

HONG KONG  
 **YOUNG LEADERS**  
 PROGRAMME

# Redefining “Smart City” FOR RESILIENCE IN THE NEW NORMAL





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# Executive Summary (1/4)

Hong Kong's recent social unrest and the global COVID-19 pandemic have revealed deep fragilities in the city's economic model. Despite being one of the world's wealthiest economies, it is also one of the most unequal. Hong Kong's wealth disparity has created a multitude of socio-economic issues that have impacted citizens' quality of life and contributed to recent discontent.

In December 2020, the Hong Kong Government launched its second edition of the Smart City Blueprint. The Blueprint put forward initiatives under six smart areas: mobility, living, environment, people, government, and economy. While the government has implemented many technology initiatives to enhance city management, there remain opportunities to address some of the fundamental quality of life issues for Hong Kong citizens by redefining what a smart city should aspire to be.

The 2021 Hong Kong Young Leaders Programme explored this topic by investigating how to develop Hong Kong into a smart city that builds resilience and improves quality of life for all. The report includes policy recommendations for five key focus areas: health and wellbeing, future skills, inclusive economy, low carbon economy and quality built environment, which are intended to serve as a reference for policymakers, industry players, and civil society leaders.

An overarching vision redefining Hong Kong as a resilient smart city is also presented to guide policymaking:

## Smart City: Living with Dignity and Living Well

Hong Kong will be an **inclusive economy** built on **social cohesion and trust** to ensure resilience in the new normal.

This will be achieved through **prioritising wellbeing, building a healthy and liveable environment, promoting low carbon lifestyles, and encouraging life-long learning opportunities**, in order to enable citizens to **live dignified and prosperous lives**.



# Executive Summary (2/4)



## Health & Wellbeing

1

### Relieve the burden on family caregivers through employment support schemes from 2025

**Policy Recommendation:** Implement a **Family Care Furlough Scheme** and provide paid leave to employees to take care of family members. Official partnership with private healthcare and equipment providers to provide subsidised aid and technology.

2

### Improve the fitness level of Hong Kong school children by 30% by 2030

**Policy Recommendation:** Introduce a **Healthy School policy** to improve health literacy and outcomes in children through engaging the public, increasing physical activity times, promoting use of idle spaces for activities, training healthy teachers, establishing clinics at schools, and providing healthy meals.

3

### Integrate health outcomes into all aspects of public policy by 2026

**Policy Recommendation:** Assess overall wellbeing of Hong Kong through a **Wellbeing Index** and formulate targeted policies aimed at raising wellbeing outcomes.

## Future Skills



1

### Create a University of Applied Sciences (UAS) and admit 20% of all Bachelor's students to it by 2030

**Policy Recommendation:** Provide youth with more pathways in applied learning by formalising applied learning at secondary and tertiary education and rebrand the Technological and Higher Education Institute (THEi) into the **University of Applied Sciences**.

2

### Train 5,000 learners annually in GBA-recognised collaborative VPET programmes by 2030

**Policy Recommendation:** Create a GBA Vocational Training Hub in Hong Kong, develop a **Vocational Training Park** at the Lok Ma Chau Loop, and develop a mutually-recognised qualifications framework in the GBA to facilitate talent mobility.

3

### Increase Hong Kong's continuing education participation rate from 25% to 60% by 2030

**Policy Recommendation:** Foster an “**Earn to Learn**” spirit in Hong Kong and encourage lifelong learning through a **Lifelong Development Fund** and instituting **Personal Development Leave**.



# Executive Summary (3/4)



## Inclusive Economy

1a

**Reduce youth unemployment rate from 10% to 7% by 2025**

**Policy Recommendation:** Increase employability of youth through a structured apprenticeship/internship scheme with vocational training.

1b

**Increase elderly labour participation from 11% to 20% by 2030**

**Policy Recommendation:** Provide economically active opportunities to elderly aged over 60 through incentives to employers and a **Senior Mentor Programme**.

2

**Significantly increase and centralise access to available public funding by 2024**

**Policy Recommendation:** Develop a **1Stop Funding Portal** for SMEs, NGOs and startups to expedite search, application and processing of available public funds.

3

**Increase employment in healthcare-related services to 5% of total employment by 2030**

**Policy Recommendation:** Establish Hong Kong as a global centre of excellence in healthcare and provide a wider range of job opportunities.

## Low Carbon Economy



1

**Half greenhouse gas emissions from the electricity sector by 2030**

**Policy Recommendation:** Tackle greenhouse gas emissions from the electricity sector holistically by implementing a carbon tax on fossil fuel generation; setting stricter legislation and implementation timelines for energy efficiency in existing and new buildings; and implementing an overconsumption charge to regulate excessive energy use.

2

**Reduce transport's greenhouse gas emissions by 80% by 2035**

**Policy Recommendation:** Create a **Low-emission Transport System** in Hong Kong to effectively meet Hong Kong's 2050 carbon neutrality target by electrifying 100% of public transportation; expanding electric vehicle charging infrastructure; extending the policy to include prohibiting new registration of fuel-propelled private cars to all road vehicles; and introducing electronic road pricing.

3

**Reduce total plastic volume sent to landfills by 80% by 2030**

**Policy Recommendation:** Promote **circular plastic waste management** in Hong Kong by banning single-use plastic, commercialising the use of plastic alternatives, and expanding Producer Responsibility Schemes for all recyclable products.

# Executive Summary (4/4)



## Quality Built Environment

1

**Provide 100,000 low-income elderly households with age-friendly home renovations by 2030**

**Policy Recommendation:** Establish a **Silver Home Fund** to subsidise age-friendly home renovations for elderly living in poverty to facilitate ageing in place.

2

**Increase public open space from 2.7 m<sup>2</sup> to 3.5 m<sup>2</sup> per capita by 2035**

**Policy Recommendation:** Establish a **Public Open Space (POS) Commission** to oversee the development of POS holistically. The Commission's objectives would be to upgrade existing POS facilities to meet community needs, create new POS targeting dense low-income areas with low POS per capita, and increase the sociability, accessibility, and utilisation of POS.

3

**Increase community engagement in POS projects by launching 10 pilot projects on the Platform by 2025**

**Policy Recommendation:** Establish a **Public Participation Platform** to enable active community engagement in the design, construction, and operation of public space projects. The online Platform would formalise community engagement and increase transparency and accessibility in the process to effectively serve the needs of the whole community of Hong Kong.







## INTRODUCTION AND BACKGROUND



# Hong Kong Young Leaders Programme



The **Global Institute For Tomorrow (GIFT)** is an independent pan-Asian think tank committed to purposeful leadership learning and partnering with clients to help them unlearn conventional wisdom and unleash potential to redesign society. GIFT's methodology invites participants to build greater self-awareness and test personal resilience whilst creating robust new business models linked to contemporary challenges and opportunities.

Based on GIFT's internationally recognised experiential Global Leaders Programme, the annual Hong Kong Young Leaders Programme (HKYLP) is a platform designed to bring young professionals together across sectors (government, business, and civil society) to develop solutions that address pressing social issues, from housing affordability to opportunities in the Greater Bay Area.

This year, the 7th HKYLP focused on solutions to develop Hong Kong into a smart city that enhances the resilience and quality of life for businesses and individuals.



# Participating Organisations and Sponsors

Thirty participants from government, business, civil society, and academia joined the Hong Kong Young Leaders Programme over the course of May and June 2021:



The programme could not have happened without the generosity of our sponsors. We would like to extend our heartfelt gratitude to all of these generous organisations and individuals that have supported the growth and development of young leaders in Hong Kong:

## Sponsors

Christine Loh



Tao Foundation

River Star Foundation

Wu Fook Charitable Foundation

# Supporting Organisations

|  |                                     |  |                                      |
|--|-------------------------------------|--|--------------------------------------|
| AIA                                      | ARCADIS                             | DESIGN TRUST                               | FARMACY                              |
| FORTRESS HILL METHODIST SECONDARY SCHOOL | FOUNDATION OF SHARED IMPACT         | GEOSPATIAL DATA OFFICE, DEVELOPMENT BUREAU | GINGKO HOUSE                         |
| HATCH                                    | HEALTH IN ACTION                    | HONG KONG COUNCIL OF SOCIAL SERVICE        | HONG KONG FEDERATION OF YOUTH GROUPS |
| HONG KONG SCIENCE AND TECHNOLOGY PARK    | HKU BUSINESS SCHOOL                 | HONG KONG RUGBY UNION                      | IMPACTIFIED                          |
| JOCKEY CLUB “AGE AT HOME”                | K-FARM                              | LEISURE AND CULTURAL SERVICES DEPARTMENT   | LIGHTBE                              |
| LONGEVITY HOUSE                          | MIND HK                             | MING WAI YOUTH OFFICE                      | THE NESBITT CENTRE                   |
| OCTOPUS                                  | PRINCIPAL CHU TZE WING              | REAL ESTATE DEVELOPERS ASSOCIATION         | SHANGHAI COMMERICAL BANK             |
| SHUI ON CONSTRUCTION                     | SMART CITY CONSORTIUM               | SOCIAL VENTURES HONG KONG                  | SOCIAL WELFARE DEPARTMENT            |
| TIME AUCTION                             | TUV RHEINLAND                       | VOCATIONAL TRAINING COUNCIL                | THE WOMEN’S FOUNDATION               |
| YI PEI SQUARE PLAYGROUND                 | YOUNG WOMEN’S CHRISTIAN ASSOCIATION | THE ZUBIN FOUNDATION                       |                                      |

Our appreciation to all the stakeholders involved



# Programme Structure



## Objectives

- To propose solutions to develop Hong Kong into a smart city that enhances the resilience and quality of life for all its citizens.
- With a focus on five focus areas: **Health and Wellbeing, Future Skills, Inclusive Economy, Low Carbon Economy and Quality Built Environment.**

## Process

- Participants met a diverse range of stakeholders, including but not limited to business executives, government-related officials, professors and researchers, entrepreneurs, civil society leaders and students to better understand Hong Kong's socio-economic challenges.
- Participants also independently reached out to experts in the field to gain greater insights into the five key focus areas.
- Through intensive discussion, debate and planning sessions, the participants generated the content of this report.

## Outcome

- With GIFT's support, participants developed an overarching vision for Hong Kong as a smart city.
- Participants produced multiple policy recommendations that aim to achieve this goal across the five aforementioned focus areas.
- Participants presented highlights from their policy proposals at a global virtual forum on 25 June 2021, to over 3000 participants from Hong Kong and other parts of the world, representing a diverse group of stakeholders including business, government, civil society and academia.



# VISION AND FOCUS AREA



# Current Challenges in Hong Kong

Hong Kong's recent social unrest and the global COVID-19 pandemic have revealed deep fragilities in the city's economic model. Despite being one of the world's wealthiest economies, it is also one of its most unequal, with a higher-than-average Gini coefficient of 0.54. Hong Kong's wealth disparity has created a multitude of socio-economic issues that have impacted citizens' quality of life and contributed to recent discontent.

- Over one-fifth of Hong Kong's population lives in poverty.
- A shortage of affordable housing has almost 100,000 people living in overcrowded sub-divided flats with sub-standard living conditions.
- At 11.4%, the city's ever-increasing youth unemployment rate has hit a new high due to the pandemic.
- 64% of Hong Kong citizens found Education policy to be the most unsatisfactory among six livelihood areas in 2020.
- Hong Kong's ageing population, which will represent 36% of the total population in 2064, presents an imminent challenge to Hong Kong's already overburdened healthcare system.
- Over 60% of current Hong Kong adults suffer from poor mental health and wellbeing.
- In the face of climate change and increased air pollution, residents are experiencing more extreme weather conditions and adverse health conditions.







# The Need to Redefine “Smart City”

The Innovation and Technology Bureau (ITB) launched its second edition of Smart City Blueprint for Hong Kong (Blueprint 2.0) last year. The blueprint sets out 130 initiatives under six smart areas: "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy", that aim to enhance and expand existing city management measures and services to bring convenience to the public.

While the Government has implemented many technology initiatives to enhance city management, there remain opportunities to ensure smart city initiatives will address some of the fundamental needs and quality of life issues for Hong Kong citizens.

To enhance its status as a leading international city, Hong Kong can benefit from taking its smart city approach a bold step further by using smart city strategies to identify and address its complex socio-economic and environmental challenges. Rethinking the approach to smart city can build resilience and improve the quality of life for all its citizens. Key opportunities for the city include:

- Enhancing **Health and Wellbeing** for all
- Strengthening **Future Skills** for Hong Kong youth and adults
- Building an **Inclusive Economy** that provides employment for all
- Pioneering a **Low Carbon Economy** to combat climate change and reduce carbon emissions
- Creating a **Quality Built Environment**

# The Vision for Redefining Hong Kong as a Smart City



## Smart City: Living with Dignity and Living Well

Hong Kong will be an **inclusive economy** built on **social cohesion and trust** to ensure resilience in the new normal.

This will be achieved through **prioritising wellbeing, building a healthy and liveable environment, promoting low carbon lifestyles, encouraging life-long learning opportunities**, in order to enable citizens to live **dignified and prosperous lives**.

A vision to guide policymaking: The vision for Hong Kong as a resilient smart city calls for enabling everyone – not just the privileged, to **live with dignity** and **live well**. This means providing a high quality of life for all and empowering people to feel valued and have control to make choices and be content in their quality of life.

The foundation of such a smart city is built on two building blocks: **social cohesion** and **trust**. Given recent geopolitical tensions, this is more important than ever. Strengthening social cohesion requires collaboration and solidarity within and among all sectors of society to enable positive change. Government can rebuild public trust through policies guided by this vision.



# Key Focus Areas

Based on the vision and goal to build a Smart Hong Kong that ensures resilience and a high quality of life, the recommendations in this report will be based on the following 5 key focus areas.



## Health and Wellbeing

Achieving positive health and wellbeing for individuals and the community as a whole entails systematically enabling and empowering people to attain optimal physical, mental and social health.



## Future Skills

To enable the youth and adults of today to reach their full potential in the job market, they will need to adopt a lifelong learning mindset and develop future skills such as applied sciences, vocational skills, regional awareness, and soft skills, among others.



## Inclusive Economy

An inclusive economy would provide equitable opportunities for all sectors and members of society, and distribute opportunities and wealth fairly and sustainably.



## Low Carbon Economy

A low carbon economy would be based on lowering the carbon footprint of major sources of greenhouse gas emissions, including electricity, transport, and waste.



## Quality Built Environment

A quality built environment includes the design and maintenance of manmade environments, such as housing, streets, and green and open spaces, to effectively support human activity and wellbeing.



