Northern Metropolis: Future City Vision

2-Day Forum and Workshop
24-25 June 2023

The Hong Kong
Institute of Architects
香港建築師學會

Contents

Foreword

The Hong Kong Institute of Architects held a two-day workshop on the Northern Metropolis in June 2023, with a focus on sustainable development. The theme was aptly chosen.

Sustainable development begins with a vision to look beyond the immediate present and a concern for future generations. The communities and environment we are shaping must not compromise the ability of our posterity to meet their needs. This calls for careful balancing between the needs of the environment, society and economy.

So this is what we must bear in mind as we take forward the Northern Metropolis project. The Northern Metropolis is positioned as a new economic engine for Hong Kong, a base for new industries, and a platform for high-quality cooperation with the rest of the Greater Bay Area. It will be home to 2.5 million people, around a third of Hong Kong's current population. It is also blessed with rich natural and ecological resources worthy of careful conservation. The test before us is how to achieve economic vitality, liveability and environmental sustainability in a holistic and thoughtful manner for the benefits of all.

I applaud the Hong Kong Institute of Architects for its initiative to host the workshop, where professionals, academics, environmentalists and other stakeholders gathered to share knowledge, test out ideas and identify directions of further work. This booklet summarizes the valuable insights and suggestions they advanced at the intensive workshop. I commend it to you.

The Northern Metropolis, with its scale and implications for Hong Kong, must be a community-wide undertaking. Here at Northern Metropolis Co-ordination Office, we see it as our duty to serve as a bridge with community stakeholders to solicit suggestions and exchange views. I am pleased to have participated in the workshop and have learnt much from it. Such dialogues must continue, as we join hands to develop a prosperous and sustainable metropolis of and for Hong Kong.

Vic YAU, JP
Director,
Northern Metropolis Co-ordination Office,
Development Bureau, HKSAR Government

August 2023

Introduction

The Northern Metropolis (NM) is one of the strategic developments of Hong Kong along with Kau Yi Chau Artificial Islands Reclamation (KYCAI) and Urban Renewals in Kowloon. Out of these 3 major strategic growth areas, the NM has a rich context of historical, cultural and ecological significance. In the Government's 2030+ strategic planning, it stated the aspiration of developing the NM into a sustainable and livable city with due respects to its unique cultural and environmental conditions.

The Hong Kong Institute of Architects (HKIA) organized a two-day forum and workshop on 24 and 25 June 2023 to explore the sustainable development potentials of the NM jointly with other professional institutes and academics and students from various universities. Purpose of the Forum and the Workshop was to deepen our understanding of San Tin and to generate constructive proposals to the Government.

The 24 June Saturday morning event was a forum of academics and researchers to provide an understanding of the current context and their visions. The following Sunday workshop brought together building professionals, environmentalists, cultural heritage experts, and concerned stakeholders to generate constructive suggestions for this significant project.

The Saturday morning session featured presentations on the NM by representatives from the Chinese University of Hong Kong, the Hong Kong University and independent researchers, followed by an open discussion of the presentations. The forum was conducted in hybrid mode, so more participants could join online. The 24 June Saturday forum formed the background for a joint institutes' workshop on the following day. Students and HKIA members were invited to join the workshop on Sunday to continue the discussion.

The 25 June Sunday workshop comprised two sessions, a morning session and an afternoon session. The morning session featured presentations on the Northern Metropolis by government representatives, various professional organizations and specialists, including the HKIA, HKIUD, HKIP, HKIS, HKILA, HKICON, HKIE, WWF-Hong Kong, The Conservancy Association (長 春 社), and former Secretary and Under Secretary for the Environment, Ar KS WONG and Ms Christine LOH. In the afternoon, there was a moderated discussion of the morning presentations, followed by a workshop with all the participants who were divided into groups for discussion and idea consolidation. Each group presented their ideas and suggestions. The workshop concluded with a summary of the suggestions gathered and contained in this report.

In June 2023, the Government announced the proposed development plan for San Tin, aiming to develop the area into a world class leading technopole. Upon the announcement, a 2-month public consultation commenced, to be ended on 5 August 2023.

The two-day event has yielded constructive comments for the Government to consider in developing the NM sustainably.

We take this opportunity to thank the support from the Northern Metropolis Co-ordination Office (NMCO) and the supporting organizations, namely HKICON, HKIE, HKILA, HKIP, HKIS, HKIUD, The Conservancy Association and WWF-Hong Kong. We wish that the Forum and Workshop will provide constructive support for NM and San Tin towards the development of a sustainable livable city of its own uniqueness.

Ar Eugene CHING
Chair of HKIA Planning & Urban Design Committee
Convener of Northern Metropolis Taskforce

Ar Corrin CHAN
HKIA Council Member
Chair of Healthy City Initiatives

01

Message from Guest of Honor - Mr Vic YAU, JP

Mr Vic YAU, JP

Director, Northern Metropolis Co-ordination Office (NMCO), Development Bureau, HKSAR Government

Mr Vic YAU is the Director of the Northern Metropolis Coordination Office. He was the Head of the Northern Metropolis Preparatory Office and a former Deputy Development secretary.

Vic and his office will co-ordinate the project that covers land development, housing supply, transport infrastructure, ecological conservation, and development of industries and government facilities.

The office is tasked with strengthening co-ordination of relevant bureaux and departments, formulating innovative planning and lands policies to support new industries and advising senior echelons on development strategies for the Northern Metropolis.

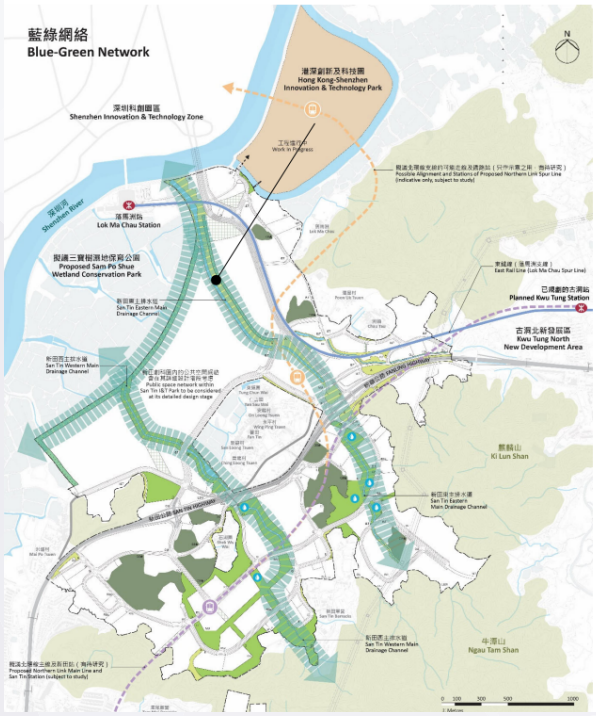
The Northern Metropolis Development Strategy puts forward a vision to transform the northern part of Hong Kong into a new economic engine and a more connected and liveable community. As we pursue this all-important project, the principle of sustainability guides our work. The presentation centres around the two approaches that the Government has been taking to promote sustainable development in the Northern Metropolis.

The first approach is proactive conservation. The Government steps forward to assume a greater role in conserving the ecological resources and diverse habitats in the area. An example is the Long Valley Nature Park in the Kwu Tung North New Development Area, where 37 hectares of freshwater wetland is being turned into a nature park to enhance the ecology, compensate wetland loss due to development, and provide a green space for the public. Works are expected to be completed by the end of 2023. Following this successful experience, plans are in hand to turn the wetland and fish ponds in Sam Po Shue near the San Tin Technopole, a future hub of clustered I&T development, into a Wetland Conservation Park to improve their ecological functions. A study underway will shed light on how the park will operate.

The second is urban design. Thoughtful urban designs, we believe, will help us build liveable, resilient and sustainable communities in the NM for future residents and workers. In the recently released land use plan for the San Tin Technopole, for example, the network of rivers and drainage channels will be revitalised to become flood-able landscape capable of mitigating the impact of inclement weather. They will also serve as breezeways, view corridors, ecological linkages to enhance biodiversity and welcome open space for public enjoyment. For the town as a whole, prevailing wind directions, visual connection, permeability and topography of the area are important considerations in planning open space, major roads and building height profile. Residential communities as well as pedestrian and cycling systems are planned such that residents would reach transport and community facilities generally within 15 minutes, reducing motor travel and promoting a low-carbon and healthy way of life.

Sustainable development is a big and multi-dimensional topic. Its importance to the NM cannot be overstated. The Government welcomes suggestions and looks forward to further dialogue with professionals on how best we may promote sustainability in developing the Northern Metropolis.

Artist's impression of river/drainage channels, open space and knolls in San Tin Technopole



Northern Metropolis: Future City Vision

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Message from the President of HKIA – Ar Benny CHAN

Ar Benny CHAN

President of The Hong Kong Institute of Architects

Ar. Benny CHAN is the President of The Hong Kong Institute of Architects, and Vice President (Local Affairs) of Hong Kong Institute of Urban Design. He was also the former Assistant Director (Architectural) of the Architectural Services Department and former Chairman of the Hong Kong Architects Registration Board. His career has been closely associated with the design and construction of public buildings and urban development in Hong Kong, including major infra-structural projects like Cyberport Development and West Kowloon Cultural District Development.

Ar Chan has active involvements in cross-boundary professional exchange activities, as the Chairman of the Organizing Committee for 2019 HKIA Cross-Strait Architectural Design Symposium and Design Awards, as well the Chairman of the Organizing Committee for 2020 and 2022 Greater Bay Area Urban Design Awards.

Image downloaded from Urbanus website

Our Sustainable Future

Distinguished guests, ladies and gentlemen, It is my great pleasure to welcome you all to this joint institutes workshop/forum on the Northern Metropolis, hosted by The Hong Kong Institute of Architects. The title of our event, "Our Sustainable Future," reflects the importance we attach to the task at hand: building a city that is not only livable and vibrant but also sustainable and resilient for generations to come.

Today's event is particularly significant as it coincides with the establishment of the Northern Metropolis Coordination Office just two weeks ago. This marks a major milestone in Hong Kong's long-term planning efforts and underscores our commitment to developing a sustainable future for our city.

We are honored to have with us today some of the most distinguished experts in the field, including the Head of the Northern Metropolis Coordination Office, the former Secretary for the Environment, and the former Undersecretary for the Environment. Their insights and expertise will be invaluable in guiding us as we seek to unite interdisciplinary knowledge and stimulate dialogue on the challenges and opportunities facing Hong Kong.

As architects, planners, and policymakers, we have a crucial role to play in shaping the future of our city. We must work together to create sustainable, healthy, and equitable communities that meet the needs of our diverse population. This requires not only technical expertise but also creativity, vision, and a willingness to collaborate across disciplines and sectors.

Over the course of today's event, we will explore a wide range of topics related to the Northern Metropolis, including strategic and cross border planning, innovation in urban and village design, ecology, cultural heritage, and environment preservation in the midst of development. We hope that the work resulting from this event will serve as a harbinger for the long-term planning of Hong Kong, inspiring us to think creatively and work collaboratively to build a city that is truly worthy of our next generation.

Once again, I would like to extend a warm welcome to all of our distinguished guests and speakers. I look forward to a productive and insightful discussion today and hope that this event will mark the beginning of a new era of sustainable development for Hong Kong. Thank you.

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Executive Summary

Event Summary

Organized by HKIA, the 2-day workshop on 24-25 June 2023 is meant to bring in multifaceted perspectives from academic & professional leaders to share and discuss on the proposed Northern Metropolis (NM) towards a Future City Vision. There were a total of 15 presenters with over 300 participants both on-site and online.

Aim

The workshop attempts to set up a common platform for concerned stakeholders;

- to collect informed views from different disciplines on NM future development
- to examine current issues of NM proposal through constructive criticism
- to explore potential opportunities of NM with feasible suggestions.

Theme

To facilitate thematic presentations, the workshop is centred around 3 key themes: **Integration**, **Innovation**, and **Sustainability**. Followed by focus group discussions, points-to-note are summarized as follows:

Integration

- Rural-Urban Integration suggests a new model of development taking bio-paths, wetland habitats and human settlements as integrated design consideration;
- HK-SZ Integration allows natural flows of ecology and effective cross-border communications in terms of wildlife corridors and talent/logistic interflows;
- Technology-Heritage integration provides new incomers to live with traditional rural communities.

Innovation

- Development-Conservation Innovation model evolves from 2D to 3D/4D planning, from zoning delineation to exploration of journeys/stories, from top-down proposals to bottom-up engagements;
- "Green-Grey" innovation interplays a vital role in preserving cultural heritage by reimagining infrastructure and housing types, e.g. underground railways, agricultural/ fishing parks, Hakka co-housing, etc.
- Living-Working innovation provides new lifestyle for young generations as well as activating traditional productions.

Sustainability

- Environmental Sustainability is ensured by sufficient buffers between new development and eco-sensitive preservation areas;
- Economic Sustainability is maintained through phasing, techno-focus and global positioning;
- Social Sustainability is made through reviving cultural/ ecological heritages into new programs and community-based initiatives, e.g. cultural embrassadors.

Way Forward

The workshop is meant to be the starting point to bridge between the Government and the academic/ professional bodies. To portray and shape the NM Proposal into a shared Future City Vision, the following actions are suggested:

- to establish continuous periodic two-way communication channels;
- to organize Planning/Design initiatives, e.g. Design Competitions;
- to engage Professional Expertise through new mechanism, e.g. working groups, review boards, etc.

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Future City Vision – Northern Metropolis Day 1 Forum

Northern Metropolis Day 1 Forum

Prof Thomas CHUNG
Prof Wallace CHANG
Prof NG Mee Kam
Prof Gianni TALAMINI
Mr CHAN Kim Ching

Towards Regenerative Futures: Notes for Hong Kong's Northern Metropolis

Prof Thomas CHUNG

Associate Professor
School of Architecture, The Chinese University of Hong Kong

Professor CHUNG's main focus is on regenerative approaches to countryside conservation, co-creative place-making, and design for well-being. His ongoing projects on rural revitalization and co-creative conservation have received competitive grants, government funding, and research consultancies. Thomas is recognized for his award-winning projects, Value Farm and Floating Fields, which fuse ecological design with socially innovative public space. Thomas has researched the urban metabolism of HK's inner-city districts and Urban-Rural settlements since 2008.

In October 2021, the Government announced the ambitious Northern Metropolis Development Strategy to turn the sparsely populated borderlands near Shenzhen into residential and commercial areas, on the one hand to assist in providing land supply for much-needed housing and boost the city's future economic and population growth, while dovetailing with further integration with the Greater Bay Area, with a particular focus on cross-border synergy in the innovation & technology (I&T) sector.

Referring to the recently announced San Tin Technopole RODP proposal, and with respect to planned ecological conservation and creation of wetland parks as a point of departure, this talk calls for a timely rethink to encourage more imaginative planning and architectural innovations that respond to the age of climate change and global urbanization. Forward-looking notions such as "ecological urbanism" and "regenerative approach" that goes beyond being sustainable should be considered, as well as holistic design approaches that empathise with contexts of life-in-place, co-evolve human-natural and architectural systems in partnered relationships, acting as catalysts for positive environment-behavioural change.

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2

1. Value Farm, Thomas CHUNG, CUHK
2. Floating Fields, Thomas CHUNG, CUHK

1

2

1. Value Farm; A mixed, high-density planting addressing local food production and self-sufficiency. Crop selection considered growing and harvesting cycles, botanical or nutritional significance, historical impact, visual aesthetics, etc; Thomas CHUNG, CUHK

2. Floating Fields; Productive pond-scape and leisure public space, integrate aquaponics and algae cultivation, water filtering and sustainable food production; Thomas CHUNG, CUHK

The Human Landscape Strategy

Prof Wallace CHANG

Associate Professor,
Faculty of Architecture, The University of Hong Kong

Professor CHANG is an award-winning architect and theorist, focusing on urban design, cultural conservation, and community participation. He advocates for civil consciousness on urban environment and sustainable planning and is a social activist for community conservation. He conducts research and exhibits in Habitat City and Bamboo Theatre. His research, the Kai Tak River Green Corridor Community Education Project, focuses on cultural identity and urban sustainability during urban transformation in Hong Kong and southern Chinese cities.

Unlike the Mainland's "Beautiful Countryside Strategy," rediscoveries of human landscape in the rural territories of Hong Kong should inspire the future of the Northern Metropolis development. The original cultural identity of the rural areas should be revived as a reconnection between people and place. The wisdom and approach of traditional Hakka villages should be integrated with the overarching 'green' thinking in the future urban-rural communities. When urban dwellers and rural residents are about to fight for their individual rights of cultivating their intellects and fields, there should be a way to allow both to live and work together. With the unique historical background, living cultural traditions, and unbroken overseas connections, the new people-and-place relationship may take a new form with traditional wisdom. The presenter is advocating the 'Human Landscape Strategy' to enable an interpretation of Hakka culture, 'Hakka Initiative', where the resources are treasured, and the communities are closely knitted, surrounded by productive landscapes and protected by cultivated ecology. The advocacy is pointing towards a new era when human beings are living in harmony with nature again. The planning should go along with cultural continuity as well as a paradigm shift towards green living. The intermix of living/ working, the interdependence of human settlements and ecological habitats, and the mutual respect between different flows of lives should be revived and manifested in the new metropolis, as the benchmark for the future Greater Bay Area.

