

Submission for 2021 HK Policy Address Consultation



Environmental Integrity & Excellence

HKIQEP
香港環專會

Hong Kong Institute of
Qualified Environmental
Professionals (HKIQEP)

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Prelude

In support of the upcoming 2021 Policy Address, the Hong Kong Institution of Qualified Environmental Professionals (HKIQEP) would like to contribute its comments and suggestions in this position paper.

We advocate for the HKSAR Government to assume green, visionary and ethical leadership to better protect our environment and ensure sustainable living and economic development in Hong Kong.

One of THE most impactful measures that the Hong Kong SAR Government can implement is to:

“enact an Ordinance to regularise environmental professional qualifications, creating new jobs and careers for our younger generations to support Hong Kong’s green economy and ranking as a world class smart and healthy city.”

重專業， 規範環保資格
撐青年， 創造環保就業
保民生， 拓展綠色經濟
共構建， 健康智慧都會

Source of background image: <http://www.ust.hk/news/news/hkust-holds-its-19th-congregation-conferring-honorary-doctorates-four-distinguished>, Hong Kong University of Science & Technology, 2011

The HKIQEP hopes that the HKSAR Government will feature some, if not all of the recommended action items set out in this paper.

Top 3 Systemic Recommendations

There are many possible areas and ways to improve the existing environmental policy-making and governance infrastructure. Given today's situation and the need to focus, we believe these three recommendations will establish a strong foundation that will help simultaneously solve a number of the Hong Kong environmental challenges we are currently experiencing, as well as strengthen our abilities to anticipate, prevent and manage future new emerging and evolving environmental issues. They would also support the ground breaking effort to create a new professional industry that will offer not just more green jobs, but more robust and sustainable career pathways for our youth and future generations.

1. Promulgation of an Ordinance to regularize environmental professional qualifications

Climate Change is the defining issue today, not only threatening our planet but also ourselves. From shifting weather patterns to rising sea levels, the impacts of climate change are global in scope. Without drastic action now, adapting to these impacts in the future will be more difficult and costly. Therefore, the demand for qualified environmental professionals across different sectors is increasing by the day to combat the looming challenges of climate change. To ensure the competency of the environmental professionals for preventing unacceptable or environmentally unsustainable developments and in line with international developments in this area, it is necessary to establish urgently a

qualification registration system by law for environmental professionals. Professionals are currently challenged by the fact that their salary range is limited, and their clients have the power to influence their assessment. By enacting an Ordinance to regularise environmental professional qualifications, the HKSAR Government will provide a robust governance framework to create new sustainable jobs and careers for our younger generations to support Hong Kong's green economy and ranking as a world class smart and healthy city.

2. Employment of Qualified Environmental Professionals

As the importance and complexity of environmental jobs increase, it is only common sense to ensure that all sectors, including the HKSAR Government, employs qualified environmental professionals with the most relevant experience and skills in jobs that require expert environmental assessment, judgement, opinion and/or decision-making. In 2018, 45 of Hong Kong's leading companies took the lead to pledge to hire only qualified environmental professionals for designated environmental posts. If business can do it, so can government. It is time for the HKSAR Government to also adopt such a practice, given its critical roles in developing environmental policies and ensuring professional enforcement of the law.

The HKIQEP has been aiming at transforming Hong Kong into a centre of excellence for developing qualified environmental professionals. Being the most stringent and relevant with full coverage of all environmental aspects, its environmental qualifications are suitable for statutory recognition.

3. Policy and financial support for development and training of young environmental professionals

To facilitate the creation of a new professional industry for our future generations, the HKSAR Government should provide policy and financial support for the provision of and access to relevant and appropriate training and development to support the career development of young professionals in the environmental industry. In particular, the HKSAR Government should consider the implementation of an Environmental Graduate Training Scheme (EGTS) which is similar to the engineering profession's Scheme "A" Training Scheme.

Top 3 Topical Recommendations

1. Holistic solutions to managing Municipal Solid Waste

HKIQEP welcomes the Environmental Bureau's Waste Blueprint for Hong Kong 2035 (the Blueprint) announced in February 2021 as well as the passage of the Waste Disposal (Charging for Municipal Solid Waste) (Amendment) Bill by the Legislative Council (LegCo) in August 2021.

Government consider providing basic supporting facilities (e.g. collecting facilities) to support the implementation of the Charging Scheme for Disposal of Municipal Solid Waste (the Scheme) as well as execute the Scheme as soon as possible.