# HEALTH AND WELLBEING



# Introduction

Hong Kong's healthcare system suffers from many challenges from a shortage of doctors, long waiting times and uneven distribution of resources between the private and public sectors, to socioeconomic issues such as unequal access and affordability to healthcare, rising elderly population, and low awareness of the benefits of physical activity and mental wellbeing.

The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. This definition links health explicitly with wellbeing and conceptualises health as a human right requiring physical and social resources to achieve and maintain. “Wellbeing” refers to a positive rather than a neutral state, framing health as a positive aspiration.

For a developed city like Hong Kong, all residents should have access to quality healthcare as one of its basic human rights.

The policies in this section focus on those that would allow the city's residents to live with dignity and live well, with consideration for the following three areas:

- Providing economic support to family carers;
- Improving health literacy in schools; and
- Placing health and wellbeing at the centre of all policymaking

# Current challenges

## 1. Insufficient support for family care

### 1 Increasing burden related to family caregiving

- As the number of elderly care recipients is expected to double from 342,000 to 729,000 by 2040, the number of working adults providing care for an elderly family member will also double from 45,000 to 89,000 over the same period.

### 2 Lack of financial support for family caregiving

- The economic cost of this growing population of informal working caregivers to employers is HK\$1.8 billion and is expected to grow 4.7 times to HK\$8.4 billion by 2060.
- To employees, the loss of income and career advancement opportunities amount to HK\$1.8 billion in 2018 and is expected to increase four-fold to HK\$7.2 billion in 2060.

## 2. Low health literacy in schools

### 1 Long study hours of school children

- A student in primary to secondary education spends roughly 10 hours each day studying at school and after school, leaving little time for other activities.
- In a study by CUHK in 2017, it was found that less than half of children and youth met the international recommendation of one hour of physical activity per day; whereas 74.8% of children spent more than 2 hours on digital devices in 2016, compared with 20.8% and 47.4% in US and Beijing, China.

### 2 Low level of mental health and physical health

- Compared to international average, 10% more children in the city reported feelings of depression
- In 2016/17 the physical fitness of Hong Kong students were lower than peers in China, Singapore and Europe.

## 3. Emphasis on treatment over preventative measures

### 1 Lack of preventative healthcare

- There is a focus on “sick-care” particularly in the public health system, and less on preventative care and promoting healthy lifestyles

### 2 Isolated policies on healthcare

- Promotion of healthy communities and health equity requires a holistic approach to address the social determinants of health in public transportation, access to education, access to healthy food, and economic opportunities etc. Currently Government departments do not collaborate sufficiently to achieve better health outcomes through integrated policies.



# Policy Proposal 1: Family Care Furlough Scheme



**TARGET: Relieve the burden on family caregivers and employers through employment support schemes from 2025.**

## BACKGROUND

Family members often need to provide support to members of their family who require care from time to time. The elderly may need to visit the doctor for a checkup, whereas children may need immediate care for a sudden ailment.

Both employees and employers face challenging situations as employees may have to take leave or lose income and employers may be impacted through lost productivity.

Currently there are schemes from the Social Welfare Department such as the pilot scheme on Living Allowance for Carers of Elderly Persons from Low-income Families, Special Care Subsidy for the Severely Disabled, and the pilot scheme on providing subsidy for Higher Disability Allowance (HDA) recipients in paid employment to hire carers, but they are aimed at low-income families who have to provide long-term care.

There is an opportunity for support to be given to those who only require temporary leave to take care of family members but are unable to due to the risk of losing employment opportunities.

Besides the social benefits and generally higher quality of care that family members can provide for their own family, increasing support for family caregivers can also relieve burden on the healthcare system overall.

## RECOMMENDATION

**Implement a Family Care Furlough Scheme** to improve quality and relieve burden on caregivers, employers and the healthcare system.

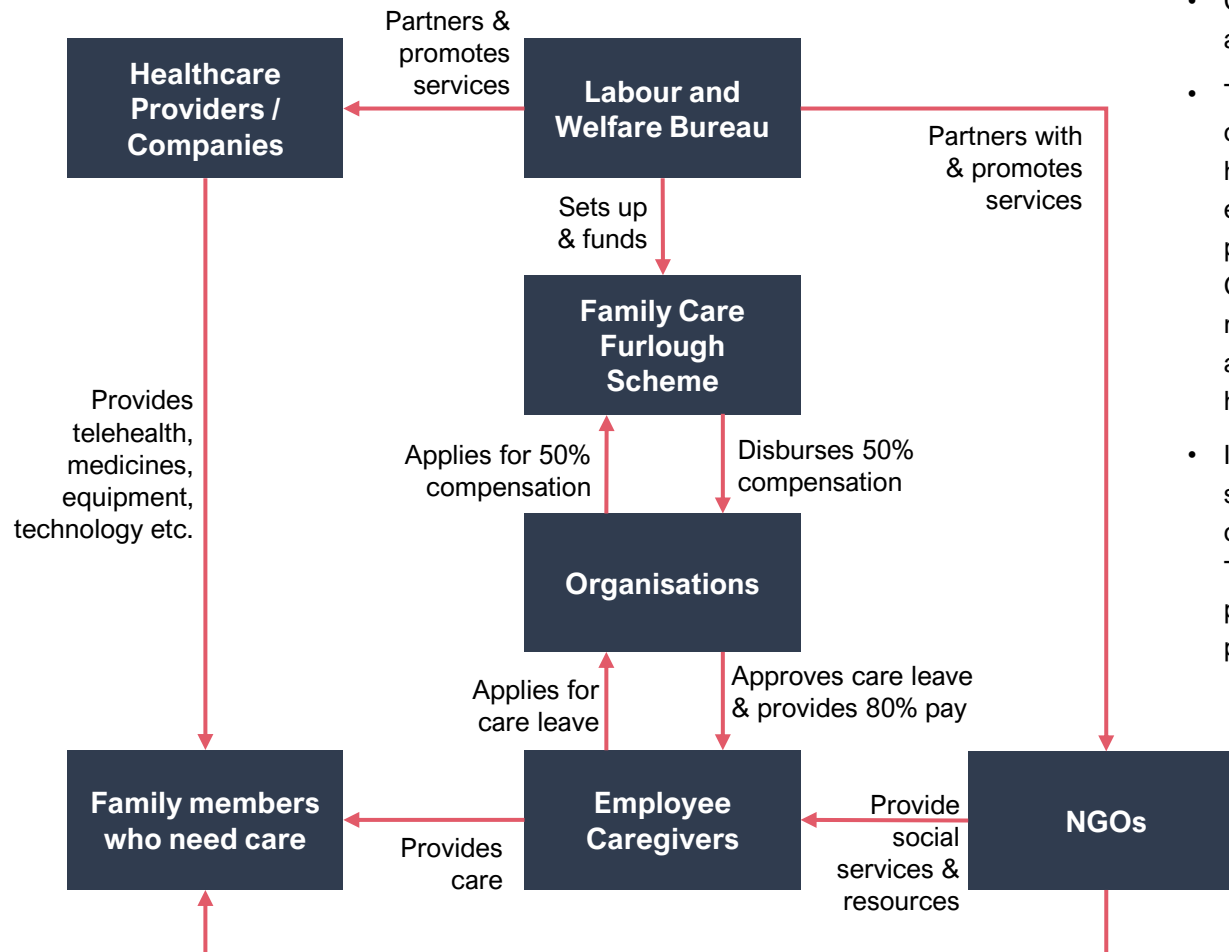
The proposed scheme incentivises organisations to provide paid care leave for employees. Participating organisations contribute 30% of the salary of an employee while on paid care leave, while the government contributes 50%. The recipient of the paid care leave receives 80% of their original salary while on leave.

This is similar to furlough schemes around the world that were implemented in light of business closures during the COVID-19 pandemic to protect the livelihood of workers who are temporary put out of work.

# Policy Proposal 1: Family Care Furlough Scheme

## RECOMMENDATIONS

### How it works:



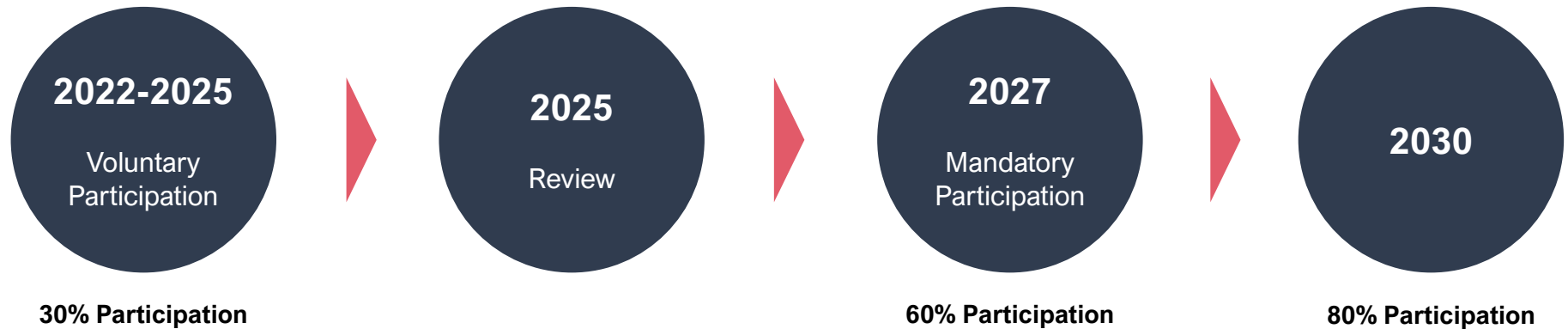
### Features of the Family Care Furlough Scheme:

- Government contribution will be capped at HK\$25,000 a month.
- The Labour and Welfare Bureau partners with private companies to support family care through provision of healthcare services such as telehealth, healthcare equipment and furniture, and technologies. These partnerships may be formalised through 'Official Government Partner' lists to offer the public reassurance of quality and legitimacy. Subsidies can also be provided on higher cost equipment which will help to reduce the cost burden on families.
- It also partners with NGOs to provide added social services and resources such as information on local community clinics, rehabilitation, and health education. This resource should be made readily available and promoted to the public via online and workplace promotional campaigns.



# Policy Proposal 1: Family Care Furlough Scheme

## IMPLEMENTATION TIMELINE



- Pilot stage which lasts for 3 years will be voluntary participation from employers.
- The scheme will be reviewed after 3 years.
- If KPIs are met by 2025 and there is an increasing uptake in home care the scheme will become mandatory for all employers in 2027.

# Policy Proposal 1: Family Care Furlough Scheme

## SMART TOOLS TO CREATE A RESILIENT CITY

Through the public-private partnership that is integrated into this scheme, family care can be better supported by the latest technologies and healthcare equipment that care recipients need. These may be handrail installations at home, electronic equipment that help with mobility for the physically disabled and the elderly, monitoring equipment, or interactive software that helps with rehabilitation.

Families can apply for subsidies to purchase such home care technologies and equipment for the elderly through the **Silver Home Fund** (See Quality Built Environment section).





# Policy Proposal 2: Healthy School Policy



**TARGET: Improve the fitness level of Hong Kong school children by 30% by 2030.**

## BACKGROUND

Hong Kong has one of the lowest active populations in the world with 85.9% of people aged 18-64 reporting low levels of physical activity. In a report by HKU in 2011, only 8.3% of school children participated in 60 minutes of physical activity every day as recommended by the WHO.

According to CUHK's Active Healthy Kids Report Card, Hong Kong performs worst in the indicators of "Overall Physical Activity Levels" and "Family Support" compared to 37 countries and regions.

The current Student Health Service led by the Department of Health has set up 12 Student Health Service Centres and 3 Health Assessment Centres and provides outreach services and an e-platform including a YouTube channel.

The "Health Promoting School Programme" was established in 2019 and is a voluntary scheme aimed at promoting healthy school policies and environments.

Physical activity can have immense benefits from greater mental wellbeing to lower incidences of obesity and therefore present a range of adverse health effects. More can be done at Hong Kong schools to promote physical activity and its benefits to the overall wellbeing of its students.

## RECOMMENDATION

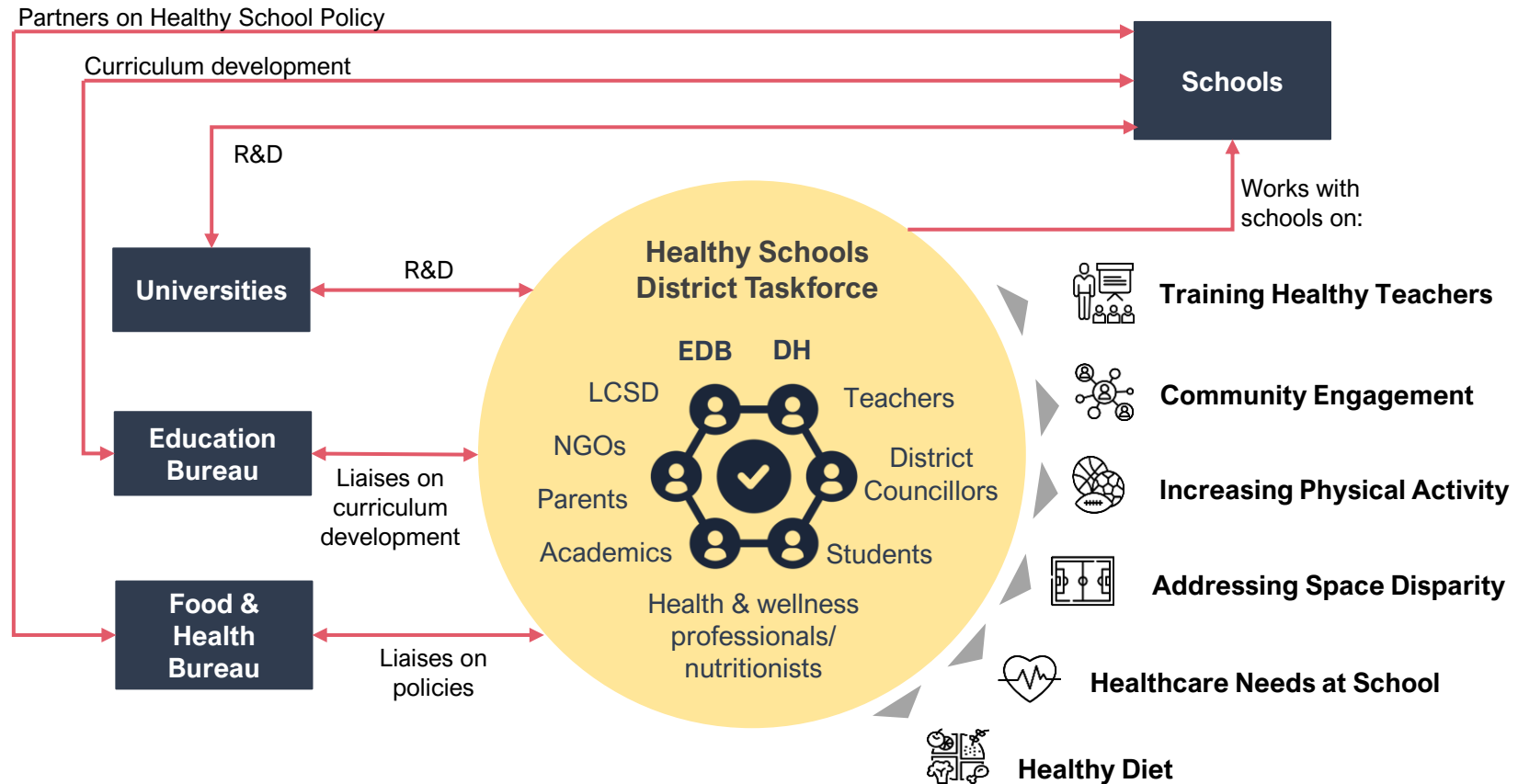
**Introduce a Healthy School policy** to improve health literacy at schools and health outcomes in children through community effort.

