Hong Kong Stock Exchange to list its renewable energy business separately in Shenzhen. CRP aims to raise funds to support its ambitious expansion of wind and solar power projects and achieve a higher valuation for its shareholders. CRP plans to establish a new holding company that will directly access equity financing and provide ample funds for the development of its renewable energy business.

The application for listing the assets is expected to be submitted to the Shenzhen Stock Exchange in the second half of the year. The completion date depends on the vetting process and market conditions. The issuance of A-shares will account for 15 to 30 percent of CRP's enlarged issued share capital after the transaction. After the listing, CRP's stake in the new entity will be diluted to no less than 70 percent. The proposed spin-off is subject to approval from CRP's shareholders, the China Securities Regulatory Commission, and the Shenzhen Stock Exchange.

Approximately 70 percent of the net proceeds from the listing will be utilised for constructing over 30 wind and solar farms in mainland China within the next three to five years. Each project is expected to take between six to 24 months to complete. The remaining 30 percent of the proceeds will be allocated to bolster CRP's working capital. As of the end of last year, CRP owned more than 150 wind farms, contributing 15 gigawatts (GW) of generation capacity, and over 30 solar plants with 1.1 GW of attributable capacity. CRP also operates 42 coal-fired and five natural gas-fired plants with a combined capacity of 35.5 GW. The wind and solar farms collectively generated a net profit of HK\$7.68 billion (US\$982.1 million) in 2022, showing an increase from HK\$7.31 billion in 2021, with a net asset value of HK\$75.4 billion. CRP's net profit for last year was HK\$7 billion, and its coal power plants incurred losses due to high coal costs.

CRP has plans to expand its renewable energy capacity by 40 GW by 2025, aiming to contribute to China's targets of peaking carbon emissions by 2030 and achieving carbon neutrality by 2060. Over the past 12 months, CRP shares have gained 20 percent, closing at HK\$17.02 on 16 June 2023.

[South China Morning Post, 19/06/2023]

Hydrogen-powered transport in Hong Kong

Hong Kong lags behind other cities in the adoption of hydrogen fuel for road transport, including public buses. However, the city still has the potential to become an innovator in using hydrogen technology to address climate change, according to the investor funding Hong Kong's first hydrogen refueling station. David An, chairman of Hans Energy, highlighted Hong Kong's ability to adopt the best global practices, given the city's stringent quality requirements for buses. Unlike mainland China, which uses hydrogen buses built to different standards, Hong Kong follows European Union standards.

Hydrogen fuel enjoys strong policy support in Hong Kong, where transportation accounts for a significant portion of carbon emissions. The government has allocated HK\$200 million (US\$25.6 million) in the 2023-24 budget for trials of double-decker buses and heavy vehicles powered by hydrogen fuel cells, which produce zero emissions. Chief Executive John Lee Ka-chiu has also expressed the government's intention to formulate long-term strategies for hydrogen energy in road transport by 2025.

Hong Kong aims to reduce carbon emissions by 50% by 2035 compared to 2005 levels and achieve carbon neutrality by 2050. Hans Energy recently announced that its pilot project to construct Hong Kong's first hydrogen refueling station, located at a Citybus depot in West Kowloon, has received an "agreement in principle" approval from the government. Citybus originally aimed for the station to be operational in Q1 2023 but now expects construction to be completed in approximately September.

Citybus has already received a custom-designed tri-axle hydrogen double-decker bus from Wisdom (Fujian) Motors, which is capable of navigating Hong Kong Island's narrow, winding, and steep roads while carrying heavy passenger loads. Whilst Citybus plans to deploy the pilot hydrogen bus in Q4, timing may be affected by regulatory requirements and changes, as the use and transportation of highly flammable liquid hydrogen are currently illegal.

Citybus is also considering hydrogen sourcing from Hong Kong and China Gas (Towngas); cost competitiveness will be a crucial factor. In addition, Towngas recently announced the feasibility of extracting hydrogen safely from its underground pipeline network to supply Hong Kong customers, eliminating transportation risks and costs.

[SCMP, 20/06/2023]

REGIONAL & INTERNATIONAL

CHINA

Encouraging safe use of scooters

Twenty years ago, China's top urban planning experts attempted to lay out the future of China's cities. Drawing primarily from the experience of the United States, their plans differed in the details, but there was almost unanimous agreement on one point: unless restricted, domestic demand for automobiles would keep rising, leading to serious traffic jams.

In 2022, there were 350 million scooters in use in China, compared to approximately 230 million private cars. Some industry insiders believe that the true number of scooters may be much higher.

Although the country is increasing in wealth, many families in China still cannot afford a car. This isn't a bad thing: Scooters' affordability and flexibility make them the perfect solution for short- to medium-length trips.