With a view of China's ban on importing recyclable waste, the Government should support our local recycling industry to develop the initial treatment process to tackle the drastically increased recyclables after the implementation of the Scheme.

Encouraging imports for example, could help link up the waste business between Hong Kong and the Greater Bay Area and is a good way to accelerate Hong Kong's transition to a circular economy.

Data from the Blueprint indicated that over 3,000 tonnes of food waste is produced every day in Hong Kong. However, the total capacity of food waste that can be treated by the local Organic Resources Recovery Centre (ORRC) is only 500 tonnes, even considering both the ORRC Phase 1 (existing) and ORRC Phase 2 (under construction). Apart from incentives for citizens to encourage sorting and recycling of food waste, the Government should consider the use of Build-operate-(own)-transfer (BO(O)T) models as a form of project delivery method instead of the traditional Design-build contracts. This can encourage the private sector to build food waste treatment facilities as well as lead the market to address the food waste issues. As a result, we foresee that Hong Kong can achieve the expected reduction (i.e. 55%) as stated in the Blueprint in the coming future.

As stated in the Blueprint, 55% of waste can be reduced by ORRC while there is still 45% of waste (around 5,000 tonnes per day) needed to be addressed. However, the upcoming incinerator (under construction) can only tackle 3,000 tonnes of waste. Instead of relying on landfills, it is envisaged that there will be a need to build a second incinerator to ensure the provision of sufficient waste treatment facilities to handle all the waste generated in Hong Kong. To ensure world class operations, again the Government can consider using contract models that have worked before, such as a form of command-and-control contract like the Scheme of Control

Agreement for the power sector, can be created for the waste-to-energy sector.

2. Strengthen climate-friendly policy and commitments

Firstly, HKIQEP welcomes the Green Tech Fund (GTF) to fund research and development (R&D) projects which help Hong Kong decarbonise and enhance environmental protection. We recommend the Government allocate more resources to continuously support the development of our local green technology industry and help green our economy.

Climate change is an urgent global environmental threat that poses serious risks to health, livelihoods, the supply of food, water and energy, security, and the sustainable economic growth of society. Being a coastal city, Hong Kong is especially vulnerable to climate risks, such as severe heatwaves, floods, storms, etc.

To combat climate change effectively, it is necessary to tighten Hong Kong's target for 2030 to about 50% reduction (or no less than 40%) from 2010 carbon emissions and commit to a net-zero target by 2050 (see our response to HKSAR Government's consultation on Hong Kong's Long-Term Decarbonisation Strategy <http://hkiqep.org/wp-content/uploads/2019/09/Views-Collection-Form-of-Decarbonisation-Strategy-HKIQEP.pdf>).

A comprehensive decarbonisation strategy needs to be implemented to achieve these targets as soon as possible through proactive climate-friendly measures including low carbon lifestyle, zero carbon energy, energy saving, net zero carbon building and transportation, etc. HKIQEP eagerly looks forward to an update of the Climate Action

Plan in the coming months, which should have a clear timeline and action items of how Hong Kong addresses the climate change issues as well as respond to the new global air quality guidelines by World Health Organization.

As renewable energy (RE) is one of the key elements for achieving the net-zero target, there is an urgent need for a regional cooperation to tap into the RE potential available in the Mainland and incentivizing wider local uses and exploitation, e.g., by maximizing the utilization reservoirs, building roof tops and façades and other open spaces for RE applications.

Hong Kong should continue its efforts in building its climate adaptation and resilience capabilities. It has already been doing well so far, but with the current advances in technology, we can continue to learn how to integrate cutting edge technologies in sensing and artificial intelligence to improve and become a city leader in climate resilience in the region.

3. Future air quality management strategies

World Health Organization (WHO) has issued new global air quality guidelines on 22 September 2021, and provided clear evidence that air pollution is one of the biggest environmental threats to human health, alongside climate change. HKIQEP recommends the Government acknowledges the WHO new guidelines and takes into account their indexes in the future air quality management strategies (especially PM2.5 and nitrogen oxide) as well as start studies that can inform the next review of air quality objective (AQO) in Hong Kong.

HKIQEP welcomes the announcement of Hong Kong's Roadmap on the Popularization of Electric Vehicles by the Government in March 2021. Since decarbonization can improve air quality while improving air quality will in turn reduce emissions, we highly suggest the Government implements the roadmap as soon as possible so as to protect public health and support decarbonization.