A "Healthy School" policy is recommended to strengthen the Health Promoting School Programme by engaging the public to support healthy schools, increasing physical activity times, promoting the use of idle spaces for physical activities, and training healthy teachers to be role models.

# Policy Proposal 2: Healthy School Policy

## RECOMMENDATIONS

### How it works:





# Policy Proposal 2: Healthy School Policy

1

## Healthy Schools District Task Force

- Led by the Department of Health and the Education Bureau, the Healthy Schools District Task Force will comprise of those who have a stake in student wellbeing including teachers, parents, students, academics, NGOs, and health and wellness professionals such as nutritionists and retired doctors.
- A Task Force will be formed in every district and liaise with universities on research, Education Bureau on curriculum development, and the Food and Health Bureau on policies related to children's health.
- The District Task Force will work with schools on implementing the various programmes under this policy and engage with the community to seek buy-in and support.

2

## Addressing Space Disparity

- Encourage schools to share spaces for physical activities with other schools that lack them.
- The Task Force can audit each school and give advice on innovative ways to use school facilities for physical activities, such as creating multipurpose sensory integration spaces and using existing infrastructure for physical activities such as abseiling or urban farming.
- LCSD can facilitate the opening up of idle spaces not used during school hours.

3

## Training Healthy Teachers

- Engage healthcare professionals from academia, NGOs, private sector and the government to develop a 30-hour accredited course to train school teachers on health education including nutrition, exercise, social capital and mental health through an online portal, allowing them to be role models and transfer this knowledge to students and other teachers.

4

## Increasing Physical Activity

- Mandate every school to institute at least 5 hours of physical activity per week (at least 3 hours of which should be done at school).
- Schools can partner with community sports programmes, clubs, and encourage different types of physical activity such as hiking, climbing, biking, dancing, orienteering, and so on.

5

## Healthcare Needs at School

- Mandate each school to have a clinic and a health professional to provide healthcare and preventative care to students.

6

## Healthy Diet

- Extend the EatSmart School Accreditation Scheme, which currently applies only to primary schools, to all secondary schools to implement a healthy eating school policy and strengthen good eating habits.

# Policy Proposal 2: Healthy School Policy

## IMPLEMENTATION TIMELINE



- Form Healthy Schools District Taskforces
- Form partnerships to expand physical activity programmes and options
- Engage healthcare professionals to formulate the Healthy Teachers curriculum and gain accreditation
- Extend EatSmart school Accreditation Scheme to secondary schools
- Enlist LCSD to open up idle spaces for school physical activities

- Establish clinics in each school
- Enrol teachers in the Healthy Teachers course
- All schools to institute 5 hours of physical activity per week

- All students across 18 districts will have improved physical activity and fitness, access to healthcare information and care through school clinics, with teachers at school who have been trained in health and nutrition.



# Policy Proposal 2: Healthy School Policy

## SMART TOOLS TO CREATE A RESILIENT CITY

Schools can utilise the latest technology to implement the Healthy Schools policy.

Urban farming methods can be used to support the EatSmart School Accreditation Scheme, to give students hands-on experience with growing their own food, as well as form a part of their daily physical activity.

New sensory integration training equipment and virtual reality can be used to improve coordination and fitness.

Systematic data gathering and analysis should be conducted across all district schools to measure, track and evaluate student activity, health and performance.

Sensors and geospatial data can be applied to visualise available spaces for booking from LCSD and other schools.



# Policy Proposal 3: Health & Wellbeing in All Policies



**TARGET:** Integrate health outcomes into all aspects of public policy by 2026.

## BACKGROUND

Currently the global metric and determinant of the health of an economy is Gross Domestic Product (GDP), which is determined by the monetary value of all finished goods and services produced within a country's borders.

Several countries such as New Zealand, Finland and Bhutan, have introduced new wellbeing indices that go beyond the limited metric of GDP and factor in social and environmental determinants to a nation's overall wellbeing.

For Hong Kong, there are many factors that affect the health and wellbeing of its citizens. From quality housing, safe and nutritious food, educational attainment and gainful employment, many policy areas beyond the scope of the Food and Health Bureau impact the health and wellbeing outcomes of Hong Kong people.

## RECOMMENDATION

Assess overall wellbeing of the population through a **Wellbeing Index** and formulate targeted policies aimed at raising wellbeing outcomes.

### Health & Wellbeing in All Policies

According to WHO, "Health in All Policies" is an approach to policymaking across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity.

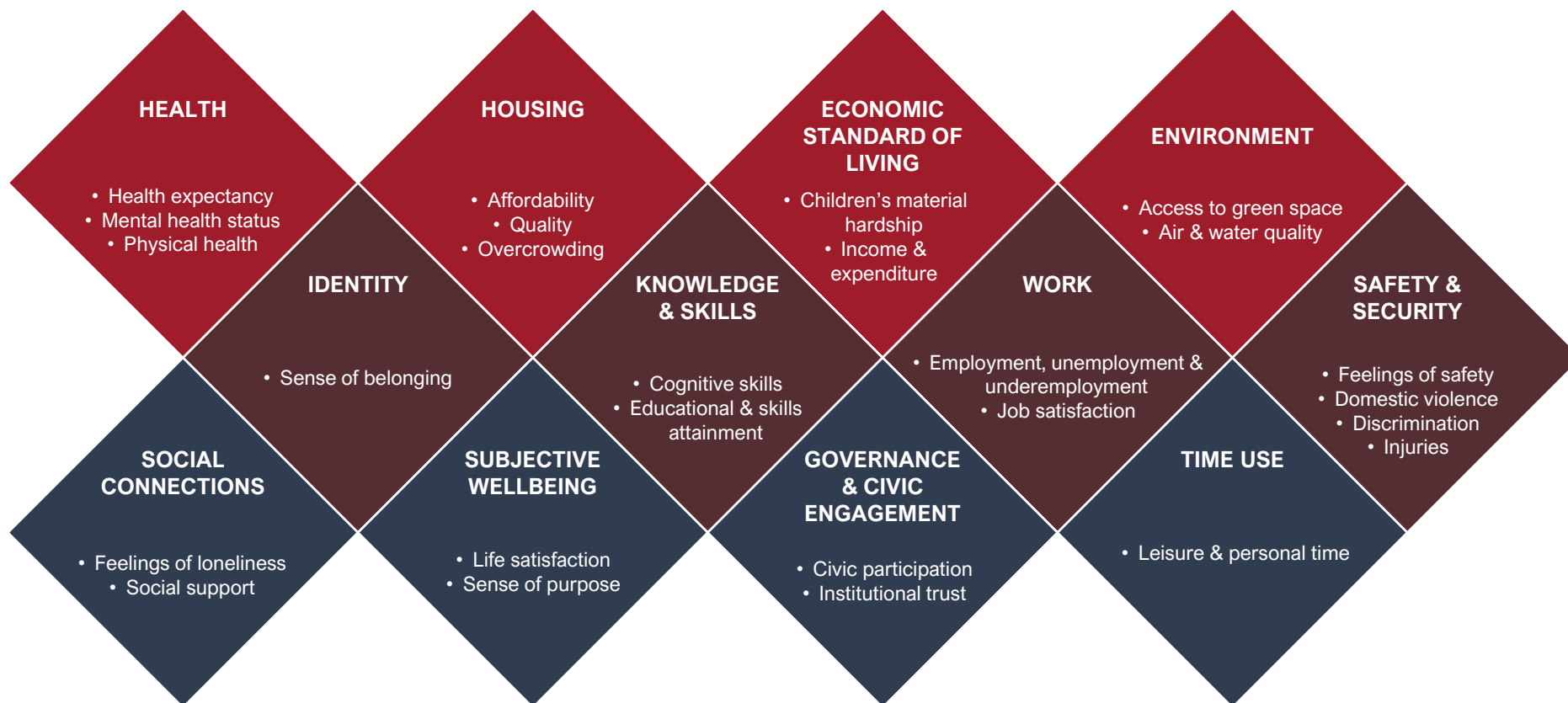
In order to facilitate decision-making related to improving health outcomes in all policies, Hong Kong can design its own **Wellbeing Index** with dedicated healthcare professionals to gauge wellbeing in various livelihood areas. The survey can be distributed by the Census and Statistics Department and results analysed to inform policy decisions.



# Policy Proposal 3: Health & Wellbeing in All Policies

## RECOMMENDATIONS

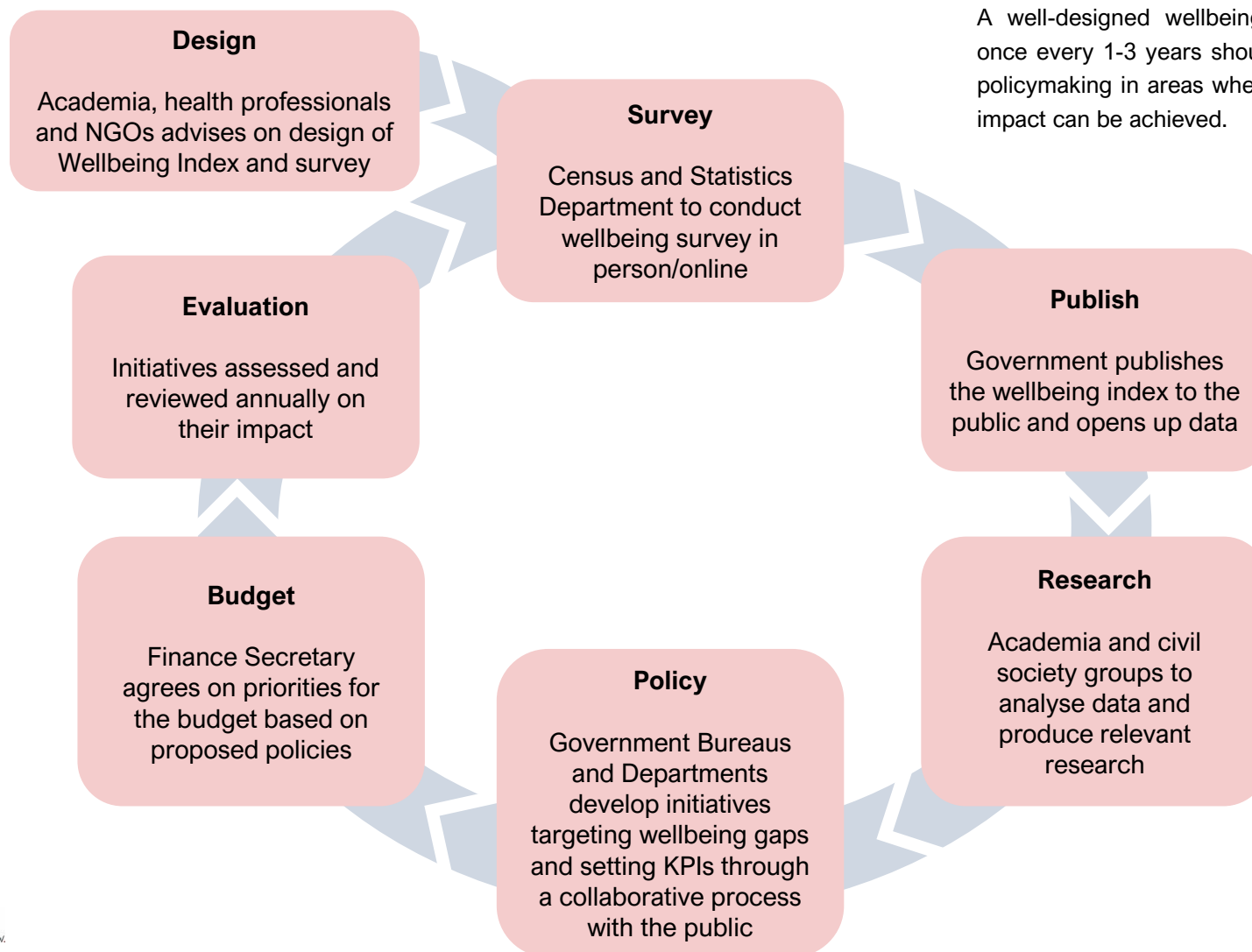
The Wellbeing Index will be adapted to the Hong Kong context with the following 12 measures of wellbeing:



# Policy Proposal 3: Health & Wellbeing in All Policies

## RECOMMENDATIONS

### How it works:



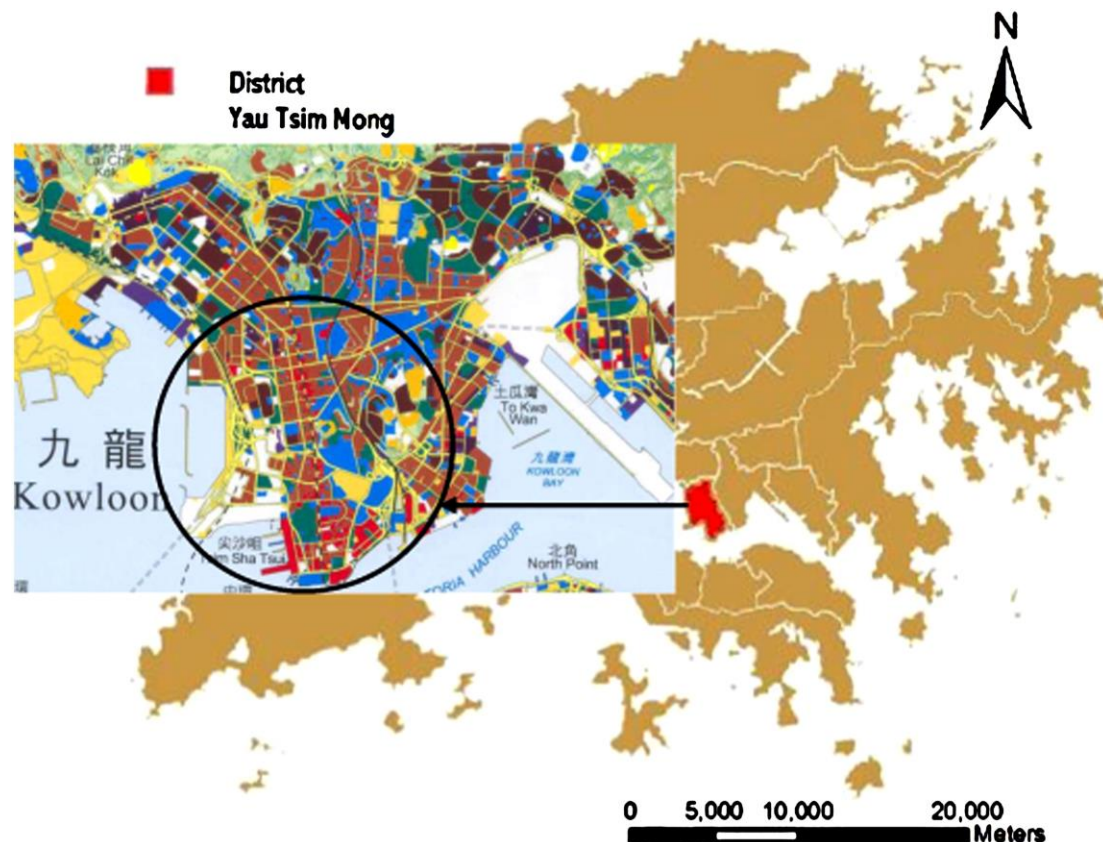
A well-designed wellbeing survey conducted once every 1-3 years should be able to inform policymaking in areas where the highest health impact can be achieved.