Despite scooters' numerous advantages such as low carbon footprint and relatively high efficiency, Chinese road networks are still designed for cars. As a result, riding a scooter in China is extremely dangerous. In 2019, one scooter rider died and five were injured every hour on China's streets.

Recently, some cities began to pay attention to these problems. For instance, Guangzhou has created buffer zones and special signals for non-motor vehicles at intersections, and Nanning has adopted similar measures.

Acknowledging these issues is a good first step to addressing the problems. China's transportation industry is now doing more research of urban planning and management in terms of regulations and supporting facilities with an aim to protect the safety of the scooters. For example, by setting up specific speed limits, dedicated turning lanes at intersections, and dedicated traffic signals.

[*Sixth Tone*, 06/06/2023]

Increased prosecution of environmental crimes

China's prosecutors have investigated double the number of criminal cases involving environmental damage in the past five years compared to the 2013-17 period, according to a report released by the top prosecutor yesterday, coinciding with World Environment Day.

Across the country, prosecutors looked into approximately 210,000 cases involving some 350,000 people suspected of causing damage to the environment and natural resources in the five years from 2018 to 2022.

That was an increase of more than 110 percent in the number of cases and a rise of over 90 percent in the number of suspects compared to the previous five years, according to the Supreme People's Procuratorate report.

But the number of prosecutions filed appeared to be on a downward trend, accounting for less than half the cases examined in 2022. It was approximately 62 percent the previous year, and 73 percent in 2020.

According to the report, crimes related to animals – such as illegal fishing and hunting and harming endangered wildlife – had the highest number of suspects and non-prosecution rates in the past five years. That indicated these cases involved offences that were not as serious, the report said.

In 2022, the number of criminal cases examined by prosecutors relating to animals, such as illegal hunting, and suspects involved went up by 229 percent and 184 percent, respectively, compared to 2018. The non-prosecution rate for animal related cases in 2022 was 44 percent.

But crimes to do with damaging natural resources – including illegal logging, theft of timber and harming endangered plants – had the lowest non-prosecution rates.

[*SCMP*, 06/06/2023]

Green steel plans unveiled

Rio Tinto and China Baowu Steel are teaming up on projects to cut carbon emissions in the highly polluting steelmaking sector.

The world's biggest iron ore miner and the top steel producer have signed a memorandum of understanding (MOU) to explore initiatives including setting up green steel facilities in China and Western Australia, Rio said in a statement.

The MOU is an example of miners working with their customers as the steel sector tries to decarbonize. Beijing had pledged China's steel industry will reach peak carbon emissions by 2030 and net-zero by 2060.

Rio and Baowu will explore other projects, including a pilot direct reduced – iron plant in China; better technology for making high grade iron ore pellets from Australian ores; developing Baowu's technology for reducing blast furnace emissions; and a low carbon iron plant in Australia.

[*SCMP*, 13/06/2023]

ASIA

Robust outlook for “sustainable financing”

The long-term outlook for sustainable financing in China and Asia remains robust because of a need for energy transition investments to meet climate targets despite rising interest rates, according to leading bankers.

Ongoing financing needs created by China's energy transition, including investments in electrified transport, renewable energy and sustainable materials, would continue to support and grow the environmental, social and governance (ESG) bond markets in Asia, said Puja Shah, head of ESG debt capital markets for Asia excluding Japan at JPMorgan: “*Climate ambition and ESG have become key elements of corporate strategy and mainstay topics in boardroom discussions.*”

China last year accounted for half the total of US\$466 billion in investments in electrified transport and 55 percent of the US\$495 billion in renewable- energy investments globally according to data from research provider BloombergNEF.

In the Asia-Pacific, excluding Japan, green and sustainability related bond issuances totalled US\$83.2 billion as of June 16 this year, compared with US\$137.3 billion for the whole of last year. China accounted for 58 percent of these deals in 2023 so far and 62 percent for the whole of last year.

“Green finance” is growing in importance because of increasing awareness among investors, financial institutions and policy makers of the need to address climate risks, according to a report by Moody’s Investors Service last month.

[SCMP, 23/06/2023]

BRAZIL

Plan to stop Amazon deforestation

Brazil’s government has revealed how it plans to meet a pledge to eliminate deforestation in the Amazon by 2023, using strengthened law enforcement and other measures in the world’s largest tropical rainforest.

Under former president Jair Bolsonaro, Brazil joined a 2021 pact with more than 140 countries to end deforestation globally by 2023. President Luiz Inacio Lula da Silva, who took office on January 1, has made the pact the centrepiece of his environmental policy.

The Action Plan for the prevention and Control of Deforestation in the Amazon (PPCDAm) sets a coordinated policy across until the end of Lula’s term in 2027.

It calls for increased use of intelligence and satellite imagery to track criminal activity, regularisation of land titles and use of a rural registry to monitor correct management of forests considered vital for slowing global climate change.