Besides, we welcome the measures of tightening the Sulphur content limit of locally supplied marine fuels to 0.001%, imposition of emission standards for new petrol-powered outboard engines, taking forward the use of liquefied natural gas in ocean-going vessels. We believe the measures can significantly help to reduce emissions from vessels.

Last but not least, the Government should consider the redevelopment of Kwai Chung Container Terminal is a good option for improving the air quality in the urban areas, especially in Kwai Chung and Shum Shui Po, which are affected by air pollutants from the associated shipping activities.

Other Recommendations

Our other recommendations are divided into three categories:

- Systems and processes (ENB/EPD can lead);
- Environmental aspects (ENB/EPD can lead); and
- Strategic projects and infrastructure (which will require cross Government bureau/department cooperation).

Systems & Processes

Institutionalize strategic environmental assessments (SEAs)

It is expected that large scale development projects and planning of strategic road networks/rails will be launched in the coming future. Having a more strategic approach is critical for optimal results, the Government should review and strengthen the practice of conducting Strategic Environmental Assessments (SEAs) and further embed it into our existing major planning and policies as well as strategic development (e.g. energy policy on how we can integrate Renewable Energy to support the achievement of new zero by 2050).

Strengthen regional cooperation on environmental protection

Under the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), taking forward ecological conservation and developing a quality living circle in the GBA are two important areas of development. To pursue green development and ecological conservation, it is necessary to provide additional resources to enhance the cooperation in ecological and

environmental protection among Guangdong, Hong Kong and Macao and enhance ecological and environmental systems in a concerted manner. The institutional setup should also be strengthened to better direct and oversee the progress of the regional cooperation on environmental issues.

Environmental Aspects

Develop the next BSAP

The HKSAR Government issued the first city level Biodiversity Strategy and Action Plan 2016-2021 in December 2016 (https://www.afcd.gov.hk/english/conservation/Con_hkbsap/files/HKBSAP_ENG_2.pdf). It is necessary to find out the progress of the list of 23 Actions (and specific actions) in Four Areas in the Hong Kong BSAP 2016-2021. In particular, the progress of:

- Action 2 - Conserve ecologically important habitats outside the existing protected areas;
- Action 5 - Step up enforcement against wildlife crime;
- Action 9 - Incorporate biodiversity considerations in planning and development process;
- Action 14 - Conduct species assessment;
- Action 16 - Improve sharing of knowledge;
- Action 21 - Promote biodiversity in education.

Meanwhile, the UN Convention on Biological Diversity has just released the Global Biodiversity Outlook 5 (GBO5) (<https://www.cbd.int/gbo5>), which provides a global summary of the progress towards the Aichi Biodiversity Targets. Unfortunately, none of the 20 Aichi targets have been fully achieved and only six targets have been partially achieved.

Hong Kong should speed up the process in preparing the next BSAP and take into accounts challenges highlighted in (GBO5).

Develop a Chinese White Dolphin Species Action Plan

The Chinese White Dolphin (CWD) is an iconic species in Hong Kong and the PRD, which has been threatened by development projects throughout its range in the PRD. Annual surveys commissioned by the government indicates a continuous decline in Hong Kong waters in recent years (see https://www.afcd.gov.hk/english/conservation/con_mar/con_mar_chi/con_mar_chi_chi/con_mar_chi_chi.html).

Despite the implementation of mitigation measures of various project EIAs, the number of CWDs continue to decline. Various research institutes, NGOs and Corporates supported WWF to release an Emergency Action Plan for the PRD Population of the CWD recently (https://www.wwf.org.hk/en/whatwedo/oceans/advocating_for_more_marine_protected_areas/protecting_chinese_white_dolphins/). The HKSAR Government should actively look into this emergency plan and formulate new actions and plans to prevent CWDs from local or regional extinction.

Strategic Projects & Infrastructure

Implement green transport policy

To deliver a sustainable and livable city, there is a need to strengthen urgently the environmental protection aspects of its transport policy. Therefore, we highly support the New Energy Transport Fund announced in 2020 to encourage trial and wider use of green innovative transport technologies in Hong Kong.