# Policy Proposal 3: Health & Wellbeing in All Policies

## SMART TOOLS TO CREATE A RESILIENT CITY

Through the use of geospatial data, the Wellbeing Index can be mapped out and “hotspots” of low wellbeing can be visualised and easily targeted. For example, new insights can be gained through understanding where residents are most dissatisfied with public open space (see Quality Built Environment section), pockets where people are most stressed or lonely, areas where children have low educational/skills attainment, or districts where residents feel everyday living expenses are high.

These new geospatially specific insights can be used to inform decisions at the district level related to building new public infrastructure such as parks, schools, markets, and health centres or provide targeted services to meet wellbeing gaps.



*Example of how hotspots from the Wellbeing Index can be mapped and visualised.*





# FUTURE SKILLS



# Introduction

Hong Kong's success as a global city can be credited in part to its world-class education system. Hong Kong ranks among the highest in the world in literacy, university admission rates, and Mathematics and English proficiency. In 2020, four local universities were ranked in the top 50 in the QS University Rankings.

Despite this, education in Hong Kong has often been described as high-pressure, highly competitive, and relying heavily on rote memorisation of textbook knowledge. Students spend long hours on homework and assessments, and a large part of the education system is examination-oriented. With the increase of university places in the last twenty years, the educational pathway has become narrower, with more youth choosing to study at universities rather than pursue non-academic vocational training which is often considered as “second-tier”. Hong Kong's long working hours and high costs for further education also leave working people little time or resources to reskill and upskill.

In an increasingly globalised and fast-paced world, future skills are essential to Hong Kong and its citizens. The acquisition of skills and knowledge should not only happen in academic settings, but be provided to all through a lifelong learning approach.

Policies in this section thus focus on:

- Formalising applied learning in the education system
- Vocational and Professional Education and Training (VPET) exchanges in the GBA
- Developing a spirit of lifelong learning through a “Earn to Learn” approach



# Current challenges

## 1. Rigid educational system

### 1 Exam-focused learning

- Performing well at exams in order to attend university has become a key concern in education
- This has led to high stress and low motivation for students not able to perform well in exams

### 2 Little flexibility in shifting between vocational and academic tracks

- The highest qualification under the Qualifications Framework for applied learning subjects is Level 4, meaning there is currently no pathway for those wishing to advance to Bachelor's under the vocational track

## 2. Skills mismatch between education and job market

### 1 Stigma of vocational and professional education and training (VPET)

- VPET usually associated with lower level qualifications
- Graduate pay and social status lower than those from universities

### 2 Skills not future-ready

- Narrow focus on academic subjects do not equip students with skills required for the market and future jobs
- 35% of youth not confident that their skills can cope with future changes (HKFYG)
- Youth not equipped for opportunities in the GBA ,southeast Asia or globally

## 3. “Learn to earn” mentality demotivates lifelong learning

### 1 Workforce ill-equipped for future economy

- Emphasis on select professional occupations such as finance, legal and real estate, lacking diversity in skills

### 2 Little incentive for continuing education

- Long working hours and minimal Government support deter continuing education, with participation rate lower than most global counterparts in the OECD
- Majority of employers do not prioritise investment in upskilling or reskilling employees





# Policy Proposal 1: Formalise Applied Learning



**TARGET:** Create a University of Applied Sciences (UAS) and admit 20% of all Bachelor's students to it by 2030.

## BACKGROUND

Applied Learning (ApL) is an educational approach that allows students to learn by engaging in direct application of skills, theories and models. ApL allows students to learn both practice and theory linked to professional and vocational fields. Currently ApL courses are elective subjects within the senior secondary curriculum. The highest attainable grade for ApL is Level 4, which means students who pursue ApL do not currently have a pathway to pursue higher applied degrees (Bachelors with a trade focus) if they wanted to.

VTC's Technological and Higher Education Institute of Hong Kong (THEi) provides vocationally-oriented degree programmes but their benefits compared to other academically focused programmes are not well known.

Hong Kong's educational system has the potential to develop more flexible pathways for students interested to pursue non-academic qualifications and ApL through a more integrated VPET system.

## RECOMMENDATION

**Formalise applied degrees and applied learning** to enable more career pathways for youth.

### University of Applied Sciences (UAS)

It is recommended that the THEi be rebranded as the University of Applied Sciences (UAS) and be afforded the same status as other University Grants Committee (UGC) funded universities.

Training Boards for various industries, which have been established by the VTC, should be tasked with curriculum design and facilitate on-the-job training as part of the curriculum.

A qualifications level at **QF Level 5** should also be established for ApL subjects to be on par with academic degrees.

# Policy Proposal 1: Formalise Applied Learning

## RECOMMENDATIONS

Illustration of the new pathways to an applied degree:

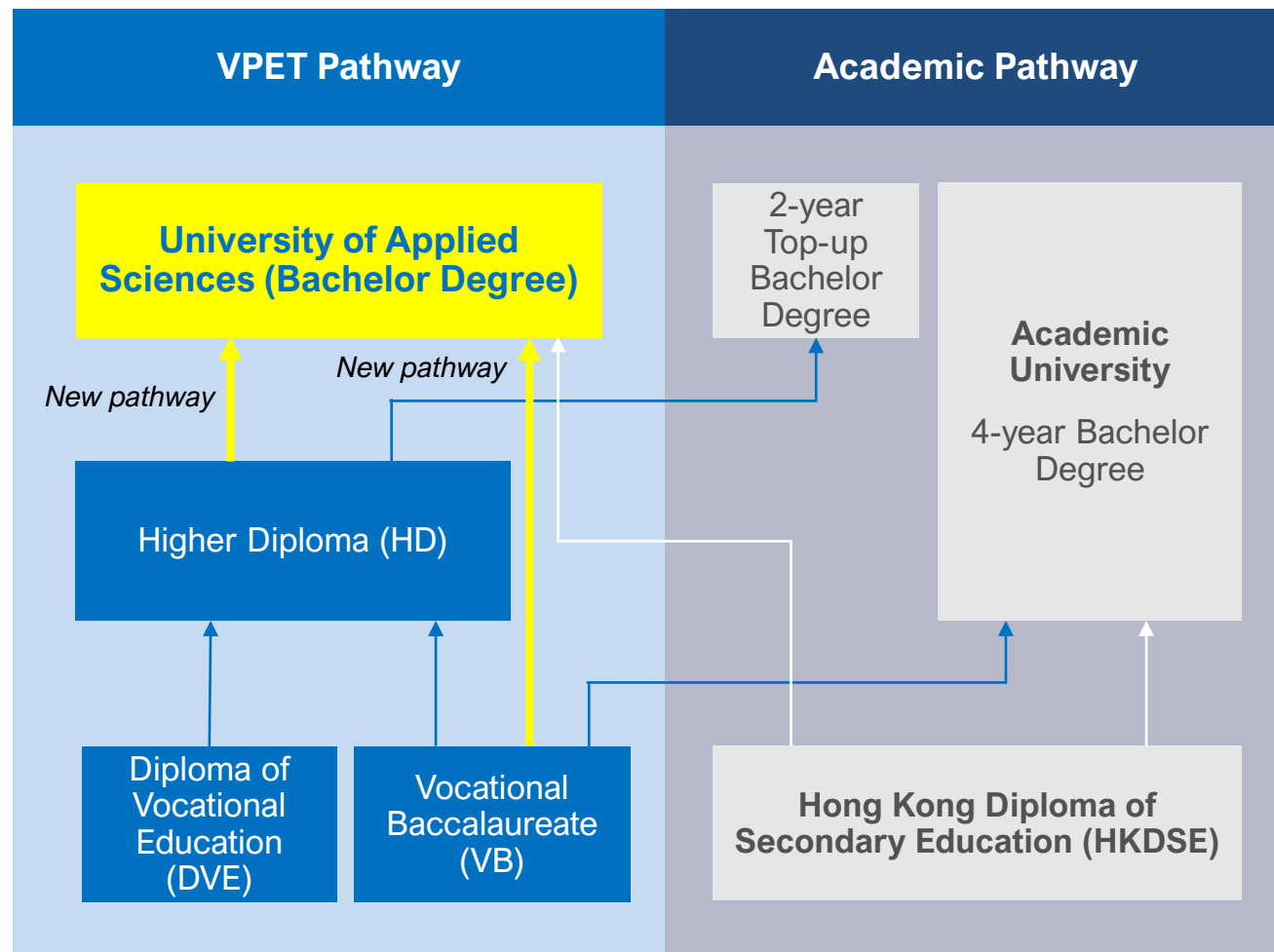
- The current system does not offer a pathway for students in the VPET stream to undertake further studies beyond a Higher Diploma (L4).
- The proposed establishment of the UAS and a QF Level 5 for degrees offered there will allow students in the VPET pathway to attain higher applied degrees, which would attain a qualification level on par with academic degrees.

QF Level

L5

L4

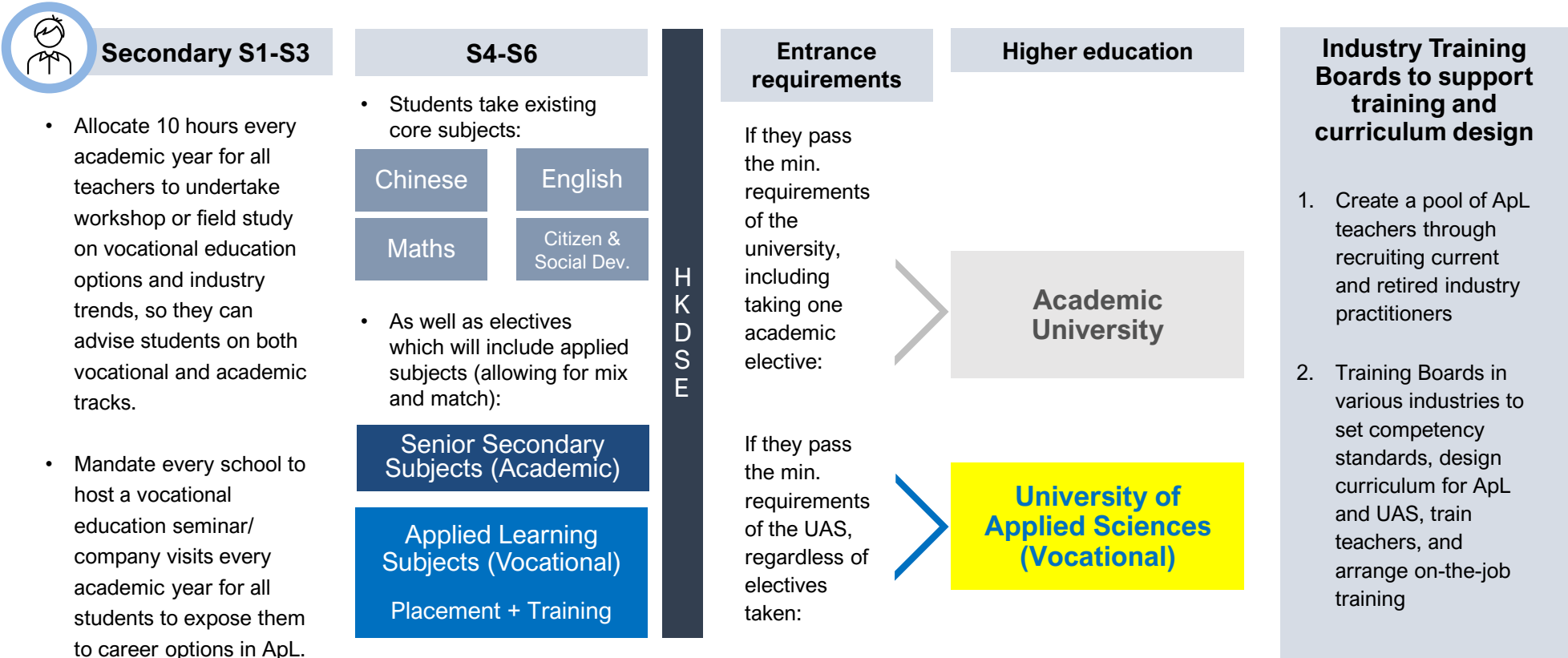
L3



# Policy Proposal 1: Formalise Applied Learning

## RECOMMENDATIONS

In order to support the creation of a pathway toward applied degrees, the following recommendations are proposed:





# Policy Proposal 1: Formalise Applied Learning

## IMPLEMENTATION TIMELINE



- Seek funding and begin accreditation process for THEi to be upgraded to UAS and its qualifications to QF Level 5; upgrade campus as necessary
- Recruit and train teaching staff for ApL and UAS; expand ApL teacher training courses at universities
- Begin teacher training workshops on VPET
- EDB and VTC to work with Training Boards on curriculum design, recruitment of teachers, and participation of industry partners to offer on-the-job training