Degraded forests will be restored and native vegetation increased through economic incentives for conservation and sustainable forest management, according to the plan.

Authorities will also cross-check information from the financial system with the rural registry and other databases and satellite images to root out illegal loggers and cattle ranching.

The plan also foresees the creation of a tracing system for timber livestock and other agricultural products from the Amazon, at a time when importing countries are increasingly demanding proof that such products are not from deforested lands. It also looks to develop a green economy that will include the certification of forest products, technical assistance for producers, provision for infrastructure, energy and internet connection, and the encouragement of ecotourism.

The government intended to also announce a new set of measures to combat illegal logging, illegal mining, hunting and fishing in indigenous territories, environmental protection areas, and in the Amazon as a whole.

[SCMP, 07/06/2023]

GERMANY

Germany plans energy aid for industry

The German economy ministry plans to subsidise 80 per cent of the electricity cost for energy intensive companies, in a proposal likely to fuel divisions inside the governing coalition and further alienate European nations who cannot afford such measures.

Under a long awaited and contentious proposal from Greens economy minister, Robert Habeck, a large part of industry would be offered electricity at a subsidised price of €0.06 per kilowatt hour (kWh) until 2023. The plan, which would cost about €25bn-€30bn, is aimed at bolstering sectors such as chemicals, steel, metal and glass, as well as encouraging European investment in industries seen as crucial to reducing EU dependence on China, such as solar panels and semiconductors production.

The economy ministry said the country needed to respond to “tough international competition” in these sectors that was “not taking place on a level playing field” because of subsidies in China and in the US owing to the Inflation Reduction Act. Habeck argues that energy intensive industries are facing an “existential threat” as they struggle with the surge in prices triggered by Russia’s war in Ukraine while also seeking to decarbonise, which often leads to higher electricity consumption.

But the plan had already faced opposition from within Chancellor Olaf Scholz’s divided three-way coalition Germany’s liberal finance minister, Christian Lindner this week warned that “extremely expensive subsidies” were the “wrong approach”, describing them as unfair and inefficient.

The proposed subsidy also risks exacerbating tension within the EU, as many members are concerned Germany’s economy, the largest in the EU, is in danger of exploiting a shift in thinking on industrial policy and its huge financial heft to help industry in a way other nations cannot afford to replicate.

National decisions on subsidies are subject to approval by Brussels, but the bloc’s state aid rule book has been weakened recently because of the pandemic and energy crisis, further aggravating grievances of lower – income countries.

German manufacturers have long complained about high industrial electricity prices, especially after they jumped following the invasion. Among those that have been reviewing plans to build factories in Germany is Swedish battery maker Northvolt, which has been looking at the US instead.

The German Steel Federation and Germany's largest union, IG Metall, backed the plan, but it drew scepticism from the German Chamber of Industry.

[*Financial Times*, 07/05/2023]

SOUTH AMERICA

Deforestation uproots South American rhythms

In the vast Chaco forests of northern Argentina, Noole rests from the fierce sun in the scented shade of dark carob trees on a small farm where her family grows watermelons and potatoes to eat or sell at market.

For Noole, an Indigenous Pilaga, and her brother Jose Rolando Fernandez, the trees set the natural rhythm of life, providing food, water and cool in this sparsely populated and remote corner of South America that is home to the continent's second largest woodland after the Amazon. But that habitat is facing increasing pressures as trees are removed to make way for large scale farms to meet global food demand.

An impending new trade deal between South America's Mercosur bloc and the European Union could mean more exports from the Gran Chaco and therefore more land clearance although the EU is likely to attach stringent rules to try to restrict deforestation.

Jose said their connection to the trees was almost spiritual. "*We greatly appreciate the carob tree. For us, it's our relief,*" he said as he worked on the farm, planting potatoes for the season.

As well as providing sustenance and shade, the trees support an ecosystem of myriad animal and plant species, said Noole.

The Gran Chaco, bordered by the Andes mountains to the west and the Parana and Paraguay rivers to the east, is a region twice the size of California that spans Argentina, Paraguay, Bolivia and Brazil.

Land clearances to farm soy and beef have led to some 7 million hectares of native forest being torn down in Argentina Between 1998 and 2021, almost all in the Gran Chaco, government data show. That's an area almost 90 times the size of New York City.

Reuters witnessed trees being felled by bulldozers and cattle roaming over arid land on a trip through the Gran Chaco, an important carbon sink often overlooked, given the prominence of the Amazon rainforest to the north.

Many countries have importation rules in place meant to deter illegal deforestation and Argentina enacted a forest law in 2007. But local officials said regional enforcement is patchy and low fines are often not enough of a deterrence.

Mariela Soto, a small-scale farmer from Pozo de Mortero, said that many local producers had lost animals because logging meant that "the soil was eroding and pasture no longer grows."