"Hakka Initiative"- Urban-rural integration/ practice; Yim Tin Tsai Bamboo Theatre, 2023

Oriented from initiatives of the 'Human-Landscape Strategy' in revitalization of local rural culture, Human Landscape - E.CO Theatre is an architecture, conservation and cultural integration programme, and a prototypic exploration cum showcase of how villagers and citizens may join forces to cultivate a sustainable living heritage.

Northern Metropolis: Context & Vision

Prof NG Mee Kam

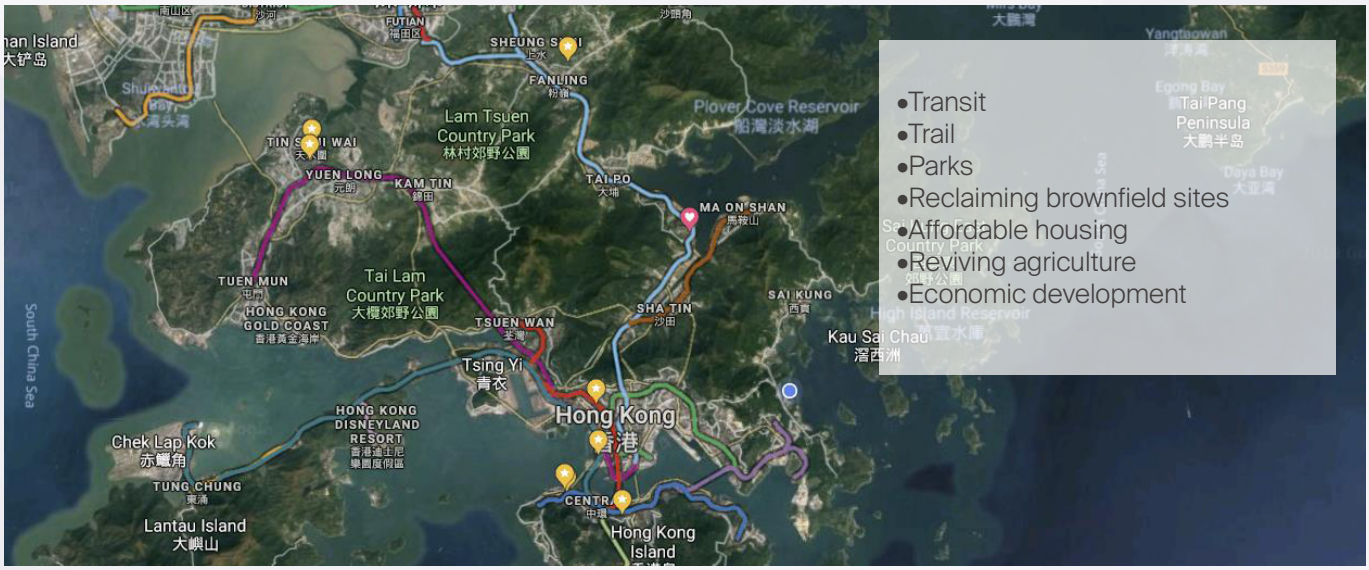
Vice Chairperson, Department of Geography and Resource Management
Director of the Urban Studies Programme
Associate Director of the Institute of Future Cities and the Hong Kong Institute of Asia-Pacific Studies at The Chinese University of Hong Kong

Mee Kam is the Director of the Urban Studies Programme, Associate Director of the Institute of Future Cities and the Hong Kong Institute of Asia-Pacific Studies at CUHK. She is a Fellow of the RTPI and a Fellow of the Academy of Social Sciences in the UK, as well as a Fellow of the HKIP. She has published widely on planning and sustainability issues in Asia Pacific. Her publications have earned her seven HKIP Awards and the 2015 Association of European Planning Schools Best Published Paper Award. She has been consultant to the United Nations and the European Union.

To properly plan the Northern Metropolis for the sustainable development of the New Territories, the presentation calls for the importance of contextual understanding and envisioning. There is an urgent need to gather place-based knowledge of the New Territories, home to over 600 villagers developed since the Song Dynasty, rich agricultural fields and fish ponds, as well as natural heritage as exemplified by the Mai Po Ramsar Wetland. Based on the United Nation's Sustainable Development Goals, the New Urban Agenda and Guiding Principles of Urban-Rural Linkages, different stakeholders should endeavor to develop an ecological and humane vision for the New Territories, embracing holistic, inclusive and evidence-based development, and respecting cultural and natural heritage.

A quick place audit shows that the existing ageing population with generally lower education and income level in the Northern New Territories may not offer the necessary skill sets for the top-down plan produced by the Government that focuses on high-tech development and integration with Shenzhen, China's Silicon Valley. There is room for the current NM Development Strategy to go beyond its focus on development nodes along the boundary to adopt a strategic and integrated approach that will "leave no one, no place and no ecology behind". Instead of reproducing the typical urban (concrete jungle) landscape in several development nodes, the New Territories should be carefully studied to support spatial development that can transform Hong Kong's urbanism, producing spaces and places that can accommodate alternative living and working options for many generations to come.

Vision for the New Territories



Symbiotic Urbanism for the Northern Metropolis

Prof Gianni TALAMINI

Associate Professor,
Program Leader of the Master of Urban Design and Regional Planning
City University of Hong Kong

Gianni is an award-winning Italian architect, urbanist, and scholar. He is the Principal Investigator of a research project funded by the Research Grants Council of Hong Kong, titled "Symbiotic Urbanism for a Horizontal Metropolis", with a focus on the application of the Horizontal Metropolis Model to the New Territories of Hong Kong. Gianni works for an environmentally symbiotic, culturally leavened, and spatially just society.

Geographically linking Hong Kong and Shenzhen, Hong Kong's New Territories are pivotal in the Greater Bay Area's development. According to the NM blueprint, projections show the population of Hong Kong's New Territories growing threefold in the next two decades, reaching 2.5 million. Should the new developments follow the urbanisation models that have transformed Hong Kong in the past few decades, the spread of suburban new town developments would have a high impact on natural resources and fuel a poor quality of life for inhabitants.

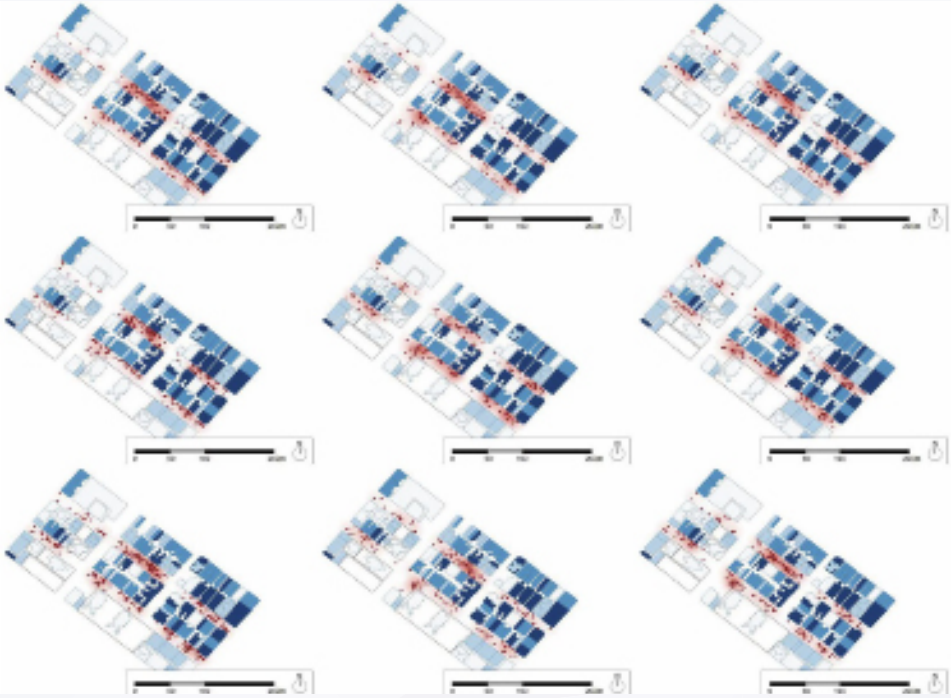
How can we propose alternative design and spatial production approaches for Hong Kong in the face of climate change, increased urbanisation, and an ongoing health crisis? How can we shape an environmentally innocuous, culturally leavened and spatially just Northern Metropolis? How can we envision an urbanisation model to adopt and adapt to the ongoing expansion of Asian cities into their peri-urban fringes?

The lecture will reflect on three concepts – sustainable density, organic urbanism and horizontal metropolis – and their potential to drive the envisioned urban growth in a sustainable, equitable way. The approach proposes to retrofit the territorial palimpsest with punctual interventions, integrating new developments within existing settlements and providing job opportunities in the industrial and service sectors while ensuring inhabitants can also access nature. These proximities foster agricultural activities, drastically reduce food miles, facilitate social interaction and community engagement, and can achieve environmental stewardship, place attachment and a sense of belonging.

Symbiotic Urbanism

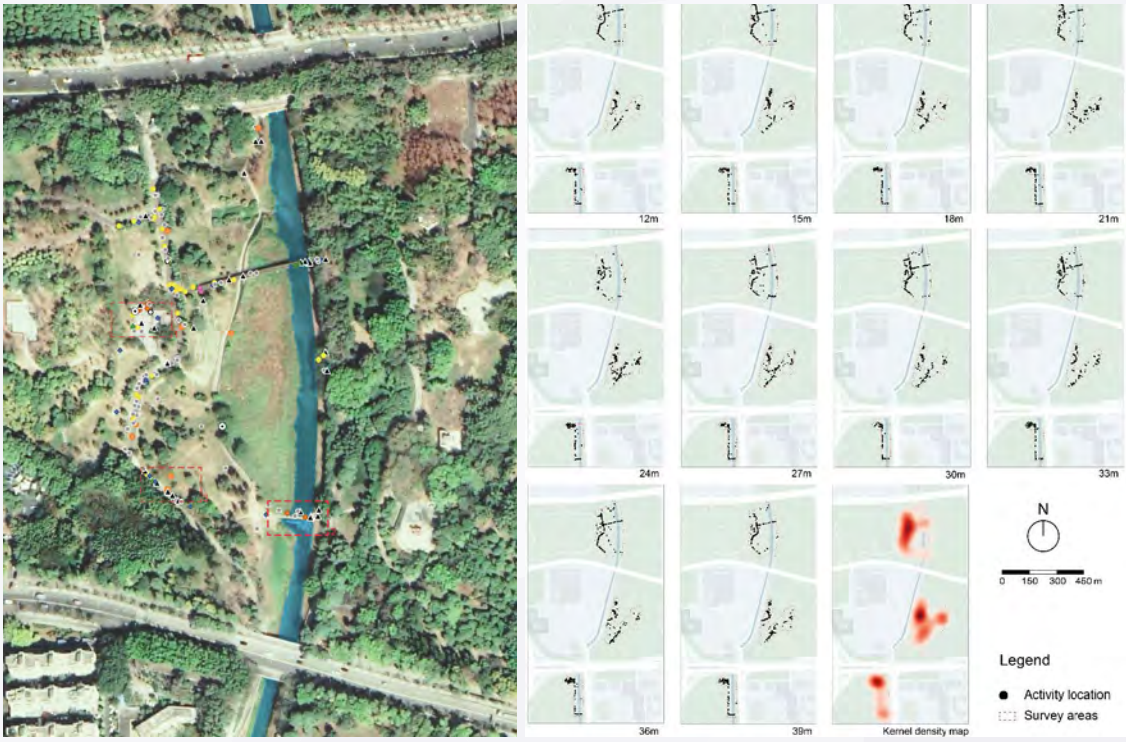
Social interaction density. (Row: day one, day two, and day three; Column: 10:30 a.m. –11:00 p.m., 2:30 p.m. –3:00 p.m., and 5:30 p.m. –6:00 p.m.)
(research by Yuxiao HE, Gianni TALAMINI, and Luzheng JIANG)

1.Research:
Sustainable Density



Activities in Futianriver, Shenzhen.
(research by Di SHAO and Gianni TALAMINI)

2.Research:
Organic Urbanism



Horizontal metropolis elements detection by deep learning.
(research by Weike LI and Gianni TALAMINI)

3.Research:
Horizontal Metropolis

Liber brownfield conditions in Northern Metropolis

Mr CHAN Kim Ching

Co-founder, Liber Research Community

Kim Ching was trained as a geographer, who also becomes interested in urban planning. Kim Ching studies our city critically from a spatial dimension on a daily basis, in a hope to discover potential to bring in progressive values to our city through quality research. He also frequents universities/tertiary institutions as a visiting / guest lecturer.

First started by elaborating one of his hinge moments in concerning land development matters in the past 10 years, Kim Ching from Liber Research Community focuses on sharing his ground observations of land use planning issues in the context of the Northern New Territories. He argues that the existing approach to land use planning in NDAs including Northern Metropolis has not fully taken into account the needs of in-situ brownfield relocation and thus resulted in the loss of valuable agricultural land, natural resources and rural landscape.

While initial strategies highlighting the progressive concept of "Urban-Rural-Natural symbiosis" was first appeared in the NT North feasibility studies in 2016 and officially spelled out in 2021, effective materialization of such idea is now in huge question as to whether recent development in San Tin Technopole sincerely points to such direction.

In the presentation, by walking-through Liber's series of research papers on various aspects of brownfields, Kim Ching found that when the Government's first 2019 brownfield study showed about 1,500 hectares of brownfield sites in total, his research found there are already about 2,000 hectares. Lack of up-to-date data is the main reason which hinders both the development potentials, land control and relocation initiatives for those sites.

In additional, his recent paper identified around 130 newly expanded brownfield sites (around 38 hectares) in the NM over the past year. Continuously updating the data on brownfield sites is essential to enable both an up-to-date and up-to-standard planning, and he sees no difficulties in putting this into action.

In his final part, Kim Ching suggested that a more holistic approach in planning existing NDAs is needed. One that takes into account the idea of "Symbiosis" genuinely, particularly the conservation of local agriculture and fishponds which could potentially contribute both unique rural characters of Northern Metropolis as well as local economy that serves the well-being of the future residents in NM.


ANNUAL AWARDS 2021

05

Future City Vision – Northern Metropolis Day 2 Forum

Northern Metropolis Day 2 Forum

Ms Christine LOH, SBS, JP, OBE
Ar KS WONG, GBS, JP
Dr Bosco CHAN
Mr Roy NG
Ms Kaite CHICK
Sr CK LAU
Dr CHAN Yin Lun
Ir Walter LAM
Mr Barry WILSON
Prof Phyllis LI, BBS

The Northern Metropolis Development

Prof Christine LOH, SBS, JP, OBE

Chief Development Strategist at the HKUST Institute for the Environment
Under Secretary for the Environment, HKSAR Government (2012-2017)

Christine is the Chief Development Strategist at the Institute for the Environment, Hong Kong University of Science and Technology. She was Under Secretary for the Environment of the HKSAR Government, CEO of Civic Exchange, an independent think tank, and a member of the Hong Kong Legislative Council. She spent 14 years in the private commercial sector in commodities trading. She is now Director of New Forests Pty Limited, Towngas Smart Energy Company Limited, CDP Worldwide, and Global Maritime Forum. She is also a founding Advisor to Hong Kong Green Finance Association.

The NM development is potentially ambitious, as it is being designed and implemented at a time when addressing climate change and sustainability has become a priority. The project needs to be outcome-oriented to address decarbonization as well as adaptation, in which the public and private sectors must play important roles. As such, developing relevant KPIs for the project is vital to deliver on the desired outcomes. The KPIs should include not only achieving carbon neutrality by 2050, to ensure resilience considering increased extreme weather risks, and stronger biodiversity but also deliver on social goals while considering the use of technology, green financing, and collaboration with regional neighbours. In developing KPIs, reference could be made to national projects, such as Xiong'an, and international efforts, such as London's example to achieve well-being and sustainability.

The HKSAR Government's Northern Metropolis Coordination Office could go beyond works coordination to being the connector with experts and professionals in Hong Kong, as well as to use the project to build social cohesion as it affects a large segment of the population. It could also use the design and implementation of the project to help rebrand Hong Kong to showcase the city as a leader in sustainability thinking. The office could call upon professional institutes and universities to help with outreach and engagement with Hong Kong society, which could be highly effective in public communication.