- Inaugurate UAS; begin enrolling students
- Begin planning for second applied sciences university
- Coordinate with GBA/overseas applied science universities on exchange programmes

- 4,500 new admissions (total 14,800 between 2025-2030), making up 20% of all new Bachelor student intake in Hong Kong (assuming 22,500 total)
- Inaugurate second applied science university

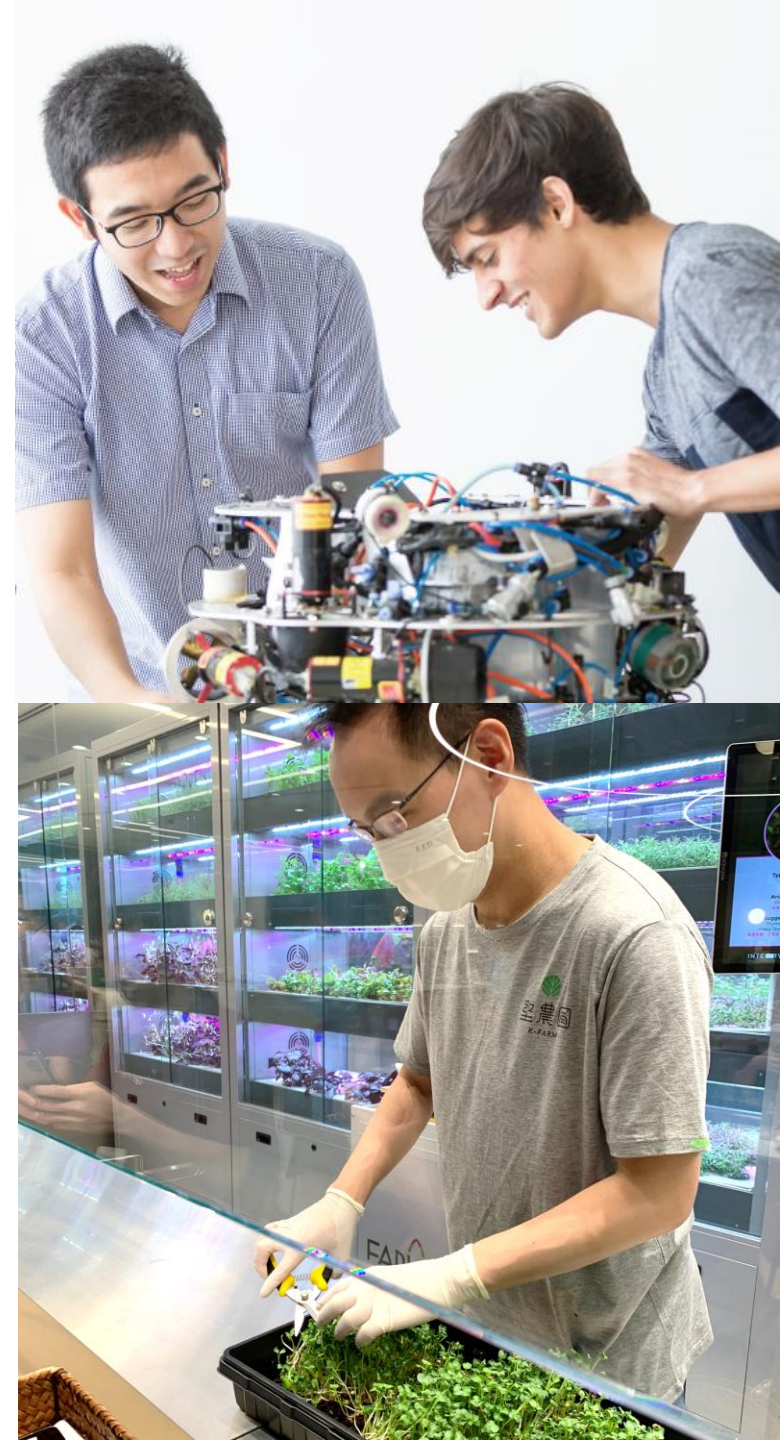
# Policy Proposal 1: Formalise Applied Learning

## SMART TOOLS TO CREATE A RESILIENT CITY

The formalising of applied learning and VPET will not only serve to destigmatise vocational skills and cater to different aspirations and interests, but it will also help to supply talents to future smart city industries.

These include:

- IT, data and cybersecurity
- Engineering
- Construction
- Healthcare
- Marine services
- Transport and aviation
- Sustainability, energy and carbon management



# Policy Proposal 2: GBA Vocational Training Hub



**TARGET: Train 5,000 learners annually in GBA-recognised collaborative VPET programmes by 2030.**

## BACKGROUND

The rapid development of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) brings about a significant rise in demand for talents who are trained in vocational and professional skills.

Currently VPET training facilities in Hong Kong are constrained by limited space and resources. VPET qualifications are also not widely recognised in the Mainland.

President Xi Jinping attached high importance to vocational education in a national conference on vocational education in Beijing in April 2021, calling for efforts to speed up the development of a modern vocational education system to cultivate more high-quality technical professionals.

Hong Kong, with its proximity and close relationship to the GBA, should work together with the 11 cities to develop a world-class vocational education system that takes advantage of the substantial professional development and employment opportunities in the region.

## RECOMMENDATION

**Create a GBA Vocational Training Hub** in Hong Kong and develop a framework for mutually recognised qualifications in the GBA.

### Greater Bay Area (GBA) Vocational Training Hub

It is recommended that Hong Kong collaborate with VPET institutions in the GBA to provide local students with **exchange training programmes** and teachers with teacher training in the GBA.

It should also develop a **mutually-recognised qualifications framework** among VPET institutions, to facilitate the mobility of talents in the GBA and enhance the value of VPET qualifications. This should be created hand in hand with the development of a QF Level 5 for the UAS in the previous policy recommendation.

It is also proposed to establish a **Vocational Training Park** at the site of the Hong Kong-Shenzhen Innovation and Technology Park (HSITP) at the Lok Ma Chau Loop to take advantage of the proximity to the manufacturing and technology supply chains across the border.



# Policy Proposal 2: GBA Vocational Training Hub

## RECOMMENDATIONS

### 1

#### Vocational Training Park

- It is recommended that VTC creates a Vocational Training Park with the view to provide a place for collaborative VPET training programmes with Shenzhen and the GBA and foster exchange of students and trainers.
- It should provide advanced training facilities and enlist the help of businesses and educational institutions that are set to be established at the Lok Ma Chau Loop to provide added training facilities.
- It should offer industry placements to VPET students across both sides of the border and provide applied learning projects that utilise cross-disciplinary skills.

### 3

#### GBA-recognised Qualifications System

- Along with this new collaborative approach to VPET in the GBA, it is also recommended that a GBA-recognised Qualifications System be developed that includes vocational skills and the Level 5 Qualification as proposed in the previous policy.
- This will facilitate mobility among talents in the GBA and create more employment opportunities for young people.

### 2

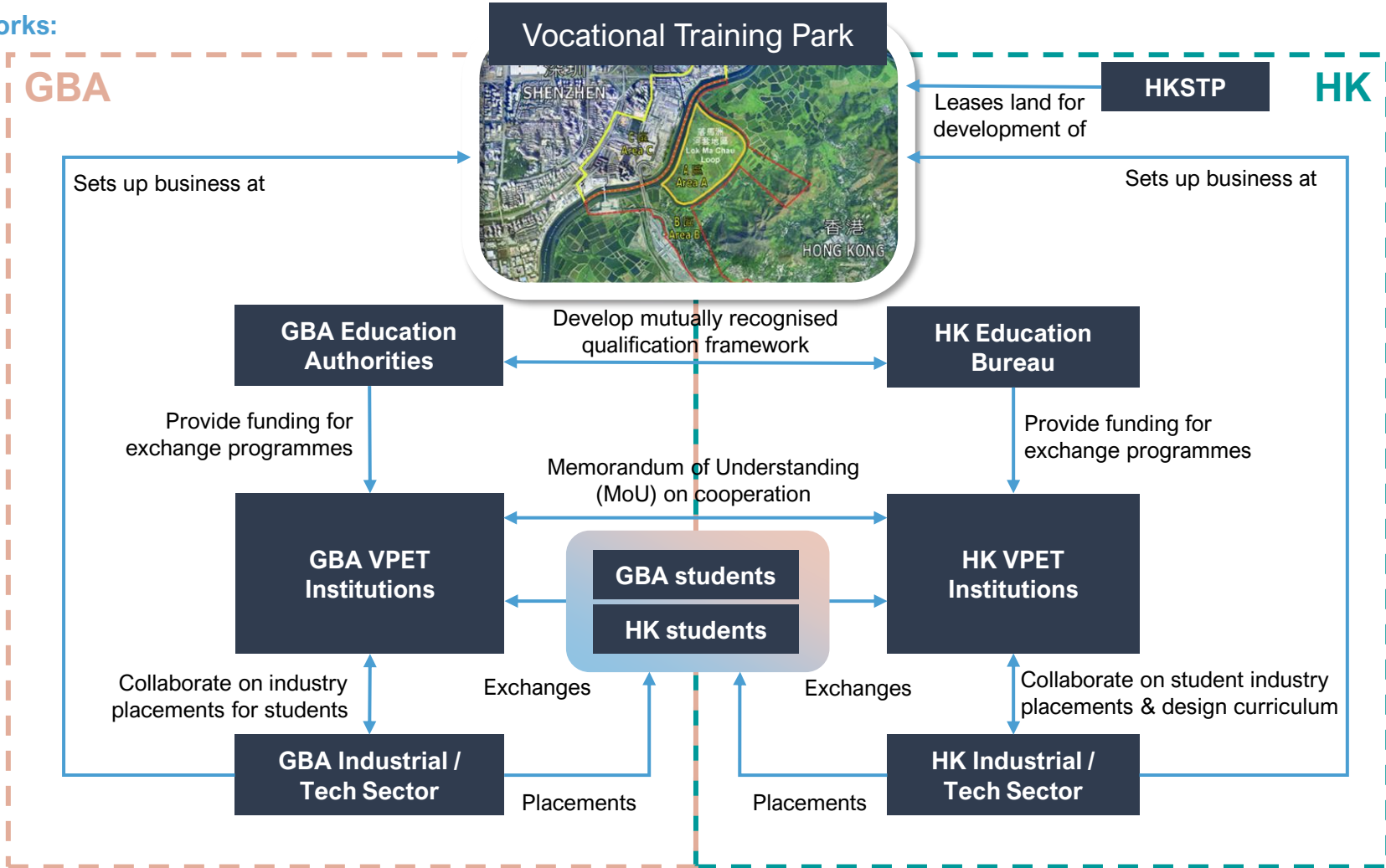
The Park should partner with institutions of higher applied learning in the GBA, including:

- Guangdong Industry Polytechnic
- Shenzhen Polytechnic
- Shenzhen Institute of Information Technology
- Guangdong Industry Polytechnic
- Guangdong Lingnan Institution of Technology
- Guangzhou Panyu Polytechnic
- Guangdong Polytechnic of Science and Trade
- Shunde Polytechnic
- Guangdong Polytechnic of Industry and Commerce
- Guangdong Nanhua Vocational College of Industry and Commerce
- And the proposed University of Applied Sciences in Hong Kong

# Policy Proposal 2: GBA Vocational Training Hub

## RECOMMENDATIONS

How it works:



# Policy Proposal 2: GBA Vocational Training Hub

## IMPLEMENTATION TIMELINE



- Seek support of HKSTP to provide a portion of land for the development of a Vocational Training Park
- Educational authorities in the GBA to collaborate on a standardised qualifications framework that includes VPET
- VPET institutions in the GBA to sign MoU on collaboration on GBA VPET exchange programme
- EdB to set up exchange programme scheme and allocate funding for participating institutions

- Target 500 – 1,000 exchange students per year in pilot industries such as:
  - I&T
  - Automobile
  - Engineering
  - Biotechnology
  - Manufacturing
- Facilitate teacher exchanges

- Target 5,000 exchange students annually



# Policy Proposal 2: GBA Vocational Training Hub

## SMART TOOLS TO CREATE A RESILIENT CITY

The GBA Vocational Training Hub will contribute to addressing the skills gaps of the I&T sector by providing a robust scheme for training and upskilling Hong Kong and GBA talent.

Exchange opportunities for students in VPET will facilitate immersive learning for students and prepare them for careers in Hong Kong and the GBA. The GBA Vocational Training Hub will create synergies among the GBA cities, as well as advance teacher training through the constructive exchange of best practices and the latest technological developments.

The cross-recognition of VPET qualifications will allow the free flow of talent in the region thus providing a wider range of employment opportunities for youth in both Hong Kong and the GBA.

All this can facilitate a more effective nurturing of Hong Kong's talent pool to make them more competitive and ready for the city's integration with the GBA.



# Policy Proposal 3: “Earn to Learn” Lifelong Development Scheme



**TARGET:** Increase Hong Kong’s continuing education participation rate from 25% to 60% by 2030.

## BACKGROUND

In today’s rapidly changing environment, the workforce will have to continually acquire new skills and knowledge in order to stay competitive. The Government’s Continuing Education Fund (CEF) was set up in 2002 to provide subsidies for individuals to pursue continuing education, but the scheme only provides a lifetime maximum subsidy of HK\$20,000 for certified courses. According to the Census and Statistics Department survey in 2018, only 20.4% of economically active persons had attended job-related training/retraining courses in the last 12 months.

Singapore’s SkillsFuture scheme supports the lifelong education of the workforce and provides regular top-ups for learning. Subsidies are provided for training in areas most needed in the market, in particular innovation and technology (I&T) related skills to support its national strategy.

Employees should be afforded with more learning opportunities and the time to develop themselves. Employers should also contribute and see this as an opportunity to increase the capability and productivity of their employees.

## RECOMMENDATION

Foster an “**Earn to Learn**” spirit in Hong Kong and encourage **lifelong learning** with employer support.

### Earn to Learn Lifelong Development Scheme

The suggested policy involves the Government setting up a **Lifelong Development Fund (LDF)** to encourage continual learning and development of adult workers.

This aims to provide funding for employees to undertake recognised training courses through a mandatory monthly contribution from employers that is matched by the Government.

Alongside this the Government should mandate a minimum of 40 hours per year of **Personal Development Leave** for all full-time employees to undergo training and provide absentee allowances to SME employers to compensate for lost hours.