Some locals, however, cite the importance of farming export in job creation and development in a region where half the population lives in poverty, often eking a living from the land selling traditional artisan products or taking on informal work.

"*To condemn deforestation is to condemn people to poverty.*" said Juan de Hagen, a veterinarian and farm manager also from Las Lomitas. He said he hoped that EU deforestation laws would not mean Gran Chaco residents paid the price economically.

"*The European Union should abide by the laws of each Mercosur country,*" de Hagen said on the farm he oversees. "*Europe cleared all its land and is not paying any penalty.*"

For Noole, global trade deals and faraway regulation take little notice of people like her, despite their potential to disrupt the natural drumbeat of her life. "*The agreements are for the economic and business world,*" she said. "*For us as an Indigenous community, the reality is that we are not part of these agreements. We were never in negotiations. They never took us into account.*"

[*The Japan Times*, 24/05/2023]

UNITED KINGDOM

Plans to transform Carlisle's city centre

Cumberland Council is planning to make big changes to Devonshire Street and English Street in Carlisle, Cumbria. It is proposing to install more outdoor seating, wider pavements, street furniture, cycle parking, trees and plants, while retaining vehicle access. The Council began a long consultation process with residents on 6 June.

The Council said it hoped to create more activity zones and more space for people to spend time on outdoor activities which makes the city more vibrant and welcoming.

The project is being funded through the government's Future High Street Fund and Town Deal Fund with the ambition of increasing footfall in the city centre.

[*BBC*, 31/05/2023]

UNITED STATES OF AMERICA

Bellevue issues a new Kerb Management Plan

The city of Bellevue, Washington state, wants to create a consistent set of rules governing curbside space, with a focus on shifting away from single-occupancy vehicle movement and storage, through a new Kerb Management Plan.

Currently, just 3 percent of Bellevue's kerb space is dedicated to loading zones, bus stops, or transit lanes; 60 percent of kerb space is used for vehicle throughput.

The plan puts in motion a series of pilot programmes, including one that would promote parking in off-street stalls and another that would study the potential for on-street loading. The plan reorients the city's priorities from vehicle throughput and parking to transit, bike infrastructure, and other public amenities.

One of the characteristics of the plan is to create more spaces that are not for automobile traffic so that pedestrians and cyclists are more visible in being a part of the transportation ecosystem.

[*Planetizen*, 29/05/2023]

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**Convictions under environmental legislation:
February to May 2023 (June 2023 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:

February 2023

One hundred convictions were recorded in February 2023 for breaches of legislation enforced by the Environmental Protection Department.

Twelve of the convictions were under the Air Pollution Control Ordinance, 1 was under the Environmental Impact Assessment Ordinance, 12 were under the Noise Control Ordinance, 31 were under the Public Cleansing and Prevention of Nuisances Regulation, 42 were under the Waste Disposal Ordinance, and 2 were under the Water Pollution Control Ordinance.

A company was fined \$40,000, which was the heaviest fine in February, for failing to make a billing account application in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation.

March 2023

Sixty-four convictions were recorded in March 2023 for breaches of legislation enforced by the Environmental Protection Department.

Eight of the convictions were under the Air Pollution Control Ordinance, 2 were under the Environmental Impact Assessment Ordinance, seven were under the Noise Control Ordinance, 22 were under the Public Cleansing and Prevention of Nuisances Regulation, 2 were under Product Eco-responsibility Ordinance, 19 were under Waste Disposal Ordinance, and 4 were under the Water Pollution Control Ordinance.

A company was fined \$68,000, which was the heaviest fine in March, for contravening the provisions of a licence.

April 2023

Sixty convictions were recorded in April 2023 for breaches of legislation enforced by the Environmental Protection Department.

Sixteen of the convictions were under the Air Pollution Control Ordinance, 8 were under the Noise Control Ordinance, 22 were under the Public Cleansing and Prevention of Nuisances Regulation, 2 were under the Product Eco-responsibility Ordinance, 10 were under the Waste Disposal Ordinance and 2 were under the Water Pollution Control Ordinance.

A company was involved in three cases of failing to comply with an air pollution abatement notice. A \$32,000 fine, which was the heaviest fine in April, was imposed on the company for each of its offences.

May 2023

Forty-five convictions were recorded in May 2023 for breaches of legislation enforced by the Environmental Protection Department.

Four of the convictions were under the Air Pollution Control Ordinance, 6 were under the Noise Control Ordinance, 11 were under the Public Cleansing and Prevention of Nuisances Regulation, 1 was under the Product Eco-responsibility Ordinance, 20 were under the Waste Disposal Ordinance and 3 were under the Water Pollution Control Ordinance.

A company was fined \$20,000, which was the heaviest fine in May, for contravening the provisions of a licence.

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