Amongst others, it is necessary to ensure more effective traffic management, including managing private car growth, road pricing and other effective means to reduce the overall level of vehicle transportation activity. There is also a need for a proactive shift to green and net-zero carbon transport through measures including enhancing mass and public transport, providing good network and infrastructure to facilitate safe cycling and walking. An aggressive programme should be implemented to promote speedy penetration of electric vehicles and other green vehicles/transport technologies with a view to phasing out the petrol and diesel vehicles as soon as possible.

Promote green building and healthy living

Pursuing green design and management of buildings and the built environment provide a sustainable solution in ensuring quality living environment and reducing carbon emissions and other environmental footprints. New policy and mechanisms are required to encourage the trade to invest in sustainable and net-zero carbon building design, construction and operation.

To decarbonize the existing building stocks, incentives and support for retrofitting existing buildings to improve energy and environmental performance as well as reduce carbon footprint. With the increasing awareness of good indoor ventilation and air quality management as risk reduction strategies during COVID-19, the demand of healthy building design and operation are on the rise. Currently, guidelines and standards in this area are mostly from overseas and their application in local context should be further studied and relevant guidance updated.

In addition, to ensuring sustainable food supply and consumption, green and healthy food policy should also be strengthened. Having more vegetarian diets and less meat consumption will not only help reduce significantly the carbon footprint, but also ensure more healthy living.

Promote green economy and innovation

To ensure sustainable development and widening/diversification of revenue sources, it is appropriate to establish supportive and enabling policies to increase green economic opportunities, including in green bonds, carbon trading, and other financing or flexible mechanisms to help improve environmental quality and achieve net-zero carbon emissions. This is particularly important to facilitate green recovery after COVID-19.

Hong Kong should position itself as the centre for green finance in the region and should act to establish and consolidate a leading position without delay. In addition, there exists also a great opportunity for creating green jobs in other non-financial sectors to shift towards a low carbon, renewable-based and circular economy. Innovation on technologies, institutions, business models and policy designs will be the key to success.

Policy and programmes to drive innovation should be formulated to reduce technology costs and costs of capital, and to ensure that policy mechanisms and infrastructure provide opportunities for deployment of novel solutions. It is also appropriate to invest in better use of artificial intelligence to benefit the society and environment and promulgate the necessary regulations to ensure that the advances benefit everyone.

Support an environment-friendly Lantau Tomorrow Vision

In HKIQEP's submission to the Task Force on Land Supply's Public Engagement exercise in 2018, we set out 3 levels of prioritisation of the land use options in order of decreasing desirability.

East Lantau Metropolis (ELM) or land use option #2, was categorised under our 2nd level of desirability, namely "Options with some environmental concerns". These are viable land supply options with different degrees of environmental concerns. Since the Lantau Tomorrow Vision (LTV) is basically an expansion of the East Lantau Metropolis (ELM), HKIQEP supports serious consideration of this option and believes that the Government should expedite the relevant technical feasibility studies with due consideration of the associated environmental issues by conducting extensive environmental impact assessment (EIA) studies.

In fact, due to the size of LTV, a Strategic Environmental Assessment (SEA) should be conducted as soon as possible in addition to an extensive EIA in the detailed design stage. With proper planning, environmental impact assessment and mitigation, it is possible that potential ecological and environmental benefits can be incorporated to provide development of high-quality living environments.

Moreover, it is recommended to adopt sustainable and resilient infrastructure design standards for the LTV project to ensure long-term benefits in terms of social, economic and environmental aspects for the society. The HKIQEP will be glad to offer further advice whenever appropriate.

Strengthen efforts on nature conservation

Hong Kong is planning for more developments to fulfill its housing needs. To achieve sustainable development, Hong Kong should also expand its investment in nature conservation. Inspired by the leading biodiversity expert E.O. Wilson, the Half-Earth Project® is working to conserve half the land and sea of the Earth to safeguard the bulk of biodiversity (<https://www.half-earthproject.org/>). Hong Kong has good potential in meeting the Half-Earth goals as more than 40% of its land area has been protected and a trawling ban has been put in place. We recommend the government to examine the requirements of the Half-Earth Project and pledge to set aside half of the land and sea of Hong Kong as protected areas with a clear road map.

HKIQEP Support

The HKIQEP will be more than glad to continue an ongoing dialogue with EnB and EPD in regards to our recommendations and to offer any necessary professional assistance to help achieve the HKSAR Government's commitments to improve the environmental quality and livelihood of the society.

Please feel free to contact us at (852) 6898 1507 or by email to chairman@hkiqep.org or general@hkiqep.org.



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