# Policy Proposal 3: “Earn to Learn” Lifelong Development Scheme

## RECOMMENDATIONS

### 1 Lifelong Development Fund (LDF)

- Employers would contribute 1% of an employee’s monthly salary to the fund, capped at HK\$10,000 per employee per annum.
- Tax deduction can be claimed for this contribution.
- The Government will provide 2:1 matching funding to the LDF for those earning at or below HK\$30,000 to accelerate the learning of low-income earners.
- In the future it is recommended that the Continuing Education Fund be merged with the LDF.
- The LDF should also fund absentee allowances paid to SMEs to encourage smaller firms to allow personal development leave.
- The fund is expected to have an annual contribution of approx. HK\$15 billion from employer contributions and Government matching. The Government should set aside HK\$10 billion for the fund after merging with the CEF.

### 2 Lifelong Development Portal

- To provide Hong Kong’s workforce with the most updated information on the skills needed in the current and future economy, it is recommended that the Hong Kong Productivity Council (HKPC) develop a portal to set priority skills and work with training providers to align courses to these priority skills.
- It can also provide matching services for learners and trainers, and work with specific organisations such as the Innovation and Technology Commission (ITC) to bolster training in high potential areas for Hong Kong such as I&T.

### 3 Training Providers

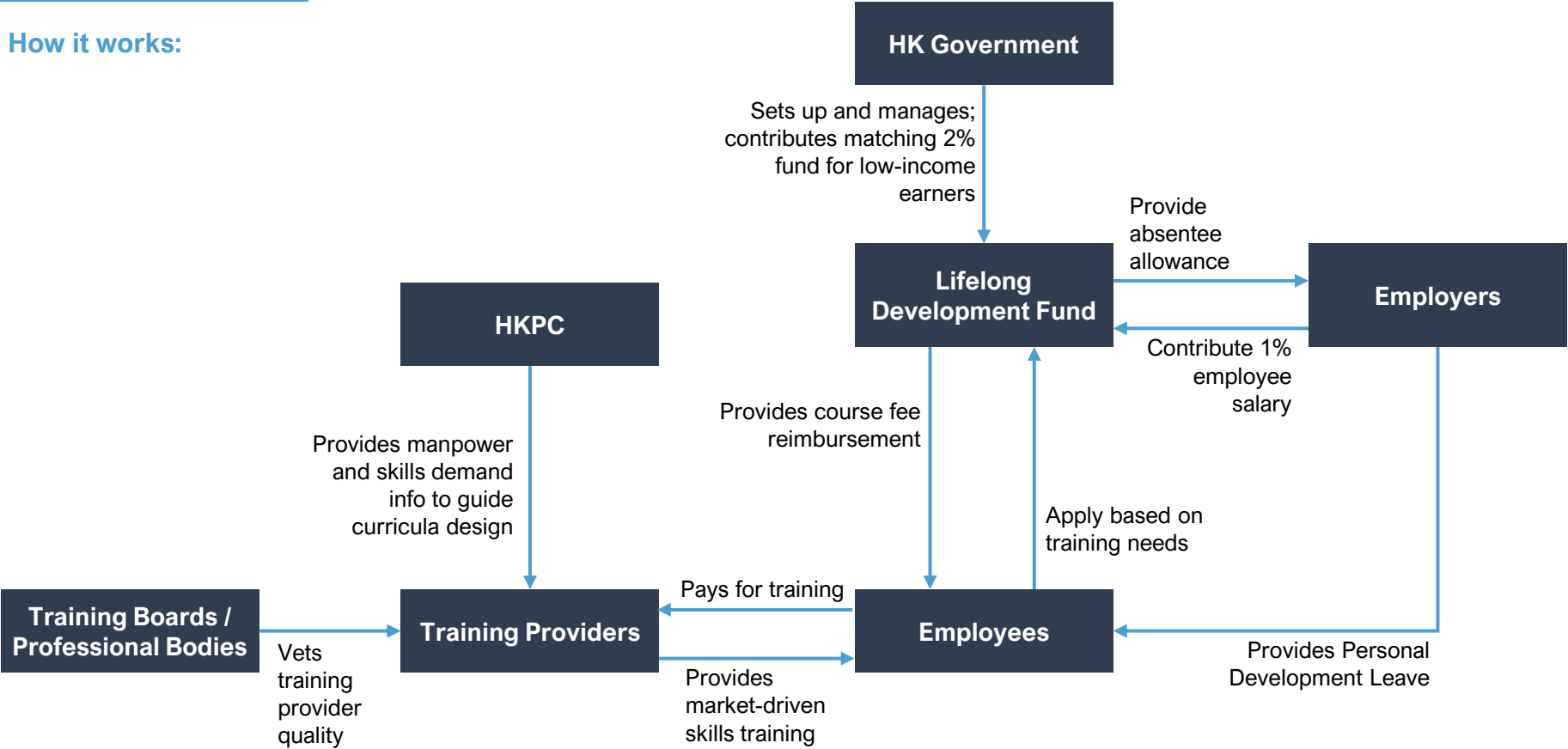
- Training providers should be vetted by the Government and expert bodies such as VTC’s Industry Training Boards or professional bodies to be qualified to provide training in the priority skills.



# Policy Proposal 3: “Earn to Learn” Lifelong Development Scheme

## RECOMMENDATIONS

How it works:



# Policy Proposal 3: “Earn to Learn” Lifelong Development Scheme

## IMPLEMENTATION TIMELINE



- Set up Lifelong Development Fund by 2023 and merge with CEF
- Contributions to begin for employers from 2023



- Legislate 40 hours of Personal Development Leave by 2024, with absentee allowances payable to employers
- Employees can draw from the LDF from 2024



- Reach 60% of participation rate in Continuing Education

# Policy Proposal 3: “Earn to Learn” Lifelong Development Scheme

## SMART TOOLS TO CREATE A RESILIENT CITY

Lifelong development is essential to equipping Hong Kong’s workforce with the skills sought by employers, now and in the future. These skills include those in the innovation and technology (I&T) sector which will help to meet expected demand as Hong Kong’s I&T infrastructure and ecosystem develop.

Training programmes should be attuned to the needs of the market, and through the one-stop Lifelong Development Portal, employees will be able to easily find the courses they need to upgrade themselves with employable skills.







# INCLUSIVE ECONOMY





# Introduction

Hong Kong is facing rising social disparities. The city's poverty rate is over 15% and its Gini coefficient, which measures inequality, stands at a record high of 0.539 as of 2020.

Among the issues contributing to social inequity include youth employment, senior citizens' inclusion into the economy, and issues facing SMEs.

The four main economic pillars of Hong Kong – financial services, tourism, trade and logistics and professional services – have served Hong Kong well and make up about 58% of GDP, but they have not benefited everyone equally. Youth unemployment is at all time highs, an increasingly ageing population will need to be supported, and SMEs are operating under tremendous pressures in the face of the pandemic and economic constraints.

There is an opportunity for the Government to support these vulnerable groups to create an inclusive economy for all. Smart policies and technologies can help.

The policies in this section are focused on the following:

- Giving youth and elderly citizens more employment opportunities
- Providing easier access to various Government and private funding
- Diversifying the economy through leveraging Hong Kong's strength in healthcare

# Current Challenges

## 1. Youth and senior citizens not included sufficiently in the economy

- 1 High youth unemployment (20 – 29-year-olds)**
  - Youth unemployment (20 – 29-year-olds) reached a historical high of 10% in 2020
- 2 Relatively low elderly employment (65 and above)**
  - Elderly labour participation was 11.7% in 2018, below OECD average (14.8%) and below US (19.3%), Korea (31.5%) and Singapore (26.8%)
  - The labour force is expected to shrink from 3.68 million in 2022 to 3.51 million in 2031; many elderly are keen and able to continue working beyond retirement age

## 2. Funding not readily accessible

- 1 Growing need for SME, NGO and startup support**
  - 49% of SMEs have applied or are interested in applying for loan or funding schemes
  - 53% of startups find funding to be the most important factor to their growth
- 2 Access to funding difficult**
  - A variety of Government funding is available, but they are difficult to access and apply for
  - NGOs spend a significant portion of manpower and resources on fundraising

## 3. Narrow economic base

- 1 Over reliance on four pillar industries**
  - Four pillar industries (financial services, tourism, trading and logistics, and professional services and producer services) comprise of 58% GDP and 46% of employment
  - Emphasis on these have led to limited career prospects outside of these industries
- 2 Other strengths can be leveraged**
  - Hong Kong has the opportunity to develop other key industries it has strengths in, such as healthcare



# Policy Proposal 1a: Employment for All (Youth)



**TARGET: Reduce youth unemployment rate from 10% to 7% by 2025.**

## BACKGROUND

A common issue among youth seeking employment is that there is often a mismatch between skills learnt in education and those that are required in the workplace.

On the job training in the form of apprenticeships and internships therefore can help youth develop these much-needed workplace skills. Australia for example has implemented an extensive apprenticeship scheme that helps trainees gain on-the-job training from professionals while earning an income for a period of 12 months.

The Government's current Youth Employment and Training Programme (YETP) offers placements for those aged 15-24 with educational attainment at sub-degree or below. This is combined with pre-employment training courses, workplace attachment and on-the-job training, and support services.

This scheme however targets those with low educational attainment and may not adequately provide opportunities for the segment of youth who have higher educational attainment but are also having trouble gaining workplace skills.

## RECOMMENDATION

Increase employability of youth through a **structured apprenticeship/internship scheme with vocational training.**

### Youth Employment Scheme (YES)

- It is proposed that the YETP be expanded into the Youth Employment Scheme (YES) to cover 18 – 30-year-olds with no requirement for specific educational attainment.
- The YES will be focused on equipping youth with employable skills and placement in companies and organisations that require a pipeline of future talent.
- Placements should be longer-term: 1-2 years.
- Apprentices should be paid a reasonable starting salary by the host organisation, and this should be topped up with a stipend by the Government.

# Policy Proposal 1a: Employment for All (Youth)

## RECOMMENDATIONS

### How it works:

#### Pre-employment

- 1-on-1 career consultation and job-matching
- Working closely with employers to identify required skills and design training courses
- Off-job training to be delivered in partnership with VPET institutions

#### During Employment

- On-the-job training with employer via job-shadowing and coaching
- Annual report to the Labour Department from trainee/employer
- Trainees to spend a set number of hours each week to further skills training at VPET institutions
- Starting salary by employer + Government stipend to be paid to trainee

#### Post Employment

- Consultation between employer, trainee and Labour Department to evaluate training
- Career coaching to help identify further job opportunities
- Completion certification to trainees
- Retention allowance to trainees if they are awarded with full time employment at the same training employer

# Policy Proposal 1b: Employment for All (Elderly)



**TARGET: Increase elderly labour participation from 11% to 20% by 2030.**

## BACKGROUND

Hong Kong has one of the highest life expectancies in the world. Many people are living longer than ever before. In Hong Kong, many employers require their employees to retire at the age of 60 or 65, yet there is no statutory retirement age or specific legislation for mandatory re-employment of older adults.

Active ageing is the process of staying healthy, socially connected and independent as people age. Many Hong Kong retirees are still healthy and able to work. Providing them with the opportunity to continue working will not only help to maintain the active minds of elders but also contribute positively to the city's socio-economic outcomes.

Singapore has the Senior Worker Early Adopter Grant (SWEAG) and the Part Time Re-employment Grant (PTRG) which help to support elderly employment by providing SG\$2,500 (HK\$14,200) per person to employers who raise internal retirement age or re-employ those over 60.

With Hong Kong's rapidly ageing population and an expected contraction of the workforce, Hong Kong's elders should be provided with more continued employment opportunities while actively ageing.

## RECOMMENDATION

**Provide economically active opportunities to elderly aged over 60 to enable them to live a dignified and prosperous life.**

### Senior Employment Scheme (SES) & Golden 65 Policy

- The proposed policy includes a **Senior Employment Scheme** to provide financial incentives to employers to employ those over the age of 60.
- The **Golden 65 Policy** will reward employers who raise internal retirement age from 60 to 65.
- The recommendations also include a **Senior Mentor Programme** for the retired elderly to share career experience and provide coaching to the younger workforce.



# Policy Proposal 1b: Employment for All (Elderly)

## RECOMMENDATIONS

### 1

#### Senior Employment Scheme (SES)

- It is proposed that a HK\$20,000 grant be provided to employers who re-employ or employ each senior over the age of 60.
- By 2028, there will be approx. 1.97 million seniors over the age of 65. It is estimated that the budget for this scheme needs to be set at HK\$8 billion for a target of 20% labour participation.

### 2

#### Golden 65 Policy (G65)

- The policy rewards employers who extend the internal retirement age from 60 to 65 by 2025. It aims to allow approx. 310,000 seniors to continue working past the age of 60.
- Provides a \$20,000 grant for the first 10,000 companies that implement the Golden 65 Policy for each senior, at an estimated budget of HK\$2 billion.

### 3

#### Senior Mentor Programme (SMP)

- Leveraging the deep expertise and life experience of seniors, the Senior Mentor Programme aims to connect youth with senior mentors, such as those from professional fields, and engage them in life and career coaching.
- This programme can also partner with secondary and tertiary institutions to provide students with career counselling.
- An allowance will be provided by the Government to each senior mentor of up to \$60,000 per year.
- This programme will recruit 5,000 senior mentors at a budget of HK\$300 million.

# Policy Proposal 1: Employment for All

## SMART TOOLS TO CREATE A RESILIENT CITY

A smart city should be focused on fulfilling the potential of all segments of society, including the youth and the elderly.

The Youth Employment Scheme and the Senior Employment Scheme should help to provide more employment opportunities and relieve the burden on social assistance.

The Mentorship programme will also help to connect youth who are in need of skills with seniors who have the time and expertise to share their knowledge and career experience.

With a focus on skills exchange, seniors may also benefit from learning the latest skills and technological knowledge from youth participating in this programme.



# Policy Proposal 2: 1Stop Funding Portal



**TARGET: Significantly increase and centralise access to available public funding by 2024.**

## BACKGROUND

Currently there are more than 340,000 SMEs in Hong Kong, which provide jobs to over 1.2 million persons. There are around 15,700 NGOs employing about 52,000 people. Together they account for 47% of total employment (excluding civil service).

SMEs often struggle with cashflow and access to funds. Startups have expressed that application procedures for Government funding are cumbersome. NGOs spend a significant portion of their time seeking out and applying for funding opportunities.

Funding opportunities offered to these groups are available from a range of Government departments and private organisations but identifying them is often difficult. In response to the 2021-22 budget, 49% of surveyed SMEs applied for or were interested in applying for the loans or funding schemes mentioned, however 23% stated they had limited understanding of the schemes.

There is an opportunity for all Government and private funding to be identifiable and accessible in one centralised platform so more organisations can make use of them.