Examples: KPIs for Urban Development

Six Key Action Items Plus A Warning

Ar KS WONG, GBS, JP

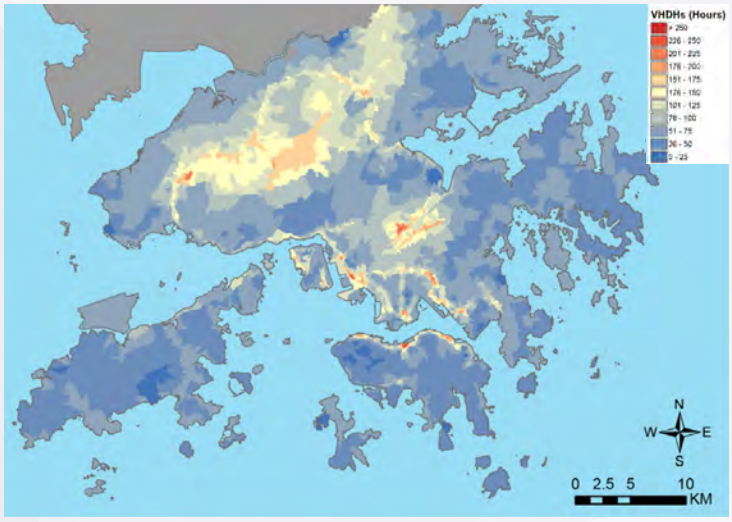
Chairman, Wu Zhi Qiao (Bridge to China) Charitable Foundation
Former Secretary for the Environment, HKSAR Government (2012-2022)

Ar KS Wong is the former Secretary for the Environment, HKSAR Government from 2012 to 2022. He has been a champion for sustainability for decades. From the time of practising as an Architect, he has been building up the green community including the establishment of HKIA Environment and Sustainable Development Committee in 1999 and the formulation of HK's Sustainable Building Design Guideline which was first promulgated by the Buildings Department in 2011. In 2021, he also led HK's Climate Action Plan towards carbon neutrality. He continues today to help our community do better on this journey.

KS made recent reflections upon the NM Development Strategy Report which was released about 20 months ago. He reiterated the importance of concerted efforts of the community and the Government to basically complete the making of the NM in the coming two decades, with a view to realizing the vision of a unique metropolitan landscape marked with "Urban-Rural Integration and Co-existence of Development and Conservation".

For environmental sustainability, KS highlighted six action items under three key action directions in the Report for attention. The three key action directions are about implementing a proactive conservation policy to create environmental capacity, creating outdoor Eco-recreation / tourism space with high landscape value, and making of sustainable community suitable for living in and working. Furthermore, six relevant key words are proactive conservation policy, ecological Integration, NTN urban-rural greenway, eco-recreation / tourism circle, sustainable community, and carbon-neutral sponge city.

In view of the latest scientific findings, KS pointed out that the town planning, urban design and building construction in the NM should place much more emphasis on climate adaptation. This year the Hong Kong Observatory warned of the increase of extreme weather events, including more Very Hot Days (i.e., days with temperature exceeding 35°C), in coming years and decades. Local researchers further warned of the urban heat island effect-related mortality under extreme heat scenarios in Hong Kong based on their latest research and made a spatial warning: the annual accumulated "Very Hot Day Hours" (VHDHs) were found to be higher in the New Territories. Hence KS reminded the Government to make the NM not only carbon-neutral but also climate adaptive and resilient, including ensuring the new development areas to be thermally healthy and comfortable for living in through strategies like maximizing urban air ventilation, designing proper shading and trees in the community, and afforesting the surrounding hills.



Spatial Warning: VHDHs are generally higher in the New Territories
Credit: Dr REN Chao

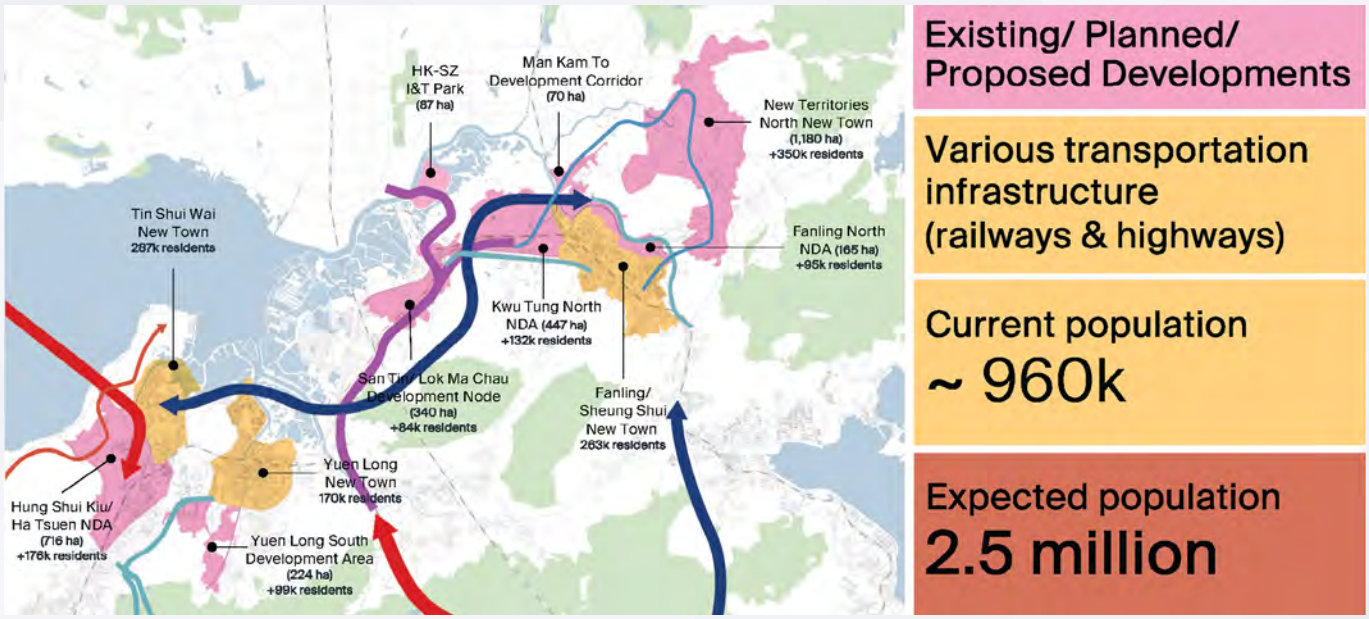
Building a Nature-Positive Northern Metropolis

Dr Bosco CHAN

Director (Conservation), WWF - Hong Kong

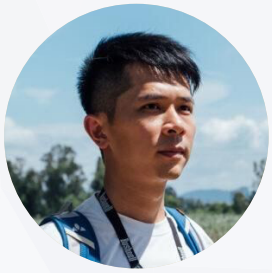
Prior to joining WWF, Bosco served Kadoorie Farm & Botanic Garden (KFBG) from 2001 to 2022 to lead the Kadoorie Conservation China Department. Bosco has extensive experience in strategic conservation planning and he has been leading protected area management in Mainland China for decades. He spearheaded the conservation work on the Hainan Gibbon since 2003 and was invited to be the Deputy Director of Yinggeling National Nature Reserve since 2006 for over 10 years. Bosco has published over 90 peer-reviewed scientific papers, covering various areas including biodiversity survey, conservation and status review of endangered species, ecological and taxonomic research.

The NM is a mega-development project of unprecedented magnitude, covering 300km^2 of northern Hong Kong including biodiversity hotspots such as the Deep Bay wetlands of international importance, ca. 70% of our remaining active farmlands, and the Pak Nai coastline which supports the globally Endangered Chinese Horseshoe Crab and locally near-extinct Eurasian Otter. The HKSAR Government has pledged to protect these natural heritage by "Proactive Conservation" including establishment of a number of wetland protection areas. WWF - Hong Kong commends the Government for this commitment and would share our views on how these new conservation areas can be enhanced. It is followed by a brief critique on potential ecological impacts of the proposed San Tin Technopole. The scope of the NM has such immense ecological implications for Hong Kong that multidisciplinary, synergistic effort is called for to ensure it benefits human well-being as well as nature.



NDAs and Development Nodes

Incorporating Conservation Concepts in Northern Metropolis



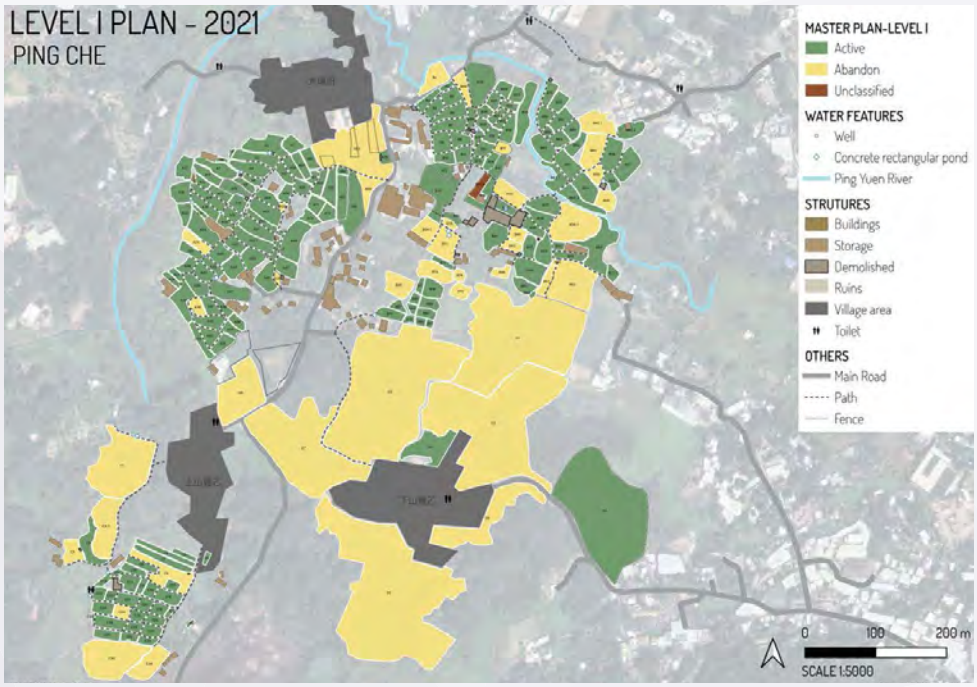
Mr Roy NG

Campaign Manager, The Conservancy Association (CA)

Roy joined The Conservancy Association in 2007. He has reviewed various environmental policies, development projects, public works, and other conservation-related issues for the organization. Roy has also actively engaged in regular liaison with other green groups, government departments and other relevant stakeholders to protect sites of conservation importance.

The study area of NM has long acted as a green buffer between the urbanized Shenzhen and Hong Kong. It is essential to keep such unique identity for NM in future. Under such circumstance, The Conservancy Association (CA) suggested that some key environmental resources should be properly conserved. Apart from the establishment of Wetland Conservation Park to conserve 2,000 hectares of ecologically important wetland ecosystems, CA suggests to expand the proposed Robin's Nest Country Park to 1,120 hectares to strengthen the ecological corridor that will connect terrestrial habitats in Shenzhen – particularly Wutong Shan - with Pat Sin Leng Country Park and thereby to Hong Kong's wider Country Park network.

From our experience in promoting eco-agriculture in Long Valley, we recognise that agricultural land can play multi-functions for our city, such as local food supply, conservation of ecological environment and traditional culture, etc. Meanwhile, from our preliminary survey since 2018, intact farmland landscape can still be spotted in Ping Che areas such as Tai Po Tin, Sheung Shan Kai Wat, etc. Abandoned lands are mostly large in size and non-fragmented by other uses such as brownfield and village development. These land resources in NM should be further protected and conserved to promote sustainable agriculture and biodiversity.



Intact farmland landscape can still be spotted in Ping Che (e.g. Tai Po Tin, Sheung Shan Kai Wat, etc...)
Abandoned land are mostly large in size and non-fragmented by other uses such as brownfield, village development, etc.

Cultural landscape approach for conserving heritage resources of Northern Metropolis

Ms Katie CHICK

Honourary Secretary,
The Hong Kong Institute of Architectural Conservationist (HKICON)

Katie is the Assistant Director of the Centre for Civil Society and Governance at the University of Hong Kong (HKU). Her expertise covers both heritage and nature conservation. Katie obtained her MPhil. and MSc degrees in ecology and architectural conservation respectively at HKU. She has been actively involved in and in-charge of various rural conservation and community development projects in which her dual expertise can be fully practiced. Before joining the HKU, she had served local green NGOs for almost ten years and represented the NGOs to present in different seminars and conferences on local, regional and international scale. Her research interests include Rural Sustainability, Eco-agriculture, cultural landscape, tree and natural resource management. She is also the founding member of The Association for Conservation of Hong Kong Indigenous Languages and social enterprise Wherevergreen.hk.

In light of Sustainable Development Goal 11 - Sustainable Cities and Communities, Katie represents HKICON and advocates for a heritage-conscious approach to the NM Development. The northern New Territories of Hong Kong possess rich cultural and natural heritage resources that form a unique and intact rural cultural landscape along the Shenzhen River. These resources require appropriate conservation, revitalization, and sustainable management. To achieve this, a "Cultural Landscape Approach" is proposed, which highlights the relationship between humans and nature. This approach provides a more holistic planning and management framework that integrates cultural and natural elements, tangible and intangible aspects, as well as biological and cultural diversity within the Northern Metropolis area. The "Cultural Landscape Approach" emphasizes the continuity of the past and present and contributes to modern techniques of sustainable land-use and nature conservation.

Katie recommends several vital steps for effective conservation and management of these resources. Firstly, a comprehensive survey should be conducted to identify the heritage resources and map cultural landscape sites within the proposed NM area and nearby New Development Areas. Secondly, a Strategic Heritage Impact Assessment is recommended to determine potential impacts and cumulative effects on cultural and natural heritage and cultural landscape values of NM. Extra attention should be paid to fully evaluate the impacts of individual development projects on the integrity of cultural landscape sites and devise suitable and timely management measures to safeguard the heritage values.

Katie also suggests the formulation of a proactive conservation / revitalization regime and funding scheme that preserves ecosystem integrity while promoting cultural sustainability and socio-economic vitality of important cultural landscape sites, including historical farming and fishing landscapes, traditional villages, war and industrial heritage, as well as other under-recognized heritage resources in the area.

The setup can reference the Lantau Conservation Fund, which aims to provide financial support to NGOs, charities, and institutions to work with local communities for conservation and revitalization. This approach aligns with the spirit of "Urban-Rural Integration and Co-existence of Development and Conservation" outlined in the NM development strategy document and will make a substantial contribution to establishing a sustainable urban-rural environment along the Shenzhen River.

Northern Metropolis: Hong Kong's upcoming I&T hub

Sr CK LAU

Past President, The Hong Kong Institute of Surveyors (HKIS)

CK is the managing director of Colliers Hong Kong. He is currently the Chairman of Land Policy Panel of the HKIS. He has over 30 years' property experience in valuation, real estate consultancy and investment sales in Hong Kong, Mainland China and the Asian region. He writes regularly on topics relating to land use and development in Hong Kong since 2010 with over 200 articles in the Hong Kong Economic Journal. He sits on numerous advisory committees and taskforces including the Expert Advisory Panel of Hong Kong 2030+.

With the national policy to develop Hong Kong into an international innovation & technology ("I&T") city, the NM is set to be a growth engine and driver of our city's future development. Innovation and flexibility are keys to smarter development in the NM.

The 300-ha I&T Park* at the San Tin Technopole – Hong Kong's flagship I&T project. The Hong Kong Government has recently published the Recommended Outline Development Plan for the San Tin Technopole in the NM. When fully developed, the Technopole with over 70 million sq. ft. GFA of I&T facilities is set to be the flagship I&T project in Hong Kong and the GBA.

Enhancing HK-SZ collaboration – making the two cities stronger together. The strategic geographical location of the Technopole will facilitate further collaborations between Hong Kong and Shenzhen while enhancing integration of Hong Kong into the GBA through complementary development with the Mainland.

To know the strengths of competitors and learn from them. While planning the Technopole, Hong Kong could learn from its regional competitors' I&T land developments. Shenzhen, Guangzhou and Singapore have already created significant I&T space. Some of their land administration practices including short to medium term land tenure (30 to 50 years), land disposal arrangement and selection criteria of industries are worth reviewing.

Competitive land price - key to attract investment. The Government should adopt a competitive land policy for creation of I&T space to suit international I&T enterprises.

Innovation and flexibility in land use planning and land grant needed. Taking into consideration the massive scale of the Technopole and the constantly changing nature of the I&T industry, innovation and flexibility in land use planning and land grant conditions are keys to promote the creation of the I&T community in the Technopole.

**Inclusive of the Hong Kong-Shenzhen Innovation & Technology Park*

Bridging Scales: Cross-Border Synergy and Ecological Urbanism

Dr CHAN Yin Lun

Council Member, The Hong Kong Institute of Landscape Architects (HKILA)

Yin Lun is a registered landscape architect and urban historian. He is currently Assistant Professor and Programme Leader of Landscape Architecture at the Technological and Higher Education Institute of Hong Kong (THEi) and also Chair of the Centre for Community Cultural Development (CCCD). His research revolves around the relationships between design, community arts, and landscapes, and has been presented in different places including Hong Kong, Taiwan, Korea, Canada, France, and Bangladesh. He is the editor of The History of the Landscape Profession of Hong Kong, 1978–2015.

A landscape architecture tradition stemming from Ian McHarg's Design with Nature (1969), spanning ideas from sustainable development, landscape urbanism, ecological urbanism, and more recently ideas of sponge cities and resilient design in response to global climate change, the foregrounding of landscape ecology and watershed planning in the urban development process has become a global practice.

Therefore, if we consider the Hong Kong and Shenzhen border in terms of the two watersheds of the Deep Bay (Shenzhen Bay) and the Starling Inlet (Mirs Bay) and the mountain ranges that define them, we would come up with rather different sets of urban analysis compared to ones that employ a traditional developmentalist lens. Rather than focusing on separations based on administrative boundaries, a landscape and ecological approach focuses on integrating complete systems through bridging connections and filling gaps. Rather than simply seeing the potential for synthesis at the level of functionalist urban development through 2-D master planning, there are now much desire from the public and opportunity afforded by technology in improving and enhancing the ecological infrastructure and framework of one of the most important conurbations of the region through the careful planning and design of the Northern Metropolis and its connections to Shenzhen.

From the landscape and ecological perspective, there are a good number of alternative approaches to unquestionably expanding high density urban development into areas of high ecological, agricultural, and cultural values. These alternative visions based on ecological and cultural landscape principles are at the heart of much academic discussions to provide balanced approaches to development and the improvement of land from both the human and environmental points of view that achieve the goals of sustainable, healthy, and resilient communities, at the social, cultural, economic, ecological, and environmental levels.

Sketch illustrating an ecological landscape approach that holistically considers the conditions of the land and treats development as a means to enhance both community and ecology rather than treating them as contradictory.

Embracing the Opportunities

Ir Walter LAM

Member of The Hong Kong Institution of Engineers (HKIE),
Project Manager, Tuen Mun South Extension & Hung Shui Kiu Capital Works

Walter is representing HKIE on behalf of President Aaron BOK. HKIE has been an important partner to HKIA and has participated in and supported HKIA NM round table in January 2023. Engineers are very important in the development of NM as they are building our infrastructures, following the Government's principle of capacity building. Walter is a Registered Professional Engineer, a civil engineer by trade working for the MTR Corporation Ltd, in particular on the Tuen Mun South Extension and Hung Shui Kiu Station.

HKIE supports the Government's construction of the NM area to promote Hong Kong's integration into the nationwide development plan. The HKIE welcomes the establishment of the NMCO to coordinate, advocate and promote the development of the NM area. The Office is responsible for formulating innovative planning and land policies, supporting new industry strategies, and strengthening coordination with relevant decision-making agencies or departments.

The HKIE suggests that promoting the NM area requires innovative thinking and means, as well as policy, land, and tax support, such as reserving land for designated innovative and technological uses. To complement and accelerate the development and construction of the NM area, it is necessary to streamline the approval process, introduce innovative materials, technologies, and processes, and to act not only as a "regulator" but also as a "promoter" role.

The HKIE is pleased to see that the Government allocates HK$100 billion to establish a dedicated fund under the Basic Law Reserve Fund to expedite the progress of land, housing, and transportation infrastructure projects in the area. The HKIE proposes that the Government should formulate a blueprint or timetable for infrastructure construction and try to decentralize the planning, design, land leveling, construction and other processes of each infrastructure project as much as possible to avoid delays or overspending due to manpower issues.

The HKIE also suggests that the Government should review the current secondary and high school curriculum, increase the attractiveness of STEAM subjects, and strengthen training for professional engineering personnel to meet the development needs of Hong Kong's future.

Northern Metropolis = Future Heart

Mr Barry WILSON

President, The Hong Kong Institute of Urban Design (HKIUD)

Barry is the President of HKIUD, Fellow of the HKILA, Hong Kong Registered Landscape Architect and also a Chartered Member of the UK Landscape Institute, Barry has taught regularly across all departments of the Faculty of Architecture for more than 10 years and is currently undertaking postgraduate research within the Department of Real Estate and Construction Management.

Barry was nominated to the HKSAR Government Common Spatial Data Advisory Committee (CSDAC) in 2020 and Land Advisory Sub-committee in 2021. He has extensive knowledge of worldwide design and construction standards and management practices, he has designed and managed large scale planning, transport, landscape, architecture and environmental projects across four continents and 30 years of practice, particularly focusing on those related to landfill, land reclamation, drainage, rail and highways.

HK is hurtling towards 2047, integration with the Mainland, and a potentially borderless Greater Bay Area. How will the maps of tomorrow illustrate the new city? Those of the 20th century frequently positioned Hong Kong at the centre of the world; as a detached cluster of territories floating in a sea of blue; a land without context. Those of the 21st century map the Greater Bay Area, a contrastingly scaled, regional development, with Hong Kong seemingly placed as a distant suburb to the metropolitan centre; an outlying port; a fringe of urbanity both geographically and economically. Hong Kong no longer stands as a city at the centre of its own imagination. When viewed from a wider lens, it is the northern borderlands, pulsing at the heart of a newly developed 'twin city' - the Shen-Kong – Hong Kong Island exists as a far-flung outpost.

The world's most renowned urban parks; London's Great Parks, Munich's Englischer Garten and New York's Central Park - all started out being undesirable land, well outside of the urban area and were only much later enveloped at its centre. Today, real estate on the periphery of these parks has become the most expensive in the world, whilst the land price of the parks themselves can be considered "priceless". The worthless marshes and fishponds of the Shenzhen River flood plain are tomorrow's gold, a green lung at the centre of dense enclosing urbanisation. Their rarity and uniqueness, cultural and heritage value, and ecological and resilience attributes, place such assets beyond those of any other global city: iconic, outstanding, irreplaceable.

HK-SZ Border alignments 1989, including FCA and Erxianguan

Image: BWPI

Reimagining the Northern New Territories: Some Strategic Planning Suggestions for the NM

Prof Phyllis LI Chi Miu, BBS

Fellow, The Hong Kong Institute of Planners (HKIP)

Phyllis is a Fellow of the HKIP and Member of the Royal Town Planning Institute. Phyllis joined the Hong Kong Government in the 1980s and took part in new town planning, statutory planning, strategic planning and major development and urban design projects in Hong Kong. She is the former Deputy Director of Planning/Territorial of the Planning Department, overseeing Hong Kong 2030+ (the territorial development strategy updating), cross boundary planning, new strategic growth areas of Kwu Tung North/ Fanling North, Hung Shui Kiu, Yuen Long South, New Territories (NT) North and East Lantau Metropolis, and central technical services from 2012 to 2018.

Phyllis has been the Adjunct Professor of the Department of Geography at HKU since 2018. She is also the planning advisor in the Transport Department, HKSAR Government. For public services, Phyllis is a member of the Antiquities Advisory Board, and a member of the Hong Kong Housing Society and its Special Committee on Planning, Design and Construction.

The present northern NT comprises boundary areas between Hong Kong and Shenzhen, a few existing new towns, four New Development Areas in the making and extensive rural areas. In reimagining the northern NT from the northern frontier of Hong Kong to a metropolis of new economic and urban growth over the next 20 years and beyond, a holistic approach supported by urban innovations is necessary. A "4 Ps" strategic planning framework is suggested to develop the northern NT into a sustainable urban development taking care of needs of the People, Prosperity, Planet and Place.

Boundary is a barrier and a dividing force but also brings opportunities from cross boundary interactions and cooperation, leveraging differences between Mainland and Hong Kong. For a prosperous NM, it should look beyond Shenzhen and build up physical connectivity and functional integration with the Greater Bay Area while creating new economic space for innovation and technology encompassing clear positioning, strong ecosystem agglomeration, well defined planning and development parameters, and good integration with the surrounding community.

For an environmentally friendly NM, it should manage water resources, ecosystems, blue and green assets and air quality improvements from a wider regional perspective, positively create and regenerate the environmental capacity in tandem with expanding the development capacity but be mindful of not overshooting the environmental limit.

For a unique, diverse and vibrant NM, it should respect the legacy and Urban-Rural-Countryside-Nature continuum of the NT, correct the Urban-Rural dichotomy, and create places based on a coherent planning, urban design and landscape framework.

For a People-Centric NM, it should tackle important issues of who are the people affected, whether there are innovative solutions for rehousing or relocation, and who are the people moving to the city as well as their needs and demand for quality living and jobs.

06

Future City Vision – Northern Metropolis Workshop

Northern Metropolis Workshop

Chapter 06 summarizes discussions from the workshop participants around the following four themes:

1. Identified Problems and Recommendations
2. Urban Integration
3. Heritage and Culture
4. Innovation

1 Identified Problems and Recommendations

Following the Future City Vision Webinar on 24 June and a morning presentation session on 25 June, this forum workshop focused on the upcoming development of the Northern Metropolis (NM), a new district in Hong Kong, with discussions centring around three themes:

- **Urban Integration**
- **Heritage and Culture**
- **Innovation**

Attended by a diverse group of professionals deeply invested in the city's development, the workshop provided a platform for engaging conversations and thoughtful insights into the future of this new mega district.

During the 2-day event, critical aspects related to the development of the Northern Metropolis were explored, including the **positioning, planning, proposed land uses** and **transportation strategies**. In addition, the integration of the new district with the neighbouring city of Shenzhen was a key topic of discussion.

Several challenges were identified by participants. These included a **perceived disparity** between the Government's vision and the realities on the ground, **ambiguity** regarding the role and function of the Northern Metropolis within the broader region, **inadequate stakeholder engagement** and **limited availability of information** to the public.

To address these challenges and ensure the successful development of the Northern Metropolis, a series of recommendations were proposed. These recommendations emphasised the need for a clear and well-defined vision for the new district, comprehensive stakeholder engagement involving local residents, industry experts, and international companies, enhanced data sharing and transparency, and the encouragement of innovation through flexible regulations and planning.

By adopting these recommendations, Hong Kong can establish the Northern Metropolis as a model of urban integration that harmoniously blends heritage and culture with innovative approaches, while also contributing to the overall development and competitiveness of the region. The seminar provided a valuable platform for professionals to express their concerns and contribute their expertise towards shaping the future of this significant urban endeavour.

1.1. Identified Problems

1.1.1. There is a gap between the reality and the Government's vision. Most strategic plans in cities around the world are driven by Mayors and not civil servants. It is also not appropriate to formulate and present a plan to the public before existing values, issues and challenges have fully been examined. For example, in the recently announced San Tin Technopole masterplan, the rationale and demand for Innovation & Technology (I&T) use of such a large area have so far not been spelled out or proven in detail.

1.1.2. The role of NM is not clear. Not only is the role itself ambiguous, but the function of NM to HK and to the region is also ambiguous. HK / NM's role in the Greater Bay Area (GBA) and even in the whole nation is not elaborated thoroughly in the proposal. It is uncertain that if NM could equip Hong Kong and the GBA to outshine the competition with the Yangtze River Delta Area. The proposal also

does not distinguish NM clearly from the traditional CBD of Central, CBD2 (Kowloon East), and the upcoming CBD3 (Kau Yi Chau Artificial Islands).

1.1.3. The engagement with stakeholders is insufficient. Not all stakeholders are engaged in the process of decision-making.

1.1.4. Limited information of the proposal is released to the public. Accurate and scientific data in various aspects are necessary to formulate a good plan, while it is not easy for the public and professionals to access the Government data nowadays.

1.2. Recommendations

1.2.1. It is crucial for the Government to have a clear position and vision for NM. Successful international experiences and exemplars are of great importance when formulating the position of NM. We could make reference to the latest relevant national policies, for instance, the preservation of agricultural land in the National 14th Five-Year Plan.

1.2.2. The Government should engage the stakeholders more comprehensively, in particular with the potential users of NM and Mainland counterparts. The younger generation is the future main users/residents of NM, whose opinions should be heard and taken seriously. Engagement period should be extended. Not only the local residents should be engaged, but also the global talent and mega IT companies should be consulted. The Government should release more data and share it with the public and professionals to facilitate the dialogue. Hong Kong should maximise its international edge to develop NM as a platform for I&T hub in the region, as well as taking this opportunity to enhance our city's overall competitiveness and inject new impetus into the economy.

2 Urban Integration

Main discussion topics were:

- **Positioning and Branding Planning & Proposed Land uses, Transportation**
- **Integration with Shenzhen**
- **Responding to the San Tin Technopole proposal**

2.1. Positioning, Branding and Context

2.1.1. Hong Kong is an international city; NM needs to be integrated not just to the regional Greater Bay Area (GBA) but also internationally. Connectivity, economic capacity, infrastructure capacity etc. are all different in different places. Methods, procedures and regulations are also different, for example in terms of heritage conservation and environmental protection.

2.1.2. As a newly developed area, NM should have its own distinctive, landmark buildings to represent the new area (eg. Hong Kong island and older districts have iconic cultural architecture like HK City Hall, Central Market, State Theatre, etc.) Perhaps NM could be characterised by sustainable design, green-tech buildings, well-planned urban design and innovative architecture that would make Hong Kong people proud. There can be green adaptation of existing conditions, as well as new landmarks that have design and technology at the international level.

Distinctive buildings and landscapes can transform how people live, their impact is powerful, and the question for NM is how such quality architecture and urban design can be delivered and realised.

2.1.3. Like Tai Kwun and Chicago School on Hong Kong island, people get inspired by culture and quality architecture. They comprehend the social context and community through these communal buildings. Like the Hakka Cultural Landscape initiative, it is fundamental to have equivalent communal and public architecture that respect the cultural context and nature itself. Place-inspired architecture needs to be generated from local context.

2.2. Community, Planning & Proposed Land use

2.2.1. Community planning is needed to build a sense of belonging for any place. So how can we attract people to come to live and settle in NM? At this stage, the overall masterplan is not well developed at all. How to retain Hong Kong's unique features and create a sense of place in this new district will be the main challenge.

2.2.2. From a user's perspective, co-living space design can be nice. It can be very thoughtful, in considering the spatial experience of how residents would return home. What kind of experiences would the residents pass through when going back home?

Experience design is what makes users become part of a community. In Denmark, there is a co-living (work) space. It is a casual space where people communicate and do sports there, like at Google, there is no office. People can gather and just talk casually sitting on a swing without being in formal meetings. There may not even be traditional public housing anymore, but something more innovative. Youngsters now treasure more on work-life balance.

2.2.3. We are not supposed to create 2D zoning maps anymore, but rather, we need to create communities. Should we really make NM a tech community with so much space? Even if it is to attract IT talent, considering the living mode of NM, how to collaborate with different stakeholders and ascertain the appropriate lifestyle would be the main challenge.

2.2.4. We need to think of what kind of people want to live at NM. How to attract them, solely by housing? For example, Singapore's central park really help people to relax. What are the concerns youngsters have here in Hong Kong? Some youngsters leave to go overseas because forming a family in Hong Kong could be very expensive and unsustainable.

2.2.5. We should not only satisfy youngsters' needs, but also (and more importantly) their dreams. To satisfy their future dreams is how we can make people stay. Some needs are essential though - the fundamental needs such as sufficient technology development, housing, ecological and environmental capacity etc., all to be achieved subject to limited resources.

2.3. Integration with Shenzhen

2.3.1. We need to be conscious about the similarities and differences of NM both from the Hong Kong side and Shenzhen side. Only when we understand both sides, then a seamless integration will be a success. Like Yin-yang, to interact, complement and support each other such that a strong bond will be formed eventually. Finding similarities and differences is crucial, so we can learn from other places' failures as well as from each other. We need to achieve effective cross-border communication. We should first find out the appropriate approach by analyzing our differences in mindset, culture and planning strategies. From the intangible to the tangible, we can use culture to generate a space/ network.

2.3.2. That is why we think the Yin-yang concept could work. NM focuses on collaboration between Hong Kong and Shenzhen or the GBA. We need to also consider from other perspectives e.g. from Shenzhen, how they see us from the other side. There are things that have no borders, e.g. ecology, geography and animal habitats. We need to collaborate, need to see from the other side of the river. HK and Shenzhen both have 300 hectares each, we can collaborate and help each other. Like in Foshan, they have lots of resources, but their system is different from ours. To collaborate, we need to identify what we are good at to achieve synergy. To collaborate with Shenzhen, surrounding areas and do regional planning.