## RECOMMENDATION

**Develop a one-stop funding portal** for SMEs, NGOs and startups to expedite search, application and processing.

The 1Stop Funding Portal aims to provide centralised and transparent funding application information to enable startups, SMEs and NGOs to gain easier access to funds, and streamline the application process to reduce manpower and administrative costs. International examples include:

- Enterprise Singapore's Business Grants Portal – centralised listing of grants that help with capability building, training and expansion.
- Australia's Funding Centre – information on grants and fundraising to serve 600,000 community groups.
- Canada's Fundingportal – private company to help companies, municipalities, nonprofits and others to secure grants, incentives and funding.

# Policy Proposal 2: 1Stop Funding Portal

## RECOMMENDATIONS

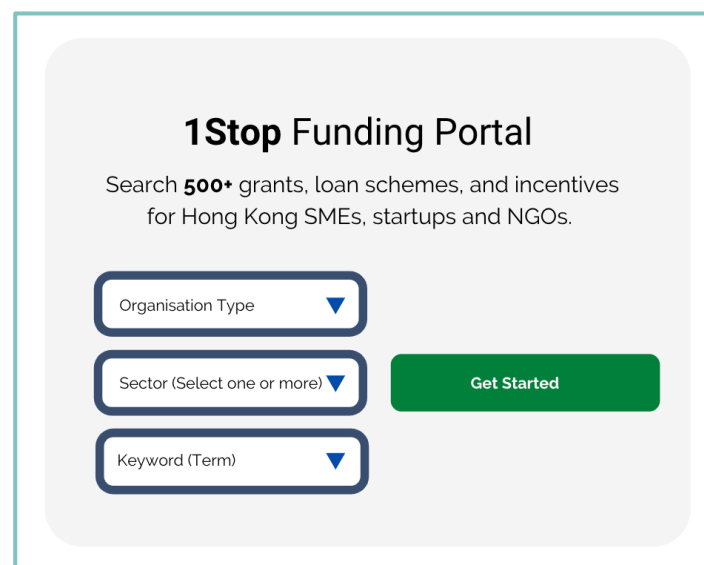
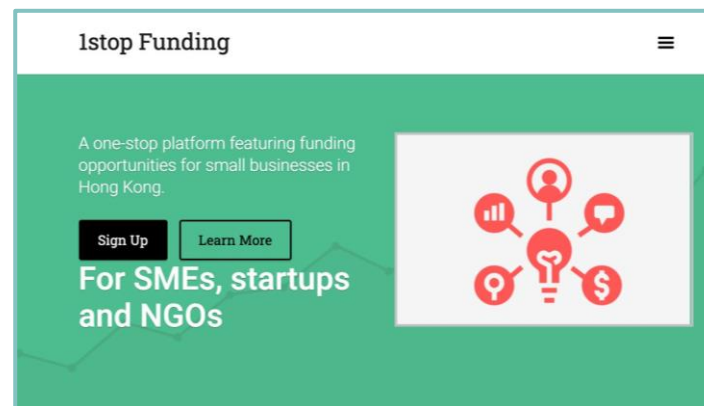
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- The portal (suggested: [funding.gov.hk](http://funding.gov.hk)) will provide an open, up-to-date, and user-friendly directory to identify funding opportunities.
- It will feature a transparent and **streamlined application system**, integration and **standardisation** of the Government's e-procurement system for all Government grants, and a **smart matching system**.
- It will provide **simplified details** of grants, incentives, tax relief and loan schemes, from Government and private funders.
- It will also provide support services and resources on **grant writing** and application procedures.

## Current Funding Directory Design:

| No.  | Funds / Schemes   | Objectives   | Target recipients   | Contact   |
|--|---|--|---|---|
| <b>Financing and Guarantee</b>                         |   |  |   |   |
| 1.   | SME Financing Guarantee Scheme                                      | Help SMEs <sup>1</sup> and non-listed enterprises obtain financing from participating lenders for meeting business needs   | Enterprises registered in Hong Kong (except listed companies, lending institutions and affiliates of lending institutions) <sup>2</sup>                                 | <b>HKMC Insurance Limited</b><br>Tel: 2536 0392<br>Email: <a href="mailto:sfgs_enquiry@hkmc.hk">sfgs_enquiry@hkmc.hk</a><br>Website: <a href="http://www.hkmc.com.hk/ena/#Corporate">http://www.hkmc.com.hk/ena/#Corporate</a>              |
| <b>Market Development/Business Upgrading</b>           |   |  |   |   |
| 2.   | SME Export Marketing Fund   | Encourage SMEs to expand markets outside Hong Kong by participating in export promotion activities <sup>3</sup>  | Non-listed Hong Kong enterprises with substantive business operation in Hong Kong <sup>3</sup>  | <b>Trade and Industry Department</b><br>Tel: 2398 5127<br>Email: <a href="mailto:emf_enquiry@tid.gov.hk">emf_enquiry@tid.gov.hk</a><br>Website: <a href="https://www.smeexpd.tid.gov.hk/emf/eng">https://www.smeexpd.tid.gov.hk/emf/eng</a> |
| 3.   | Dedicated Fund on Branding, Upgrading and Domestic Sales (BUD Fund) | Provide funding support to individual Hong Kong enterprises in undertaking projects to develop brands, upgrade and restructure their business operations and promote sales in the FTA markets <sup>4</sup> and Mainland China market, so as to enhance their competitiveness and facilitate their business development in the FTA markets and Mainland China market. | Non-listed local enterprises  | <b>Hong Kong Productivity Council</b><br>Tel: 2788 6088<br>Email: <a href="mailto:bud_sec@hkpc.org">bud_sec@hkpc.org</a><br>Website: <a href="https://www.bud.hkpc.org/en">https://www.bud.hkpc.org/en</a>                                  |
| <b>Supporting Research &amp; Development (R&amp;D)</b> |   |  |   |   |
| 4.   | Innovation and Technology Support Programme (ITSP)                  | Supports research and development (R&D) projects undertaken by designated local public research institutes and R&D Centres.  | R&D Centres and designated local public research institutes   | <b>Innovation and Technology Commission</b><br>Tel: 3655 5678<br>Email: <a href="mailto:enquiry@itf.gov.hk">enquiry@itf.gov.hk</a><br>Website: <a href="https://www.itf.gov.hk/eng/ITSP.asp">https://www.itf.gov.hk/eng/ITSP.asp</a>        |
| 5.   | Partnership Research Programme (PRP)                                | Support research and development (R&D) projects undertaken by private companies in collaboration with local universities and public research institutions  | Locally incorporated companies, or industry support organisations/trade and industry associations/professional bodies having the legal capacity to enter into contracts | <b>Innovation and Technology Commission</b><br>Tel: 3655 5678<br>Email: <a href="mailto:enquiry@itf.gov.hk">enquiry@itf.gov.hk</a><br>Website: <a href="https://www.itf.gov.hk/eng/PRP.asp">https://www.itf.gov.hk/eng/PRP.asp</a>          |

## Proposed Funding Portal Design:





# Policy Proposal 2: 1Stop Funding Portal

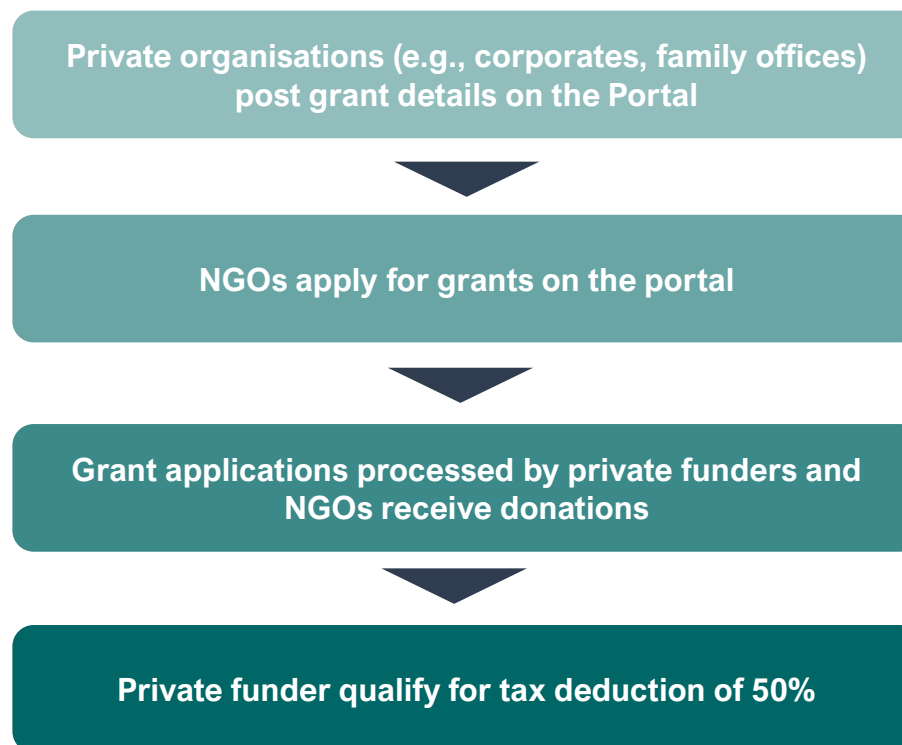
## RECOMMENDATIONS

# 2

### Making NGO fundraising easy

- In order to incentivise utilisation of the 1Stop Funding Portal and increase posting of funding opportunities by private organisations that can be utilised by NGOs, an extra tax deduction incentive is recommended.
- Private organisations who make donations to registered S88 charities through grant opportunities posted on the Portal will get an increased tax deduction of 50%, up from 35%.
- Applications on the Portal should be streamlined and integrated into the platform via an open Application Programming Interface (API).

### NGO Funding Search



# Policy Proposal 2: 1Stop Funding Portal

## SMART TOOLS TO CREATE A RESILIENT CITY

The creation of a streamlined and one-stop funding portal in Hong Kong will allow SMEs, startups and NGOs to gain better access to the wide range of funding available, which are currently underutilised due to dispersed administration and cumbersome processes.

This is aligned with the Smart Government initiative outlined in the Smart City Blueprint and can be integrated with current technologies such as the iAM Smart app developed by the Government.

This will act as a much-needed support service for smaller organisations which are often understaffed and underfunded, and do not have the resources to make best use of the funds available to them.



# Policy Proposal 3: Hong Kong as a Healthcare Centre of Excellence



**TARGET:** Increase employment in healthcare-related services to 5% of total employment by 2030.

## BACKGROUND

Hong Kong has one of the best healthcare systems in the world, provided by a dual-track system of public and private facilities. Its people have the highest life expectancy, measuring 82.2 years for males and 88.1 for females. Further exemplifying this has been its effectiveness in managing the Covid-19 pandemic, allowing Hong Kong to be ranked 1<sup>st</sup> in the Economist's normalcy index.

However current employment in the healthcare industry stands at only 102,480, accounting for 2.7% of total employment. Its GDP contribution is only 1.9%,

Currently Hong Kong's emphasis on its four pillar industries has resulted in less opportunities for those in other industries to flourish, and has left the economy vulnerable in the face of shocks to any one of the pillar industries, such as the recent impact on the tourism industry.

Given Hong Kong's leading healthcare system and world-class institutions, it has the opportunity to develop its healthcare industry further to allow it to become another key pillar of its economy, and help broaden its economic base and support future resilience.

## RECOMMENDATION

Establish Hong Kong as a **global centre of excellence in healthcare** and provide a wider range of job opportunities.

It is recommended that the healthcare industry be positioned as the fifth key pillar of the economy and attract global investment to develop the industry in Hong Kong.

This strategy involves creating a **Healthcare Innovation Centre** focusing on R&D in healthcare, increasing funding to attract talent to the industry and provide necessary **training and education**, as well as attracting **global healthcare corporations to set up** in Hong Kong.

Combining Hong Kong's strong healthcare with the latest healthcare innovations will further establish Hong Kong as a global centre of excellence in healthcare.

# Policy Proposal 3: Hong Kong as a Healthcare Centre of Excellence

## RECOMMENDATIONS

### 1

#### Healthcare Innovation Centre

- Recommended to be set up at HKSTP, this centre will be responsible for developing the industry through R&D, talent development, and partnerships.
- A Healthcare Innovation Division is also recommended to be developed under the Department of Health to seek new innovations that would support healthcare services in Hong Kong, and work with the Innovation Centre to apply local and new technologies.
- The Centre would also form partnerships with GBA institutions to collaborate on research, set standards that can be applied across the region, and promote Hong Kong innovations.

### 2

#### Employment and Training Schemes

- To increase the talent pool in healthcare, HK\$100 million should also be budgeted for companies to hire and train those hoping to enter the industry. This provides HK\$10,000 for a maximum of 12 months for each trainee.
- A grant can also be provided to any university that sets up new programmes in healthcare sciences or technologies.

### 3

#### Attracting Global Healthcare Corporations to Hong Kong

- To further grow the industry, it is recommended that Hong Kong should attract major industry players in healthcare, pharmaceuticals, and healthcare technologies to set up R&D centres in the city, and leverage the GBA for the prototyping and manufacturing of high-value healthcare products.
- Hong Kong can leverage its “Made in Hong Kong” brand and international reputation for IP protection, business-friendly environment, and access to the GBA and provide attractive grants and subsidies to these industry players.