2.4. Responding to the San Tin Technopole proposal

2.4.1. In the past two days, most of the presentations are about the San Tin Technopole proposal, the adjacent wetlands and nature conservation. In this aspect, we can reference natural conservation in the Mainland, as they have more resources and bigger sites. As there are still differences in hierarchy in terms of resources, exchange and consultation should be done in both directions, a two-way interaction between Hong Kong and the Mainland. The new area affects not only new residents, but also existing residents and villagers, and hence their thoughts need to be taken into consideration.

2.4.2. In terms of cultural heritage and architectural conservation for the existing villages, we can reference a lot of Mainland cases; one example can be Nantou Ancient City in Shenzhen. In San Tin, there are many ancestral halls. But when old houses are in bad condition, more often than not, they may be destroyed completely and redeveloped, which is a cultural loss.

2.4.3. The current San Tin proposal may be questionable, as the input resources and the plan seem rather conventional. There is a real need to think about birds, other rare species, river, ecological corridor, wetland buffer zone, etc. These are very technical but must-solve problems. To remediate the loss of ecological connection, we can learn from creating roads under the river in the Netherlands.

2.4.4. The designated 300 hectares of land in the San Tin proposal is mainly used for I&T development, which is to build the I&T community. However, if one looks at Silicon Valley as an example, its initial design focus was to create a vibrant liveable city, to attract tech talent to settle there. The Government should investigate more about how to make the place become appealing, e.g., how to attract young talent. Of course, the tech companies are essential to drive innovation, but more importantly we need to attract users to go there first.

2.4.5. As an example, the Barcelona Flea Market design respects the local culture and is beautifully designed, taking the needs and wants of the users into consideration. In the end, the stall owners there are proud of the design.

2.4.6. Is it possible to combine the I&T hub with existing fishponds instead of creating a sponge city? We want to question the "line" or development edge – does the area really need to be 300 hectares? The new developments should add more value to the place overall.

2.4.7. It is important for designers to satisfy client needs or aspirations. Time and resources are limited, so it may not be easy to fulfil the client's "dreams" as the schedule for the San Tin proposal is too tight and the masterplan is not well developed and thought out. Does the Government really need to get it started in 2024? Are the current plans ready for implementation to achieve its original intentions?

2.4.8. How should we apply Yin-yang concept? Is it about San Tin's positioning? Is it the best plan? Can we have more consultation? Any plan Bs? Or should we have more innovative ways to create a lifestyle and an attractive place? We need to set the targeted goals into our brief and to make them happen.

3 Heritage and Culture

3.1. Valuing Place, Empathising with People

3.1.1. In relation to Urban-Rural Integration, a significant portion of the rural population consists of non-indigenous individuals who reduce villages to mere residential spaces, thereby displaying a decreased inclination to preserve tangible heritages. In light of this, what immediate measures can be taken to safeguard these valuable tangible heritages? Furthermore, how can the transition process be effectively facilitated?

3.1.2. To begin with, it is imperative to redefine the term "rural" within the context of the urban-rural discussion. A rural area must encompass primary production activities such as farming, fishing, and even the preservation of salted fish. In the case of indigenous villagers, their fundamental values are rooted in collective memories and attachments to their villages and the spaces they once inhabited.

3.1.3. However, the "rural" population in contemporary Hong Kong is almost non-existent. The mindset and way of life of residents in rural areas have already become highly urbanized, as they strive to adopt and maximize an urbanized lifestyle. Moreover, there is little likelihood of their descendants returning to live in these rural areas. Consequently, their connections have weakened, resulting in significantly reduced incentives to consider the preservation of cultural heritage. This has led to intergenerational discontinuity, as their attachment to the land is primarily driven by monetary motivations. It is imperative to envision NM to include not only urban dwellers and rural residents but also indigenous inhabitants.

3.1.4. Numerous walled villages, such as Hakka settlements, have their ancestral origins in locations like Guangdong and Teochew. In order to enhance engagement and interaction among residents and their ancestral villages, tangible events that establish connections to these places can be organized and implemented. The fishponds in Hong Kong are currently confronted with challenges arising from the aging population of their managers, who may be fatigued and unable to actively engage in value-adding activities for their products. It is imperative to introduce fresh and young individuals to ensure the effective management and operation of these fishponds.

3.2. Technology, production and new way of living

3.2.1. The primary objective of urban-rural integration is to establish a new lifestyle and achieve a harmonious amalgamation of diverse production modes. For instance, in Japan, there exists a village that exemplifies a similar concept by integrating the information technology sector with rural communities. In this case, reliable internet connectivity is the primary requirement for companies to operate, making them willing to relocate to remote areas characterized by low tax rates and favourable living environments.

3.2.2. These companies also engage in the entire production and sales processes of agricultural products, thereby adding value and building their own brand. As a result, a new working model emerges, which eventually becomes a set of local policies and common practices. Similarly, such local policies are necessary to facilitate urban-rural integration within NM.

3.2.3. This necessitates the involvement of individuals willing to engage in both sectors, an approach that may prove appealing to the younger generation seeking such lifestyle and even as a way to improve their quality of life. The limitations of solely participating in one sector can be overcome and the blending of the zones could maintain certain social values. The objective is not simply to place functional buildings adjacent to farmlands but rather to create a novel and innovative way of living, a truly unique Hong Kong brand.

3.2.4. This would need consideration not only in two dimensions (2D) but also in three dimensions (3D) or even four dimensions (4D including time) for the integration process. While the first concept focuses on delineating boundaries on maps, the latter two encompass exploration of journeys and storylines, adding depth and temporal aspects to the integration approach.

3.3. Implementation process and architectural innovation

3.3.1. In terms of the implementation, the Government should demonstrate boldness and pioneering spirit in driving forward the initiatives of NM, embracing the realm of the unknown instead of simply adopting and replicating "safe" schemes from other countries, such as Singapore's Smart Nation or San Francisco Bay Area. It is essential to

expedite the launch of the project at the earliest opportunity, leveraging the existing momentum to efficiently execute various tasks. Simultaneously, each action must be meticulously evaluated to prevent undesirable irreversible consequences and to carefully consider the sequence of the development plan, particularly with respect to proposed reclamation or filling in of fishponds and wetlands.

3.3.2. Architectural innovation also plays a vital role in preserving cultural heritage by reimagining infrastructure. One example is the construction of underground railways, which can help prevent the demolition of villages. Allocating additional resources to NGOs is essential, enabling them to conduct more comprehensive studies and surveys beyond individual heritage buildings. A basic place audit is recommended where domain knowledge is still lacking: ecological and cultural heritages of the Northern New Territories.

3.3.3. Additionally, widening the buffer zone surrounding villages on development plans can promote better integration and protection of cultural heritage. It is also worth reconsidering the Government's proposed 15-hectare cultural area, ensuring that it goes beyond mere replicas of performance venues found in other districts. Instead, it should serve as a place that truly embodies historical symbols (e.g. permanent bamboo scaffold theatre or marketplace). Such innovative approaches can enrich the preservation and representation of cultural heritage.

3.4. Social consensus and Inclusive engagement

3.4.1. It is of utmost importance to foster a social consensus among citizens and encourage active participation from all stakeholders. Education is important not only to the general population but also to indigenous villagers, enlightening them about the significance of preserving their own cultural heritage. Traditionally, landlords with larger landholdings have enjoyed greater influence and decision-making power. However, it is imperative to ensure that the voices and values of minority stakeholders are not disregarded. This transformation requires time and effort to impart knowledge, cultivate awareness and enable connections with residents, which can be achieved through community events and initiatives.

4 Innovation

Main discussion topics were:

- **Innovative Planning & Architecture for Climate Resilience**
- **New Housing & Building Typology**
- **Regulations and Governance**

4.1. Innovative Planning & Architecture for Climate Resilience

4.1.1. As noted by Ar KS WONG in his presentation, Hong Kong temperature has risen significantly in the last five years with many days above 35°C that causes severe health problems. The Northern New Territories notably has the highest temperature in Hong Kong.

4.1.2. Many green and blue resources may be destroyed if urbanization of NM is not well considered. As seen in the latest San Tin Technopole Recommended Outline Development Plan (RODP), much of the Sam Po Shue fishponds are being developed. Though new open spaces appear to be incorporated into the new RODP, they are often hard landscapes. These and the urbanization of rural countryside in developing NM will likely worsen the heat island effect.

4.1.3. More effective and innovative planning approach would be needed to resolve climate issues and protect the sensitive environment and ecology of the Northern New Territories.

Current problems:

4.1.4. In general, land resumption/consolidation remains fragmentary with the current approach by LandsD that restricts the development over pre-existing villages and graves, resulting in the inability to carry out holistic urban planning (land use zonings).

4.1.5. Planners are following current HKPSG and defined zoning/land uses. The new I&T hub definition in San Tin RODP is not clearly explained but intended for flexibility of use. However, other uses in San Tin are typical NDAs planning, that is almost a separate entity to the rest of the technopole.

Recommendations:

4.1.6. LandsD should continue to improve their current practice and be more proactive in working with villagers following approaches taken by our Mainland counterparts in proposing win-win scenario in integrating urban and village communities.

4.1.7. Reconsideration of land-use zoning and the possibility of developing and utilizing strips of land (e.g., along the periphery of fishponds) for settlements to protect existing fishponds, i.e. resort villas or private villas next to the fishponds.

4.1.8. The control re-vitalization of the existing blue and green resources into liveability enhancement of development areas will allow resources to be preserved and create unique character of the developed communities.

4.1.9. Transit Oriented Development can be expanded into building over roadways, or transport integrated developments to minimize land consumption and heat island effect.

4.2. New Housing and Building Typologies / Governance

4.2.1. With the higher temperature in the Northern New Territories, the traditional tower blocks for public housing and those for generic private residential flats would be out of place.

4.2.2. The quantum of housing targeted would create a lower income concentration that seems to be mismatching the knowledge base workforce required in the Northern Metropolis. In addition, the employment generated would not seem to be sufficient for the increased population, forcing many to have to travel into the city for other types of employment.

4.2.3. With the post-Covid era mode of working, the innovation focus of the NM and new liveability standards that is to integrate with the existing green and blue resources, there ought to be new building typologies breaking with conventional types, those that are currently shaped by existing Buildings Ordinance.

Current problems:

4.2.4. Public and Private Housing Ratio – suggestion to reconsider the current 70-30 ratio (in which 70 percent of residential land is allocated to public housing and the other 30 percent to private housing). Reasons for reconsideration:

(i) The 70-30 ratio was not derived scientifically to begin with and the majority of occupants who would populate the area are expected to be skilful professionals with relative material comfort, meaning that the housing demand in NM may lean further towards the private end, comparatively speaking.

(ii) Strictly bounded by the Buildings Ordinance and Lease Conditions, room for innovative approaches is often confined by either one of the above regulations.

(iii) Private developers would also stay away from experimental practices to avoid potential time costs while awaiting approval (considering higher interest rates and increased “GFA”).

Recommendations:

4.2.5. Participants agreed on encouraging innovation and "sandboxing" in NM, (experimental zones that could range from the residential spectrum to shopping malls and office buildings) and acknowledged current problems that hinder innovative practices. (e.g., adoption of new high-rise building typologies like stacked units block, mixed uses that combine GIC with commercial elements of shopping centres that create new community hubs, etc.)

(i) While the Housing Authority (HA) would most likely stick to current public rental housing types if it is reluctant to increase funding for public housing projects. (However, since HA has been willing to adopt/ comply with "BIM" and "MIC" requirements, it is believed that HA could potentially take on a more innovative approach with early engagement and proposals from the group)

(ii) With the "Talented Accommodations" being limited in number and specialized based on government policy, there may be room for more "out-of-the-box" designs for such residences to suit the context of NM.

(iii) Potential solutions for allowing the process of Innovation to happen in NM:

a) Legal and regulatory flexibility when developing NM to allow for innovation. Regulations could be implemented to ensure the attainment of certain goals or performance targets, not merely as a form of restraint. There are Singaporean examples (The National Parks Board) of requiring new landed housing development clusters to set aside open space plots at a certain rate relative to every square meter of gross floor area)

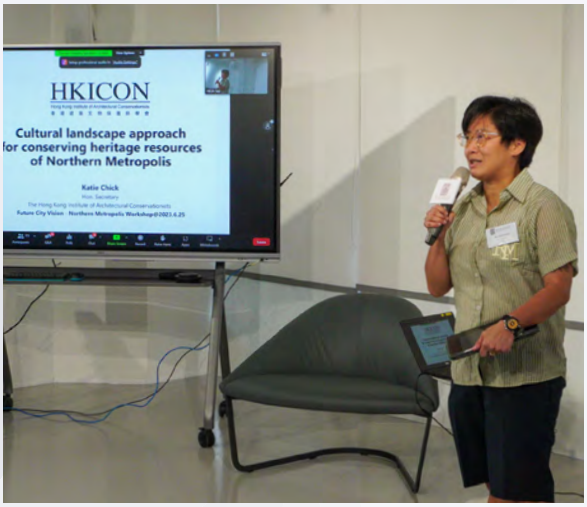
b) The Government could take the initiative to identify appropriate performance targets, which could potentially be related to the facilitation of co-living (common areas and building communities), nature-based living (vegetation), and achieving climate adaptability.

c) As such, NM could be an opportunity for innovation to occur in building typologies, while new policies and regulations could serve as a positive force that would encourage and support innovation, simultaneously guiding the innovation process in NM.

(iv) Seek new building solutions for better ventilation and cool areas to achieve climate resilience (the topic requires further detailed discussion).

(v) Demonstrated the potential clashes between the "designer" and "planner". Stood by the "sandbox" idea, and suggested there ought to be a special authority that would oversee the framework/ development of the sandbox as experimental zone.

(vi) Some previous innovative practices including the implementation of "Environmentally-friendly Balconies" (環保露台) were great concepts, but were unsuccessful due to the limited scale (as compared to similar balconies actualized in Singapore). The building density and compactness of the NM area could deviate from the current policies (which seek further densification of the urban areas), which would offer opportunities for better implementation of such innovative and sustainable practices.


HKICON
Cultural landscape approach
for conserving heritage resources
of Northern Metropolis
Katie Chick


OUR SUSTAINABLE FUTURE
THE NORTHERN METROPOLIS


the Northern New Territories:
tegic Planning Suggestions for
Northern Metropolis

07

Statements on the Northern Metropolis from HKIA and Supporting Organizations

This chapter includes statements issued by different institutes.

HKIA Statement:

The Hong Kong Institute of Architects (HKIA) Statements on the Development of the Northern Metropolis.

Innovative Thinking, Cross-Boundary Planning

1. The Hong Kong Institute of Architects (HKIA) supports the government's "Hong Kong-Shenzhen Cross-Boundary Strategic Spatial Plan" to create the Northern Metropolis with innovative thinking that crosses the administrative borders between Hong Kong and Shenzhen. In addition to significantly increasing land supply, the planning concept of "Two Cities, Three Circles" can enhance the synergistic effects of infrastructure, creative technology, talents, education, ecology, and tourism resources between Hong Kong and Shenzhen, and strengthen the competitiveness of the two cities.

2. HKIA supports the establishment of a high-level government dedicated agency to lead and guide relevant policy departments in promoting the Northern Metropolis plan. It should also coordinate with relevant units in Shenzhen to implement the planning, such as transportation networks, ecological corridors, and bird migration routes.

Livable City, Talent Agglomeration

3. Successful cities must attract talent, and creating livable and efficient cities through quality architecture, landscape, and urban design is essential. HKIA suggests that the government optimize the current system for selecting consultant firms to ensure design quality.

4. We are pleased to see the government actively conserving the ecological diversity and habitat network of the Northern Metropolis. Over the years, we have encouraged the government to use the 3-D planning and urban design concept, as well as the comprehensive development model, to make the best use of limited land resources while also effectively integrating existing ecological, agricultural, and environmental resources, as well as necessary cultural, recreational, and community facilities, into urban design to create a unique metropolis.

5. The Government should consider using underground railways and roads to avoid affecting areas with agricultural and ecological value, and use environmentally friendly and sustainable transportation modes to reduce reliance on private cars and road space, creating a pedestrian-friendly, livable city.

6. In planning, the government should adopt a gradual approach rather than comprehensive development within a single time frame to preserve more natural and cultural resources. Before conducting environmental impact assessments and approving redesigned plans, the government should establish measures to ensure that agricultural land does not turn into brownfield sites and to preserve disappearing green resources.

Traditional Villages and Cultural heritage

7. In addition to natural ecological resources, the Northern Metropolis has abundant cultural heritage resources of traditional villages, including houses, temples, shrines, bridges, ponds, fields, gatehouses, moats, and feng shui woods, many of which are intertwined. Before planning the North District, the government must conduct a comprehensive investigation, survey, and analysis. In addition to approving the scope of the villagers' list, traditional settlements established before the modern development of the New Territories in the 1970s should also be included. HKIA believes that if planned appropriately, the development of the Northern Metropolis can also conserve relics with traditional cultural values, adding uniqueness to the Northern Metropolis.

Keeping Up with the Times, Updating Planning Standards / Current Policies

8. The government can also take the opportunity to review and optimize the current "Hong Kong Planning Standards

and Guidelines" to meet the needs of new planning concepts. At the same time, the government can also consider including innovative planning and urban design, such as considering agricultural land as recreational open space to highlight its ecological value.

9. Regarding the current "Small House Policy" in the New Territories, the community has discussed it for a long time. HKIA suggests that the government review this policy in a timely manner and seek solutions acceptable to all parties, including the original inhabitants of the New Territories.

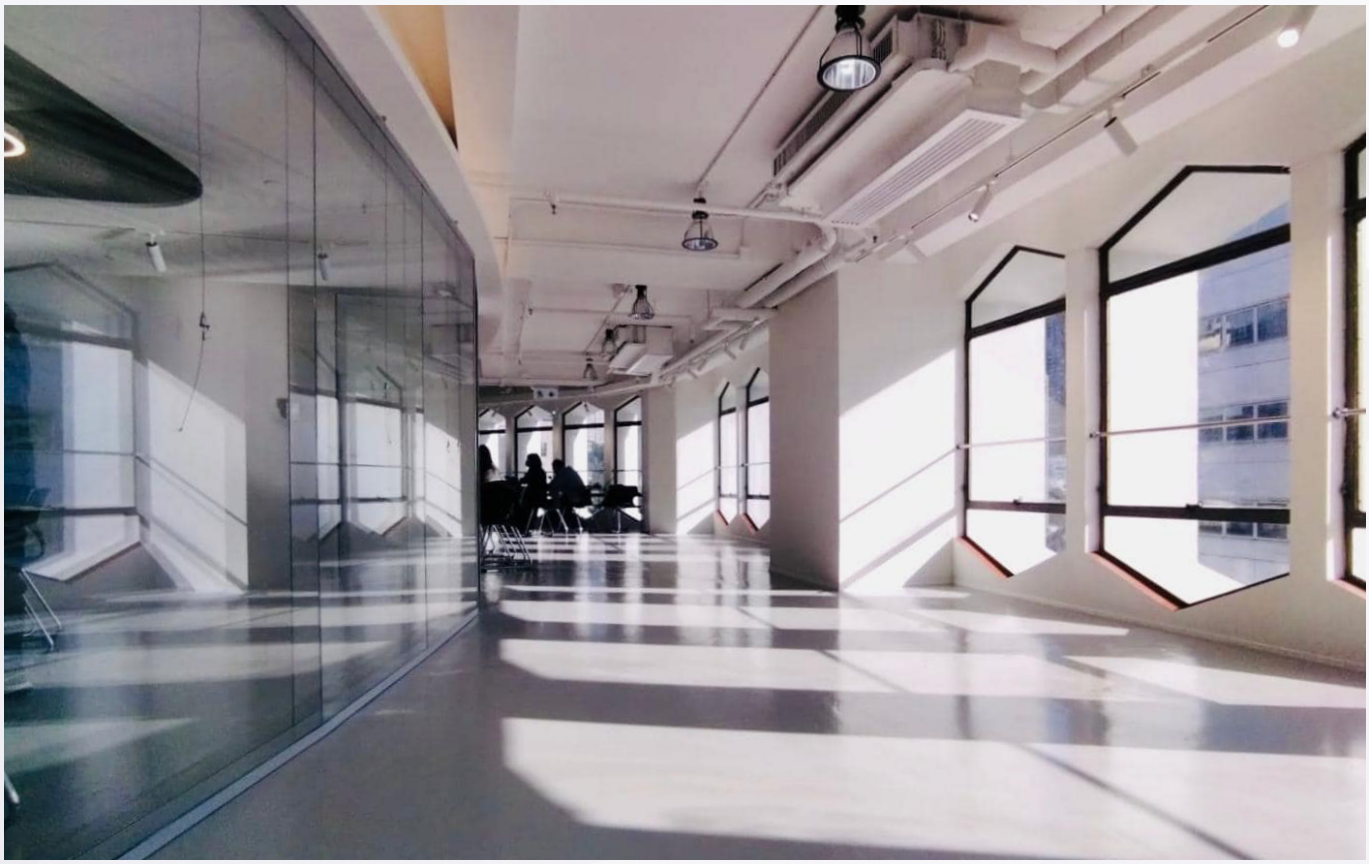
Economic Benefits, Cultivating Talents

10. HKIA welcomes the government's plan to provide land in the Northern Metropolis for the production and storage of Modular Integrated Construction (MiC), which can leave a larger share of MiC economic benefits in Hong Kong while also more effectively cultivating local MiC or Design for Manufacture and Assembly (DfMA) talents and technologies.

11. The government mentioned in the Policy Address (2022) that the Northern Metropolis will take high-tech innovation as its development direction. However, high-tech development projects with this goal are blooming in different regions throughout Hong Kong, such as the Science Park and Lok Ma Chau Loop. HKIA recommends that the government and the Innovation and Technology Bureau develop a clear overall development blueprint and vision, define clear policy goals based on the different situations and conditions of each region, and achieve complementary long-term planning effects for each region, enhancing Hong Kong's competitiveness.

12. HKIA expects the government to strengthen public participation and further optimize the innovative planning concepts for the Northern Metropolis.

Hong Kong Institute of Architects
April 2023



HKIE Statement:

香港工程師學會北部都會區意見書

北部都會區是香港未來發展的其中一個重要引擎，亦是香港未來走向「南金融、北創科」發展格局的重要一步。香港工程師學會 (「學會」) 支持政府提倡北部都會區建設，把握發展的重要機遇，為社會及下一代營造良好的發展勢頭。

北部都會區享有鄰近大灣區的地理優勢，將有效促進香港融入國家整體發展。學會樂見政府宣布成立北部都會區統籌辦事處　(北都辦)，以統籌、倡導及推動北部都會區的發展，並於今年內將制訂和公布北部都會區行動綱領和具體計劃。學會留意到北都辦的主要職務包括制訂創新的規劃及土地政策與執行安排，以推動及支援新產業策略，以及加強與相關決策局或部門的協調工作，以適時在北部都會區推展房屋、交通及其他基建設施、生態保育、不同界別的產業發展，以達至全面整體的發展。學會認為，推動北部都會區需要創新的思維和手段，配合政策、土地及稅務上的支援，例如預留土地作指定的創科用途，包括數據中心、生物科技、高科技製造業等，才能加快相關發展，捉緊與大灣區發展接軌的機遇。為配合及加快北部都會區及其他社會的發展建設，需要精簡審批流程，敢於引入創新的物料、技術及工藝，審批部門除了擔當「監管者」角色之外，在不影響質量及安全，公開公平的情況下，亦應擔當「促進者」的角色。

學會亦樂見政府撥出一千億港元，在基本工程儲備基金下成立專款，以加快推動區內土地、房屋和交通基建項目的進程，學會亦支持政府除了發行基建貸款抵押證券外，尋求以更多不同渠道集資，靈活運用市場力量，減輕政府財政負擔。學會了解政府將繼續採取多管齊下的方式解決土地短缺的問題，並提出明確時間表，加快發展未來兩大供應來源：北部都會區及交椅洲人工島，為香港建立土地儲備。

學會認為，相關時間表十分清晰，唯兩項大型發展項目在接近的時間上馬，再加上多項新提出的重點交通基建，將會令工程及建造業界人手更加緊張。為了避免當年推動「十大基建」出現的問題，學會建議政府應制訂基建藍圖或時間表，把各個基建項目的規劃、設計、平整土地、建造等流程盡量分散，避免集中在同一時段，以免因人手問題而造成延誤或超支。學會亦呼籲政府需檢討現行中學課程，增加 STEAM 學科的吸引力，並加強培訓專業工程人才，以滿足香港未來土地、房屋、基建、交通及創科等方面的發展。除專業人才外，學會亦建議政府可以考慮引入海外及內地副學位畢業生，擔任技術員或工地監督人員，短期內為業界提供可用的技術人才。

學會亦建議政府規劃北部都會區時，應考慮所需的社區及交通配套，確保達致職住平衡，減少遠程交通出行的需要，鼓勵環保式的交通，例如步行及踩單車。發展時亦要確保平衡發展及生態保育，盡量避開高生態價值的地方，例如濕地，並保留適當的緩衝區。

HKIP Statement:

對北部都會區及新田科技城的意見
對北部都會區的一般意見

1. 我們普遍支持北部都會區的提議，可善用棕地，提供大量土地以滿足當前和預期的發展需要。北部都會區毗鄰深圳，可以與深圳的創新科技產業產生協同效應，為發展香港的就業中心提供了契機，並有助於改善全港職住不平衡的問題。鑑於北部都會區將由多個毗鄰已開發地區的發展節點組成，在發展規模上具有較大的彈性，可有效應對未來的不確定性。

2. 北部都會區涵蓋大量易受破壞的濕地，包括米埔內后海灣拉姆薩爾濕地，因此我們認為平衡經濟發展與環境保育將會是北部都會區規劃最重要的原則之一。

3. 在制定行動議程和實施計劃時，北部都會區統籌辦事處需要聯同相關政策局和部門，充分了解和整合目標產業和企業的空間要求。例如：
   - 新產業策略將包括哪些目標產業和企業？會否包括較大規模的生產製造？
   - 是否有充足的電力供應滿足數據和物流中心（特別是冷凍倉庫）的營運需求？
   - 是否有足夠的電訊網絡基礎設施滿足未來的創新與科技用途的需求？
   - 數據中心或創新科技用途應如何聚集，每個運營者的規模應有多大？
   - 在生物技術實驗室附近設立醫院或診所，能否產生協同作用？

4. 北部都會區需一併綜合考慮與交椅洲人工島、馬料水填海等其他大型項目的落實方案、人口/經濟用途的遷入，以及分階段實施策略。此外，馬料水填海現已提出新增創科相關用途的土地，這些與北部都會區的創科用途在功能上如何區別，需要一套整體創科發展策略。

5. 交通和基礎設施需要在第一批人口遷入之前完成。在北環線竣工（約 2034 年左右）之前幾年引入第一批人口和企業（約 2031 年左右）的做法非常不可取。

6. 我們同意政府應帶頭積極管理濕地和魚塘。然而，現時公眾仍未清楚如何進行生態補償和管理該些濕地和魚塘。我們促請政府解釋長遠的保育計劃和財務安排，包括：
   - 在生態上如何確保三寶樹及蠔殼圍的魚塘得以連繫？
   - 如何在擬議創新科技的土地上保留候鳥的飛行路徑？

對新田科技城的具體意見

7. 研究小組需要仔細解決保育區和發展區之間的銜接問題，例如對雀鳥的炫光影響。設計創新科技園的邊界時應尊重自然生態的分布和特徵，例如跟隨現有魚塘的地理分界，而非隨意地勾劃界線。

8. 新田科技城應更仔細考慮城鄉共融。對於目前在建議發展大綱圖上以白色顯示的認可鄉村用地，政府應在考慮鄰近土地用途和設施的情況下，對這些地區作整體規劃，例如透過制訂鄉村發展藍圖，展示行人路改善及單車徑連接，並預留位置作公共空間及安裝防洪設施等，而不是放任該些鄉村用地的發展。

9. 我們認為建議的創新科技園規模太大，內容也太模糊。應列明創新科技用途的一般發展參數，包括人才住房、休憩用地的規模和位置等。我們期望創新科技及工業局所委託的顧問研究，在給予足夠的靈活性以吸引各種創科用途之餘，能夠闡明更多細節，包括發展規模和設計指引。

10. 新田新發展區佔地超過 600 公頃，南北跨度超過 5 公里，僅由 3 個擬建港鐵站提供服務。擬建的創新科技園的交通配套尤其令人擔憂。政府應規劃足夠的接駁服務（包括可能的無人駕駛自動車），以連接港鐵車站和發展區內的各個區域。

公共事務委員會香港規劃師學會
2023 年 8 月 4 日

HKIS Statement:

HKIS's Views on San Tin Technopole

The Hong Kong Institute of Surveyors ("HKIS") welcomes the Government land use proposal for the San Tin Technopole ("Technopole"), inclusive of Innovation &Technology Park, Hong Kong-Shenzhen Innovation & Technology Park and San Tin Town Centre.

Hong Kong is going to be an international innovation & technology ("I&T") city and the Northern Metropolis ("NM") is set to be one of the two growth engines (alongside with the CBD as a financial hub) and driver of our city's future development. We are delighted to see that the Hong Kong Government is now prioritizing the development of the Technopole in the NM and released the land use proposal and the Recommended Outline Development Plan ("RODP") for the Technopole for public engagement in June 2023.

Including the Hong Kong-Shenzhen Innovation & Technology Park, which is currently under development, the Technopole will provide a total of 300 hectare of I&T land and over 70 million sq. ft. gross floor area of I&T facilities upon full development. This is set to be the flagship I&T project in Hong Kong and the GBA. We believe this mega development is vital for the long-term development of Hong Kong's I&T industry and our economy as a whole.

The strategic geographical location of the Technopole will definitely facilitate further collaborations between Hong Kong and Shenzhen while enhancing integration of Hong Kong into the GBA through complementary development with the Mainland.

While we generally welcome the Government's initiatives to create sufficient land supply to foster the development of our I&T industry, we would like to convey our views as follows:

I. **To know the strengths of our peers in the region and learn from them.** While planning the Technopole, we suggest that Hong Kong could learn from its regional competitors' I&T land developments. Shenzhen, Guangzhou and Singapore already have created significant I&T space, for example Shenzhen and Guangzhou have over 4,000 ha of land for I&T and other related industrial uses. Their land administration practices including short to medium term land tenure (30 to 50 years), land disposal arrangement and selection criteria of industries are worth reviewing. Furthermore, with reference to other I&T parks in the world, there should have at least one university research centre nearby to support the Technopole.

II. **Competitive land price is key to attract investment.** The government should adopt a land policy inducive for creation of I&T space and consider granting land with competitive price level on the regional/global arena so that international leading I&T enterprises and unicorns would be attracted to Hong Kong.

III. **Innovation and flexibility in land use planning and land grant are needed.** Taking into consideration the large scale of the Technopole and constantly changing nature of the I&T industry, innovation and flexibility in land use planning and land grant conditions are keys to smarter and swifter development in the Technopole. It is important to promote the creation of a vibrant and sustainable I&T community in the Technopole.

IV. **More direct and integrated transport infrastructure at the Technopole is needed to foster cross-boundary travel.** The development of the Technopole and the NM has strategic importance to promote high-quality economic co-operation between Hong Kong and Shenzhen, as well as the GBA under the "Twin Cities, Three Circles" framework. A more direct and integrated transport infrastructure with existing domestic and cross-border railway networks is important to facilitate further development integration of the two cities.

Additionally, we would also like to put forward the following points for the development of the Technopole and the NM for Government consideration:

1. **Be proactive in facilitating implementation and development of the Technopole / the NM** – Direct land grant is one option considered by Ms. Bernadette Linn, Secretary for Development. If this land disposal arrangement is to be adopted, clear policy statement should be provided for the selection of relevant industries and how land premium is to be assessed. The land premium would need to be meaningful to the I&T players which HK wishes to attract them to come. One of the considerations would be to reduce the length of the land leases. Another consideration could be paying an annualised land premium throughout the lease term to minimise an upfront capital payment.

2. **Wider user for the I&T industry under planning and land grant regimes** – The government has already advised that they will include talent accommodation. By drawing upon Mainland and overseas examples, such ancillary supporting users like shops and services, recreational use and hotel would be essential to create a world-class I&T community with critical mass and human-centric theme.

3. **Simple planning and land lease conditions for I&T** – avoid imposing excessive burden on developers/ investors/ enterprises on providing GIC and/or public facilities.

4. **Embrace private sector involvement** – Increase of private sector participation would have many benefits, including leveraging the private sector capital and expertise, reducing pressure on public finances and a better allocation of risk between the public and private sectors. We have seen meaningful results of private sector participation in the form of in-situ land exchange in New Development Areas. It would be good if the government can announce the policy and practice arrangement as soon as possible.

5. **Establish an assessment panel or body to advise the CE in Council for private treaty grant and land premium with certainty** – Similar to HKSTP and HSITP, there will be a need for a body to evaluate the proposals from the I& T players in terms of their economic contribution to Hong Kong and business plan and subsequently to monitor their ongoing performance.

6. **Establish a transparent framework to facilitate land resumption including explanation of Government assessment of statutory compensation** – it would be good if the Government can speed up the settlement of compensation to affected owners and occupiers by including such measures as: imposing a time frame for Government surveyors through administrative means to respond to compensation claims made by affected owners/occupiers with rationale and comparables for compensation assessment.

We hope that the above comments and opinions are helpful.

HKIUD Statement:

We would like to express our sincere gratitude for briefing our representatives, Mr Donald CHOI, our president, Mr Joel CHAN, our immediate past president, and myself, the concept of the Northern Metropolis at PlanD's office on 9 December 2021.

Planning Consultancies

At the meeting, we were told that there were two ongoing consultancies (being undertaken by AECOM) and they are undergoing studies of 3 key areas:

I. San Tin / Lok Ma Chau including Huanggang Portal (includes 120 hectare of San Tin IT Hub)
II. Man Kam To/Lo Wu (inclusive of the previous Man Kam To Logistic Corridor and Lo Wu; Station Vicinity); and
III. NTN New Town (from Queen's Hill to Heung Yuen Wai).

We understand from the CE's policy address 2021 that Northern Metropolis is to cover a larger area than those mentioned above, we would appreciate if PlanD and CEDD can update us any update on the planning process and arrangement of further consultancies such that we can share with you our views on the urban design and planning issues of the metropolis in a timely manner.

Our Initial Comments

HKIUD welcomes the government's proposal to establish a Northern Metropolis. It has always been HKIUD suggestion in the past that an urban area in the northern part of Hong Kong shall be established to provide more local job opportunities, better integration with GBA as well as more housing supplies. More job opportunities and housing supplies in proximity can also help to reduce intra-city transportation needs.

When planning the Northern Metropolis, HKIUD suggests the government to consider the following:

1. **Public Participation in Establishing Visions and Objectives** - There shall be early discussion amongst Hong Kong citizens (not just the stakeholders) for establishment of the vision and objectives for the Northern Metropolis. The Northern Metropolis should not be seen in strategic isolation from the rest of Hong Kong, in particular, how the East Lantau proposal (estimated population 700,000 plus CBD3) fits into this. We understand that there will be role differences between this Northern Metropolis and the Southern Metropolis also being planned concurrently; the government shall clearly identify their such differences by reviewing Hong Kong overall positioning as well as understanding the needs and listening to the voices of the citizens.

2. **Better Living Standards** - With the importance of this metropolis and availability of potential good amount of land supply stock, establishment of better living standards/metrics shall be considered. We hope the government will have the courage to increase the amount of open space as well as average living space per habitant. There shall be a higher percentage of land targeting for functional uses (i.e. actual business /industrial /residential uses). Lands that maybe sterilised by infrastructure shall be minimised. Attaining Net Zero or Super Low Energy developments should be an objective as well.

3. **Urban Design over Traditional 2-D Town Planning Approach** – In planning such an important new metropolis for Hong Kong, the government shall stop following the

traditional approach in the planning and implementation of our city: 2-D planning approach spearheaded by the PlanD then implementation by the CEDD. This kind of disjointed design and implementation effort is not the right approach for a highly densified 3-D city like Hong Kong. Urban design is an interdisciplinary field that utilises the procedures and the elements of architecture and other related professions, including landscape design, urban planning, transport planning, civil engineering, and municipal engineering. It considers overall health, social, economic, environmental as well as aesthetic aspects of the planning of the city and requires widespread inputs from all related sources of expertise. A "liveable metropolis" shall be a product of all the above and it can never be satisfactorily shaped when we keep on with 2-D planning, data and engineering concerns.

4. **Integration of infrastructure and developments** - There shall be early planning of the integration of infrastructure and developments. TODs and TIDs shall be encouraged. We have to stress that developments above infrastructure can only be feasible if developments (i.e. structural and access provisions) are taken into account in the planning and design of the infrastructure (i.e. both highways and railways).

5. **Innovative and Future Ready Urban Design** – Beside TODs and TIDs, the Northern Metropolis can be planned with the latest upcoming smart city technologies in mind. We believe that most newly established communities shall primarily be served by mass transit and centralised carparking. To attain an ideal and liveable metropolis, we ought to make pedestrians, slow-moving autonomous vehicles, bicycles or similar personal transportation means as priority; our city shall no longer be dominated by cars or other vehicles for logistic means.

6. **Early Review the Village Housing Policy** – Village housing is a big problem within area and there are long ingrained vested interest issues. We encourage the government to conduct early study with innovative options for "integrative" village developments. Balancing development needs, public and indigenous rights will probably be a long process and the government should not procrastinate on the issue.

7. **Early Identification and Planning for Heritage and the Environment** – There shall be early study and identification existing heritage and environmentally sensitive areas, especially ancient Hakka villages, wetland and virgin forest.

8. **Commissioner with Urban Design Experience to lead the Project** – There shall be a commissioner (a new post mentioned in PA2021 by CE) with urban design experience to lead the whole process. He or she shall take architectural, layout, economical, social, environmental as well as liveability aspects into consideration in the planning of this new metropolis.

In conclusion, HK needs as ever to start to focusing on quality lead development and stop thinking in numbers; harnessing its ever shrinking advantage in the region. When looking at the two urban centres together (SZ/HK), any border development in NNT will be at the heart of the twin cities and surrounded by extensive quality green assets. It needs to be of the most visionary and compact development quality and carefully considered to ensure the protection of this natural green lung of rivers, wetland and mountains.

Anthony CHEUNG
Chairman, Public Affairs Committee, HKIUD

HKICON Statement:

Position statement of The Hong Kong Institute of Architectural Conservationists (HKICON) on the Northern Metropolis Development.

The northern New Territories contain rich cultural and natural heritage resources that form precious and unique rural cultural landscapes along the Shenzhen River. These resources require appropriate conservation, revitalization, and sustainable management.

HKICON advocates for a heritage-conscious approach to the NM Development that aligns with UN SDGs and UN-Habitat's vision of sustainable city development. We propose adopting the "Cultural Landscape Approach," which acknowledges the relationship between humans and nature, providing a more holistic planning and management framework that integrates cultural and natural elements, as well as tangible and intangible aspects for heritage management.

We call for a comprehensive survey to identify the valuable heritage resources within the proposed NM area and nearby New Development Areas. Additionally, a Strategic Heritage Impact Assessment is recommended to determine the potential impacts and the cumulative effects on cultural, natural heritage, and cultural landscape values of the NM development and to devise suitable and timely management measures to protect the heritage values of the site.

HKICON also recommends the formulation of a cultural landscape management regime that preserves ecosystem integrity while promoting cultural sustainability and Socio-economic vitality of traditional farming and fishing landscapes, war and industrial heritage, as well as other under-recognized heritage resources in the area.

The Conservancy Association Statement:

The Conservancy Association Statement on The Northern Metropolis

The Northern Metropolis has been planned to host a population of about 2.5 million people. With development at such mammoth scale, The Conservancy Association considers that a series of measures and actions are required to ensure current conservation efforts are not compromised by developments in the Northern Metropolis area before and during the planning, construction and operation phases.

The Conservancy Association have been calling for a holistic conservation policy in Northern Metropolis, includes but not limited to, conduct detailed study in the proposed Wetland Conservation Parks to safeguard connectivity and function of wetland ecosystem; make good use of the Wetland Buffer Area, such as aligning it with the planning and design of the Wetland Conservation Parks; put a stop to any forms of Eco-vandalism to reduce land restoration costs in future, etc.

WWF-Hong Kong Statement:

WWF-Hong Kong's first policy address recommendation for Chief Executive John LEE highlights the importance of setting up a "Holistic Nature Conservation Policy" bringing together conservation and development, rather than treating them as competing goals. This policy aligns with "President XI Jinping's Thought on Ecological Civilization", China's 14th Five-Year Plan, Greater Bay Area Policy Areas, and the current draft of the Post-2020 Global Biodiversity Framework. By adopting such a policy, Hong Kong can be a Green Development Paradigm, have a positive contribution to the nation's global advocacy of building a well-connected community of all life on Earth, and thereby contribute to the revised targets of the Convention of Biological Diversity that are intended to reverse biodiversity loss.

Hong Kong is blessed with beautiful natural coastlines, with beaches and wetlands that transition into mountain ranges that are clothed by regenerating forests. Most importantly, almost 40% of the nonmarine landscape comprises protected areas. These natural spaces provide ecosystem goods and services, such as clean air, clean water, food, and medicines, that our lives rely on.

Studies have also shown that nature or green space is essential for the well-being of people who spend most of their time in built-up areas. Access to nature improves sleep, increases happiness, promotes positive social interactions and even helps to generate a sense of meaning to life. Healthy, happy people contribute to economic productivity and, eventually, to a flourishing economy and a stable governance.

Hong Kong's nature and its ecosystem goods and services is one of the city's biggest uniqueness. We must treasure and conserve our nature, so that we can sustain our development for generations to come.

To do so, WWF suggests bringing together conservation and development, as part of sustainable development, with the below vision and goal:

- **Vision:** People living in harmony with nature.
- **Goal:** By 2030, a people- and nature-positive Hong Kong by transforming our relationship with nature.

To achieve such a vision and goal for Hong Kong, our Chief Executive needs to mainstream conservation, and ensure environmental consideration is at the core of all ongoing and future developments. He must implement a comprehensive, ambitious, and practical plan, based on a holistic conservation policy shaped with support received from various bureaus and departments.

Here, we suggest five key, achievable and actionable recommendations to develop a policy that will support a vision for Hong Kong where people live in harmony with nature. Key conservation recommendations for a Hong Kong based on the Ecological Civilization concept of development:

I. Beautify urban spaces and conserve natural spaces through comprehensive spatial planning.
II. Become a net-zero carbon city with a green finance hub.
III. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.
IV. Strengthen marine biodiversity.
V. Transition to a circular economy.

Details of Key Policy Recommendations

1. **Beautify urban spaces and conserve natural spaces through comprehensive spatial planning.**
   Bringing together biodiversity conservation and development is key to a holistic conservation policy. The Ecological Civilization concept highlights the importance of using a systematic landscape governance concept to enhance ecosystem integrity, managing ecosystems effectively, and avoiding their disturbance or degradation by humans. President XI Jinping said: "It is necessary to coordinate a systematic governance of the landscape, forest, farmland, lake, grass and sand

systems, implement ecological protection and restoration projects, enhance the protection, and improve the stability and sustainability of the ecosystem." The first draft of the Post-2020 Global Biodiversity Framework also stated an action-oriented target to "ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas."

To put the landscape governance concept in practice, WWF recommends the government to carry out comprehensive ecosystem-based spatial planning urgently prior to any new development. We propose the following specific measures should be adopted by the government:

1.1. Safeguard the integrity of Deep Bay ecosystems for their conservation values and as nature-based solutions to build climate resilience and contribute towards climate mitigation. This will include creating a wetland landscape along the Deep Bay coast, echoing the Northern Metropolis Development Strategy by:

1.1.1. Establishing a sustainable Northern Metropolis Office to kick-start consultation and stakeholder engagement to ensure a smooth and harmonised whole-of government planning and implementation process;

1.1.2. Extending the current Mai Po Inner Deep Bay Ramsar Site to include the three proposed Wetland Conservation Parks, Hong Kong Wetland Park and its extension, the Tsim Bei Tsui/Lau Fau Shan/Pak Nai Coastal Protection Park and Waterfront Promenade, and Long Valley Nature Park;

1.1.3. Restoring the fishponds in Lut Chau, Nam Sang Wai, Fung Lok Wai, and Tsim Bei Tsui into gei wai, to adopt an integrated management strategy for both biodiversity and fisher livelihoods;

1.1.4. Embracing a Smart City design and integrating green infrastructure into the Northern Metropolis under the sponge city concept and to qualify for Ramsar Wetland City status.

1.2. Publish, at regular intervals, a biodiversity indicator report for Hong Kong that sets out evidence of any gains or losses in populations or species of conservation concern, and which highlights the associated obligations and responsibilities of Hong Kongers under international covenants (such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Ramsar Convention).

1.3. Update The Hong Kong Planning Standards and Guidelines to ensure climate change and biodiversity conservation elements, such as climate mitigation and adaptation, ecological integrity, and habitat connectivity, are considered during planning process.

1.4. Apply a 'no further conversion of wetlands' policy to safeguard the ecological integrity of Hong Kong's wetlands that are essential to safeguard the coastal areas from climate change impacts.

1.5. Establish a regulated Land Trust to provide feasible alternatives for landowners, such as land swaps, to resolve the current land rights deadlock on wetland use and management.

1.6. Include all land under statutory land use planning requirements with Development Permission Area Plans, and regulate land uses under Outline Zoning Plans.

1.7. Formulate and adopt holistic, long-term land and marine-scape "Ridge

to Reef" conservation plans to protect ecologically important habitats in South Lantau watersheds and the Inner Deep Bay.

1.8. Formalize the procedures for conducting Strategic Environmental Assessments 1 to incorporate principles of the Convention on Biological Diversity (CBD), including no net loss, precautionary principles, wide stakeholder participation, and incorporating traditional and scientific knowledge.

1.9. Institutionalize an inclusive, transparent, and participatory integrated, multi-sectoral spatial planning process for landscapes and seascapes within the Planning Department to clearly demarcate land-use, including conservation areas.

1.10. Establish a Marine Spatial Planning authority and allocate adequate funding to kickstart the first stage of marine spatial planning.

1.11. Initiate an ecosystem-based marine spatial planning process that engages all relevant stakeholders.

2. **Become a net-zero carbon city and a green finance hub.** Together with biodiversity loss, climate change is threatening our well-being. The Hong Kong Observatory's data has shown an increasing trend of extreme weather events Every year, we experience unusual weather patterns, heavier rainfall and hotter days and nights, which will manifest as super-typhoons that will occur with greater frequency. The government must lead the way and address these intertwined issues to ensure Hong Kong will be a liveable city that is resilience to the impacts of climate change. Hong Kong's role as an international financial centre provides us with opportunities to mitigate climate actions and conserve biodiversity through financial means.

Nature-based solutions such as green infrastructure offer a highly effective means to increase resilience to climate change and to reverse the attenuation of biodiversity, and we should take the opportunity to make use of existing opportunities with the utmost urgency. Nature-based solutions must be inclusive, transparent, developed with respect to local people's views and traditional knowledge; the benefits generated should be equally distributed among stakeholders.

We reiterate that both biodiversity values and climate impacts must be integrated into policies, regulations, planning, development processes, accounts, and assessments of environmental impacts at all levels of government and across all sectors of the economy, ensuring that all activities and financial flows (public and private) are aligned with biodiversity values and climate impacts.

WWF Hong Kong proposes the following be adopted by the government as a matter of climate urgency:

2.1. Adopt existing or develop an effective and credible taxonomy to strengthen Hong Kong's reputation as a leading green finance market.

2.2. Fully integrate and mandate biodiversity values and climate impact in policies, regulations, planning, development processes, accounts, and assessments at all levels and portfolios of government and across all sectors of the economy.

2.3. Establish a Climate Action Authority to ensure the mainstreaming of climate action.

2.4. Study the worst-case scenario under SSP5-8.5 sea level rise4 and storm surge during extreme weather events and ensure all future developments are safe from impact of climate change.

2.5. Mainstream nature-based solutions such as green infrastructure in urban planning to mitigate urban heat island effects protect coastal areas, reduce floods droughts and other natural disasters from extreme weather events, while benefiting biodiversity conservation.

2.6. Set an ambitious target and roadmap for the government itself to reach carbon neutral before 2030.

2.7. Disclose government energy use and carbon reduction data by department to set a good role model for the society.

2.8. Set a government internal low carbon procurement policy to foster and encourage market change to low carbon products.

2.9. Allocate resources to facilitate school private light bus as the next sector to go for electrification.

2.10. Raise the bar of the existing climate change and decarbonization plan, with targetsetting grounded in science-based approaches that align with the mid-century 1.5°C net zero pathway.

2.11. Meet a minimum 10% renewable energy (RE) target by 2030, with integration of biodiversity protection during whole development process, from early planning, design, construction, operation and decommission.

2.12. Diversify Hong Kong's RE portfolio through regional collaboration, with application of certified sustainably sourced biofuel to abate "international emissions" from the aviation sector.

2.13. Establish a dedicated funding facility for sustainable development, and in particular for climate change mitigation and biodiversity conservation and restoration.

3. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health

To reverse biodiversity loss, it is necessary to address the causes and drivers of such loss, including unsustainable consumption and trade of wildlife. A milestone to halve the footprint of production and consumption by 2030 and targets covering all drivers, including food systems, diets and infrastructure, is needed.

In July 2022, the government released the Hong Kong Money Laundering and Terrorist Financing Risk Assessment Report. The report is a wakeup call not only to the government, but also to the private sector to fight transnational organized wildlife crime, recognized as a USD $200 billion-a-year illegal industry. Throughout 2015-2020, a total of 2,817 seizures were made involving 2,214 metric tonnes of wildlife conservatively valued at HK$723 million. 1,824 people were arrested and 871 convicted.

With the number of seizures, suspected black market value, and arrests, WWF encourages all parties to increase reporting and investigations and to utilize the enhanced investigative and punitive powers of Cap 455 or Organized and Serious Crimes Ordinance (OSCO) amended in August 2021 that now includes offenses under Cap 586. Under Cap. 455, an "authorized officer" does not include staff of Agriculture, Fisheries and Conservation
Department (AFCD). With a specialized team operating under the Inter-Departmental Task Force on Wildlife Crime, in determining and investigation of IWT offenses associated with OSCO, the government will fully utilise its anti-money laundering powers in identifying kingpins and illicit financial flows associated with wildlife crime.

The spread of Covid-19 in Hong Kong and across the world and the recent transmission of the virus from hamsters to humans in Hong Kong demonstrates the

risk and need for stricter regulations of the exotic pet trade to prevent future zoonotic disease outbreaks.

The government must ensure that the direct and indirect harvesting, trade and use of wild species is sustainable, legal, and safe for human health, including by applying the ecosystem approach to fisheries, and urgently take actions to stop the supply and sale of illegal wildlife products. WWF urges the government to:

3.1. Create a Specialized Team led by the Customs and Excise Department and Hong Kong Police Force within the Inter-Departmental Task Force on Wildlife Crime, to lead investigation into Organized and Serious Crime, including the determination that a case involves such elements and needs to be investigated and prosecuted as such.

3.2. Designate an independent Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Scientific Authority in Hong Kong to help mitigate issues relating to illegal captive breeding, wildlife trafficking, and inadequate traceability of traded species. It would operate in a complementary and supporting role to the activities currently undertaken by the CITES Management Authority, AFCD.

3.3. Strengthen the traceability, regulation, monitoring, and enforcement of Hong Kong's exotic pet trade markets, with priority on parrots and tortoises.

3.4. Establish a seafood labelling system to provide transparent information on i) source country, ii) production method and iii) scientific names on pre-packaged seafood products.

3.5. Encourage inclusion of biofiltration/ filter systems in all mariculture farms.

3.6. Strengthen regulatory protection for marine animals, such as the whale shark (Rhincodon typus), Chinese Bahaba (Bahaba taipingensis) and the two species of horseshoe crab (Tachypleus tridentatus and Carcinoscorpius rotundicauda) found in Hong Kong.

3.7. Urgently strengthen measures to eradicate illegal fishing, including stronger collaboration between government agencies, cross-boundary collaboration with Guangdong authorities, and strengthening penalties and awareness of enforcement agencies and judiciary.

3.8. Enhance fisheries management, including developing an AIS system to monitor fishing activities within Hong Kong and across the boundary, provide monetary rewards to whistle-blowers of illegal fishing, and establish a user-friendly reporting system facilitating voluntary whistleblowing.

4. Strengthen marine biodiversity

Marine Protected Areas (MPAs) can provide significant socio-economic benefits during the post-COVID green recovery period from outdoor recreation, eco-tourism, scuba-diving, and better-regulated fisheries. We urge the government to take a proactive and precautionary approach and commit to a specific and time bound roadmap for increasing coverage of effectively managed MPAs to 30% of Hong Kong waters by 2030, which aligns with the CBD target.

Currently, 5% of Hong Kong's waters are designated or planned to be established as MPAs by 2023. Most are compensation for developments. This extent falls short of Hong Kong's commitments to the CBD, and to conserve Hong Kong's representative marine biodiversity. President XI Jinping's Ecological Civilization also emphasised to strengthen ocean conservation and governance, and to build a coastal ecological belt within the Greater Bay Area.

The MPA network should be based on a science-based planning exercise that includes strict no-take reserves, Fisheries Protection Areas (FPAs), species-specific conservation zones, community-based fisheries reserves, and other MPA designations. The establishment of FPAs should be accelerated with transparency. The government should review the establishment schedule and provide progress updates regularly. Under the proposed Holistic Nature Conservation Policy, an all-round management plan must be implemented in all MPAs and proposed FPAs to conserve and restore the ecosystems through appropriate zoning and use practices, from strict no-take zones to enforcing sustainable fishery practices.

To prevent the extirpation of the Pearl River Delta population of Chinese white dolphins (CWD; Sousa chinensis), the Hong Kong government must work closely with the Guangdong authorities to activate timely conservation actions. Governments can refer to the Emergency Action Plan for Chinese White Dolphins6, formulated jointly by authorities, academics, conservationists and specialists from Hong Kong and the broader Greater Bay Area for developing a regional management plan to preserve key habitats and mitigate major human impacts. Key actions include establishment of buffer areas connecting key dolphin habitats and re-routing major shipping lanes away from critical habitats. To restore and safeguard marine heritage, WWF advocates the following actions from the government:

4.1. Establish and commit to, by 2023, a roadmap for MPAs to cover 30% of Hong Kong waters by 2030, with effective site-specific management plans and time bound conservation goals.

4.2. Withdraw the Central Waters Reclamation plan under Lantau Tomorrow due to the potential unavoidable negative impact on local cetaceans, coral communities and fishery. Ever worse, the plan may expand hypoxia waters in Hong Kong, which is catastrophic to both the living standard of Hong Kong resident and the marine biodiversity.

4.3. Establish a development-free Dolphin Conservation Management Area off western and southern Lantau by 2024, by expanding the Southwest Lantau Marine Park to also cover coastal waters off Tai O and Lo Kei Wan, and natural continuous coastline of western Lantau supporting abundant prey supply to CWDs.

4.4. Update the Environmental Impact Assessment Ordinance (EIAO) to provide specific guidelines for assessing, evaluating, and mitigating underwater noise impacts, with mandating acoustic propagation modelling.

4.5. Establish, by 2025, a Shui Hau Marine Protected Area, with zoning that provides strict protection to the most ecologically sensitive area and allows regulated activities in the outer zone.

4.6. Establish a Ninepins MPA by 2026 to drive socio-economic benefits, enhance climate resilience and facilitate fisheries resources recovery.

4.7. Accelerate the designation of the FPAs, with the aim of recovering depleted fish stocks to sustain fisher livelihoods.

4.8. Update the Marine Parks and Marine Reserves Regulation (Cap.476A) to implement sites-specific measures within designated marine parks, with setting SMART goals as quantitative indicators of protect area effectiveness.

4.9. Expedite cross-boundary management of protected areas throughout the Greater Bay Area.

5. Transition to a circular economy

Plastic pollution is affecting people's well-being. Plastics are ubiquitous worldwide and now found in all kinds of organisms, including in humans. Recent studies have found microplastics in human blood circulatory systems and lungs with irreversible effects to human health. The first draft of the Post-2020 Global Biodiversity Framework target 7 is about "eliminating the discharge of plastic waste". Ecological Civilization states the importance of high quality development and a circular economy to use the least amount of resources to create the biggest social-economic value.

City and coastline full of plastic pollution shouldn't be a scene of a green city paradigm. If our government has pledged to make Hong Kong a liveable and beautiful city, a circular plastic economy is urgently needed, where materials are recycled and reused, resources are responsibly managed, and negative impacts are actively avoided. A plastic circular economy can reduce the amount of plastic that leaks to both urban and natural environments.

To reach the goal of No Plastic in Nature by 2030, a holistic waste management system with bold, legally binding instruments is needed to tackle the problem and make Hong Kong a plastic-smart city. In dealing with the plastic problem, we highly recommend the government to adopt the "CATCH" principle (i.e., circular, adaptive, transparent, convenient, and holistic), which was proposed during the Producer Responsibility Scheme on Plastic Beverage Containers previously10, to ensure all future schemes can truly solve the plastic pollution problem by engaging civil society.

Currently, we lack the policies and measures to stimulate the demand and supply for products and services that come from a circular economy. Therefore, WWF suggests the following actions from the government:

5.1. Accelerate the ban legislation process for single-use plastic cutlery and polystyrene tableware by 2023, and phase out other single-use plastic and biodegradable tableware for both dine-in and takeaway services by 2025, including individual packaging for tableware items.

5.2. Establish an aid fund for the F&B industry to roll out incentive schemes to encourage customers to bring their own tableware for takeaway orders.

5.3. Set a high levy on single-use shopping bags of any material, with minimal exemptions, by 2022.

5.4. Expand the Plastic Recycling Pilot Scheme to all districts and release the most up-to-date recycling rates of plastics on a monthly or quarterly basis.

5.5. Adopt a comprehensive Producer Responsibility Scheme for Plastic Beverage Containers by 2023, with a goal to reach 100% bottle-to-bottle recycling by 2030.

5.6. Develop clear standards and guidelines for modified plastics (i.e., biodegradable and compostable plastics) and restrict those are not compatible to Hong Kong market (either cannot be biodegraded, composted, or cannot be recycled).

5.7. Push forward a labelling system to facilitate appropriate end-of-life treatments for plastics and boost the recycling rate of plastics.

08

Digital Record of Presentations and PowerPoints

Video Recording Recap and Presentation Material can be found on the below links:

Future City Vision -
Northern Metropolis Day 1 Forum
https://www.hkia.net/en/cpd-events.html?id=1272

Future City Vision -
Northern Metropolis Day 2 Forum
https://www.hkia.net/en/cpd-events.html?id=1273

09

Joint Institutes' Views on San Tin Technopole

9 August 2023

We support the Government's new mindset breakthrough, taking into full consideration the unique circumstances of both Hong Kong and Shenzhen, taking into full consideration the unique circumstances of both Hong Kong and Shenzhen in the planning of the Northern Metropolis. In addition to increasing land supply, The twin-city three circle concept would create synergy in urban infrastructure, talent, I&T industry, natural, ecology, and tourism resources, and enhance the competitiveness of the two cities.

Integrating the old with the new, creating a liveable and sustainable city

Regarding the Revised Recommended Outline Development Plan (RODP) for the San Tin Technopole announced by the Government in June, we suggest that the Government should fully respect and conserve the rich ecological environment, historical buildings, cultural landscapes, and intangible cultural heritage in the area. These precious resources should be actively incorporated into the development proposal, and the spirit of urban-rural integration should be embraced to strengthen the connection between the New Development Area (NDA) and the existing communities, environment, and local history. This will create a sustainable, liveable, diverse, and distinctive NDA, attracting innovation and technology professionals from around the world to live and work there.

Planning, land, and industrial policies

To adapt to the evolving needs of innovation and technology, it is necessary to provide flexibility in planning and adopt a flexible land allocation approach. The Government should establish open, transparent, and logical industrial and land policies, overall planning parameters, urban design guidelines, and appropriate administrative approval procedures to ensure that future development stays true to the original planning intent and does not have significant negative impacts.

The Development Bureau needs to closely collaborate with other relevant policy bureaus to develop detailed planning and formulate a development timetable for the innovation and technology park through clear industrial strategies, including timely provision of supporting infrastructure and community facilities. Reference can also be taken from similar innovation and technology development zones in neighbouring areas, and appropriate land policies should be implemented to ensure reasonable land prices and enhance the international competitiveness of the San Tin Technopole.

Ecological landscape

The current proposal will affect over 100 hectares of fish ponds, which differs from the 2021 Northern Metropolis Development Strategy Report. The Government needs to comply with the requirements of Town Planning Board PG - No. 12C, Town Planning Board Guidelines for Application for Developments within Deep Bay Area, conduct ecological impact assessments, and demonstrate "no-net-loss" in the functions provided by wetlands or cause adverse impact. Compensation for wetland loss should also be provided in accordance with the guidelines.

Furthermore, the Technopole in proximity to the Sam Po Shue Wetland Conservation Park has a proposed built area of 7 million square meters. The Government should provide principled guidelines to ensure a harmonious relationship between the NDA and the wetland, while meeting the requirements of Town Planning Board PG - No. 12C for development within the wetland buffer zone.

History and cultural heritage

The San Tin Village has a history of approximately 600 years, with two designated monuments and over 18 graded historical buildings, making it rich in cultural resources. The Government should conduct a comprehensive survey of cultural heritage resources and assess their impact, and implement appropriate and timely planning

measures to ensure that historical buildings and cultural landscapes with conservation value are not destroyed during the development process. Additionally, the area possesses abundant intangible cultural heritage, with many elements already included in the first "List of Hong Kong's Intangible Cultural Heritage." The Government should take appropriate measures to preserve and integrate intangible cultural traditions into the NDA, creating a unique way of life to attract innovation and technology professionals.

Urban design and rural-urban integration

The San Tin Technopole surrounds the existing village type development area where San Tin Village is located, but lacks sufficient connection between the two. The Government can improve the accessibility of the entire area by enhancing pedestrian walkways and bicycle networks that connect the new and old areas. It is also recommended to develop a detailed development blueprint to achieve a more ideal rural-urban integration. Furthermore, through the use of "place-making" techniques, the design of the Technopole should prioritize people-oriented public spaces, enhancing the local characteristics and fostering a sense of belonging among residents.

Transportation network and accessibility

An innovative technology park requires an efficient public transportation network to attract users and other stakeholders. The current railway proposal does not include a railway station within the park. The Government should conduct in-depth research on the feasibility of incorporating a railway station, especially in the central area of the park, to strengthen the commercial success factors of the park.

Addressing climate change

The design of the San Tin Technopole must ensure a pleasant microclimate, avoiding the creation of "heat island" effect through appropriate urban design, building disposition, greenery ratios, and biodiversity considerations. Appropriate measures should also be taken in the San Tin Technopole to address the threat of rising sea levels and establish effective drainage systems to mitigate the potential negative impacts on nearby wetlands and communities. The concept of sponge city and other mitigation and adaptation strategies should be employed to address climate change.

The Hong Kong Institute of Architects
The Hong Kong Institute of Architectural Conservationists
The Hong Kong Institution of Engineers
The Hong Kong Institute of Landscape Architects
The Hong Kong Institute of Planners
The Hong Kong Institute of Surveyors
The Hong Kong Institute of Urban Design

10

Acknowledgements

Forum / Workshop Organising Committee

- Ar Eugene CHING
  Chair of HKIA Planning & Urban Design Committee,
  Convener of Northern Metropolis Taskforce
- Ar Corrin CHAN
  HKIA Council Member
  Chair of Healthy City Initiatives

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Supporting Organisations:

The Hong Kong Institute of Surveyors

The Hong Kong Institute of Planners

The Hong Kong Institute of Landscape Architects

The Hong Kong Institute of Engineers

The Hong Kong Institute of Architectural Conservationists

The Hong Kong Institute of Urban Design

Professional Green Building Council

WWF-Hong Kong

The Conservancy Association

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About HKIA

History

On 3rd September, 1956, 27 architects gathered and formed The Hong Kong Society of Architects. As the membership of the Society increased, recognition was given by Royal Institute of British Architects as an Allied Society. The change of name from Society to Institute was effected in 1972 and had initiated a new phase of activities for the Institute.

In 1990, The Hong Kong Institute of Architects Incorporation Ordinance (Chapter 1147) was enacted which governs the running of the Institute since then.

Today The Hong Kong Institute of Architects (HKIA) has more than 4,900 members and more than 200 architectural practices as corporate members.
Apart from the Hong Kong office, the Institute also operates a representative office in Beijing since 2006.

Vision and Mission

The two main Objects of The Institute are:

- to promote the general advancement of architecture and to promote and facilitate the acquisition of the knowledge of the various arts and sciences connected therewith;
- to raise the standard of architecture in Hong Kong and the standard of professional architectural services offered by members of the Institute.

Professional Qualification

In Hong Kong, registration of architects are governed by the Architects Registration Board (ARB) under the Architects Registration Ordinance (Chapter 408). Every year, graduates with recognized architectural education qualification and appropriate practical experience, aspiring to become a Registered Architect, can sit the Professional Assessment jointly held by the Institute and ARB. Successful candidates will be admitted as a Member of the Institute which, in accordance with the Architects Registration Ordinance, will be readily accepted as a Registered Architect by ARB. Alternatively for overseas professional architects with adequate relevant local experience, they can apply for HKIA membership and hence register as a Registered Architect in Hong Kong, through a Professional Induction Workshop followed with an interview held jointly by the Institute and ARB.

Accreditation of Architectural Education

The Institute works closely with the ARB to accredit the architectural courses offered by local universities and tertiary institutions and offers advice on the aspects of professional practice and practical experience in architecture.

Apart from recognition in Hong Kong, architectural programmes accredited by HKIA/ARB are also recognised by Mainland as well as a number of overseas countries such as, Australia and New Zealand under Mutual Recognition agreement with respective accrediting authority.

Service to The Public

The Institute also serves the public by applying the collective expertise of its members in an advisory role to government and the building industry. Today, HKIA is represented in numerous consultative or advisory bodies to government as well as non-government organizations. Moreover from time to time, HKIA would carry out various studies on issues of public interests and reflects the views of architectural profession to the public and the government.

International Participation

The Institute takes Hong Kong to the fore in international circles through its active participation in the International Union of Architects (UIA), the Commonwealth Association of Architects (CAA), the Architects Regional Council of Asia (ARCASIA) and the Asia-Pacific Economic Cooperation (APEC) to facilitate the exchange of information and ideas in relation to all aspects of architecture and matters in connection with the architectural profession.

香港建築師學會
The Hong Kong Institute of Architects

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