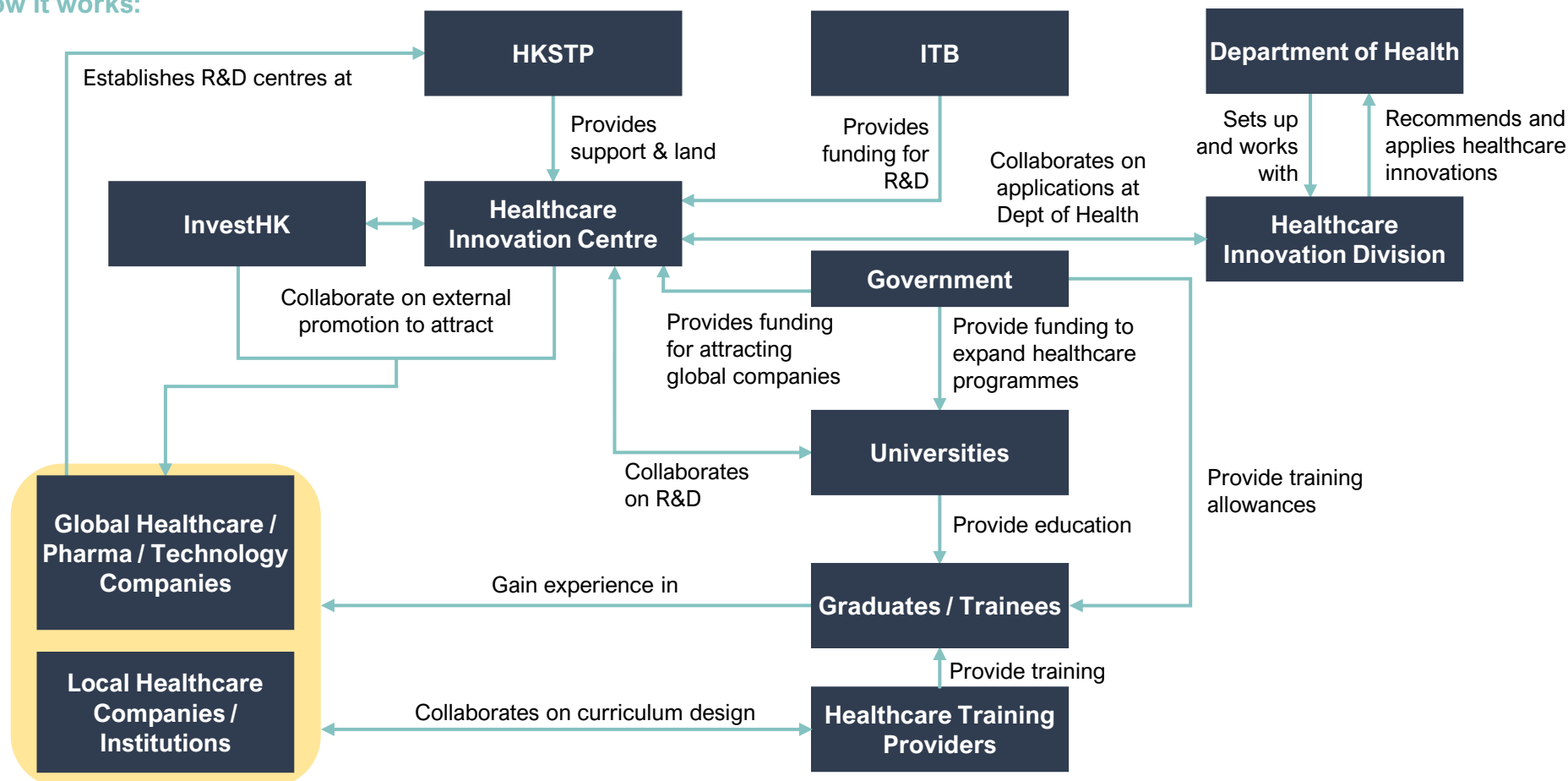
Examples of companies which have R&D capacity to attract to Hong Kong



# Policy Proposal 3: Hong Kong as a Healthcare Centre of Excellence

## RECOMMENDATIONS

### How it works:



# Policy Proposal 3: Hong Kong as a Healthcare Centre of Excellence

## IMPLEMENTATION TIMELINE

### Short term 2021-23

- Establish Healthcare Innovation Division under Department of Health
- Set target industries and players to attract to Hong Kong
- Form necessary global and GBA partnerships
- Hiring and training for Healthcare Innovation Centre
- Engage universities to expand programmes
- Engage industry players for training programmes
- Allocate funding and resources for R&D and training schemes

### Mid-term 2023-2030

- Establish the Healthcare Innovation Centre at HKSTP
- Attract the first global healthcare, pharma and technology companies to HK
- New healthcare programmes at universities
- Expand incentives for training programmes at more healthcare institutions/companies

### Long-term 2030-

- Increase healthcare employment to 5% of all employment
- Double R&D expenditure in healthcare
- 10 global healthcare companies in Hong Kong

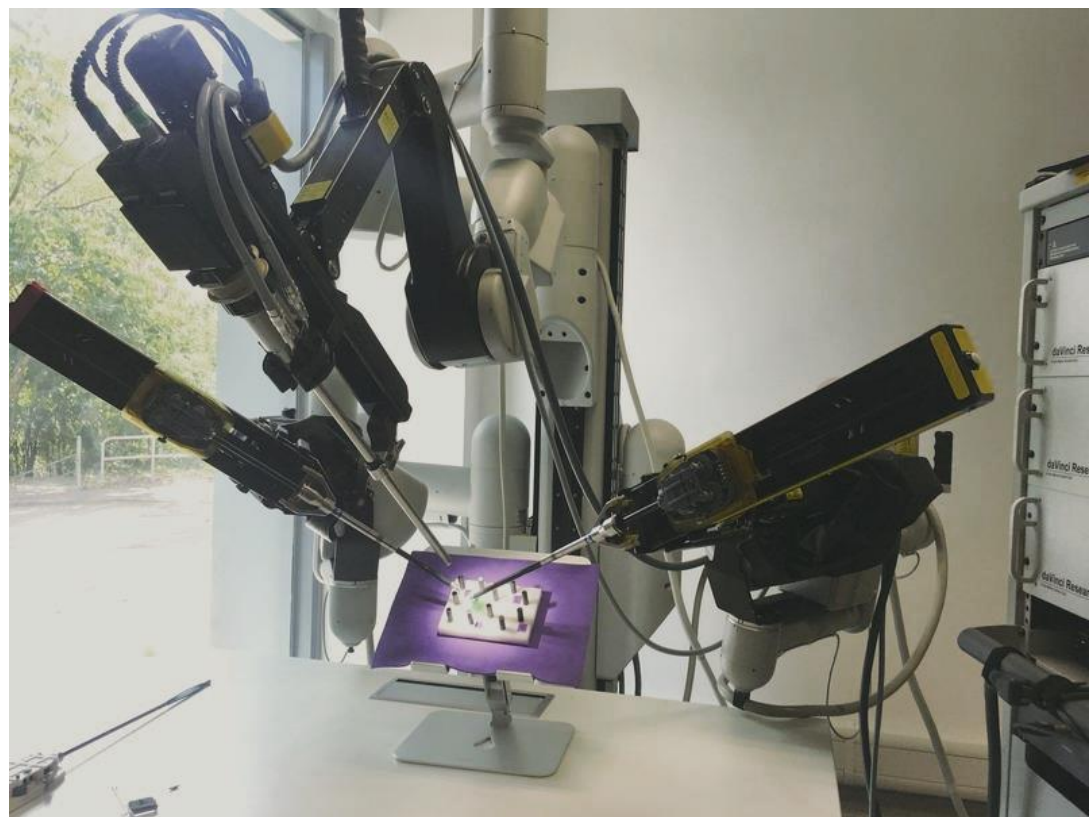
# Policy Proposal 3: Hong Kong as a Healthcare Centre of Excellence

## SMART TOOLS TO CREATE A RESILIENT CITY

By establishing Hong Kong as a global healthcare centre of excellence, there will be a tranche of new employment opportunities and economic activity in Hong Kong.

This will also help to build Hong Kong into a smarter and more resilient community by improving its healthcare access and quality through new technologies, local manufacturing of healthcare products, and a world-class healthcare system supported by a skilled labour force.

It will help to develop Hong Kong's innovation and technology sector, leveraging its unique advantages in R&D within the GBA.



*Da Vinci Research Kit, a medical robotic system developed by a research team at the Chinese University of Hong Kong.*





# LOW-CARBON ECONOMY



# Introduction

As part of the global fight to combat climate change, Hong Kong has set a goal to decarbonise by 2050, as well as set a target to reduce carbon intensity by 65 – 70% by 2030 compared to 2005 levels. While Hong Kong has set out plans to achieve these goals, many gaps remain. Bold strategies are needed to help the city secure its future.

The bulk of Hong Kong's greenhouse gas emissions come from electricity generation (66%), of which 90% come from buildings. Transport is the second largest contributor (18%), followed by waste (8%). For Hong Kong to successfully transition to a low carbon economy and achieve its 2030 and 2050 targets, tackling policy gaps in electricity generation and consumption, transportation, and waste management are essential.

The policies in this section focus on these sources of carbon emissions through the following three areas:

- Incentivising low carbon power generation, and efficient and responsible energy consumption
- Accelerating the shift to low-emission transport
- Promoting circular waste management in plastics

A financing mechanism called the “Carbon Fund” is also suggested to enable rapid adoption of these policies and other future decarbonisation policies.



## 1. Legislation is fragmented and does not target all stakeholders

- 1 Lack of incentives to encourage transition to low-carbon fuels and renewable energy**
  - There is currently no legislation that directly targets power companies burning fossil fuels and emitting greenhouse gases.
- 2 Lack of comprehensive energy efficiency standards for buildings**
  - There are no minimum energy efficiency standards for residential and industrial buildings.
  - There are no regulations or incentives to encourage building owners to improve and monitor efficiency.
- 3 Lack of regulation to reduce overconsumption of energy in commercial buildings**
  - Despite being the dominant energy consumers in Hong Kong (44%), commercial buildings are not regulated to encourage reductions in consumption.

## 2. Transition to low-emission transport is slow

- 1 No low carbon roadmap for public transportation and goods vehicles**
  - There are no targets set to electrify buses, taxis, and goods vehicles.
  - The Government is still conducting trials to measure its feasibility.
- 2 Lack of charging infrastructure to support adoption of Electric Vehicles (EV)**
  - There are only 4,103 EV chargers in Hong Kong, which are unevenly distributed across districts.
  - In comparison, Shenzhen has almost 7,000 EV charging stations.

## 3. Poor Plastic Waste Management

- 1 Linear plastic economy**
  - Hong Kong produces 1.7kg of waste per person per day, which is much higher than the worldwide average of 0.74kg. Plastic waste makes up 20% of this.
  - 46 million single-use plastic products are disposed in Hong Kong every week and 5 million plastic beverage bottles end up in landfills each day. Hong Kong's landfills are already saturated.
  - Only 4% of plastic is recycled. In comparison, over 30% of paper and over 50% of metals are recycled.
- 2 High environmental cost of incineration**
  - Hong Kong's incineration plant, which will be fully commissioned by 2025, will burn plastic at a high environmental cost. It is estimated that burning plastic adds 16 million metric tons of greenhouse gases into the air a year.

# Policy Proposal 1: Tackling Electricity Emissions Holistically



**TARGET:** Half greenhouse gas emissions from the electricity sector by 2030.

## BACKGROUND

66% of Hong Kong's greenhouse gas emissions come from electricity generation, of which buildings account for 90% of Hong Kong's total electricity consumption. In comparison, the global average of building electricity consumption is only 40%.

Current legislation surrounding emission reduction in electricity is largely fragmented as many stakeholders are exempt, and inadequate when compared to other countries. Filling these gaps through regulations and incentives to tackle the source (electricity generation), infrastructure (energy efficiency), and usage (electricity consumption) in buildings is crucial to achieving Hong Kong's decarbonisation target.

To encourage high energy efficiency in buildings, green building certification has been key in helping countries assess the environmental performance of their buildings. Hong Kong's local green building certification is BEAM Plus (BEAM+). Despite having the framework and technology in place since 1996, traction has gained slowly; less than 2000 of Hong Kong's 42,000 buildings are BEAM+ certified currently.

## RECOMMENDATION

**Tackle greenhouse gas emissions from the electricity sector holistically** by incentivising low carbon generation, high efficiency, and responsible consumption

To combat greenhouse gas emissions holistically, the Hong Kong Government must take the lead to regulate the behaviour of all stakeholders in the electricity sector, including power companies, building owners, commercial and industrial tenants, and residents. The following policies and initiatives are suggested for the Government to implement:

|                         |  |
|-------------------------|--|
| Electricity Generation  | <b>Introduce a carbon tax on fossil fuel generation</b> to encourage uptake of low-carbon fuels and transition to renewable energy   |
| Energy Efficiency       | <b>Set stricter legislation and implementation timelines for energy efficiency in existing and new buildings</b> to enable emission monitoring and green infrastructure improvements |
| Electricity Consumption | <b>Implement an overconsumption charge</b> to regulate excessive energy use  |

# Policy Proposal 1: Tackling Electricity Emissions Holistically

## RECOMMENDATIONS

1

### Introduce a carbon tax on fossil fuel generation in power companies by 2025

- Implement a fee at the point of fossil fuel generation per tonne of carbon dioxide emitted.
- The fee can be based on pricing estimates recommended by the International Monetary Fund in 2021, in which it was estimated that achieving decarbonisation targets in OECD countries requires a carbon price increase of USD 25 – 75/tCO<sub>2</sub>.
- Fees collected from power companies will contribute to the **Carbon Fund**.

2

### Set stricter legislation and implementation timelines for energy efficiency in all existing and new buildings

- Extend the Buildings Energy Efficiency Ordinance, which covers commercial and municipal buildings and common areas, to cover residential and industrial buildings as well by 2025.
- Introduce tax rebates for properties that achieve BEAM+ Gold or Platinum certification or equivalent international energy efficiency standards by 2025.
- Legislate to ban building owners of energy-inefficient commercial buildings from annual rent increases by 2030.
- Mandate all commercial buildings to meet BEAM+ certification or above by 2035.
- Subsidise energy efficiency enhancement projects for all existing commercial and residential buildings with the **Carbon Fund**.

3

### Implement an overconsumption charge to regulate excessive energy use by 2025

- Extend the Residential Tariff system\*, where residents are charged more as they consume more, to all consumer segments including commercial and industrial.
- Define the acceptable level of energy intensity for different consumer segments and lot size e.g. reasonable energy consumption level for an office versus a factory would be different.
- Charge steeper rates for consumption levels that exceed the defined acceptable energy intensity.
- Fees collected from overconsumption will contribute to the **Carbon Fund**.

| Consumption (In Blocks)         | Rate (cents/unit) |
|---------------------------------|-------------------|
| For each of the first 150 units | 67.4              |
| For each of the next            |                   |
| 150 units (151 - 300)           | 81.3              |
| 200 units (301 - 500)           | 95.2              |
| 200 units (501 - 700)           | 118.8             |
| 300 units (701 - 1,000)         | 132.7             |
| 500 units (1,001 - 1,500)       | 146.6             |
| From 1,501 units and above      | 160.5             |

\*Example from Hong Kong Electric's rates for higher consumption through a Residential Tariff system.



# Policy Proposal 2: Create a Low-emission Transport System



**TARGET:** Reduce transport's greenhouse gas emissions by 80% by 2035.

## BACKGROUND

Transportation makes up 18% of Hong Kong's greenhouse gas emissions. Implementation of Electric Vehicle (EV) technology, policy, and regulation in both public and private transportation is crucial to curbing these emissions, but its roll-out has been slow and ambiguous.

Use of EV in private vehicles can reduce 4.2% of Hong Kong's carbon emissions. The Government's recent Roadmap on popularisation of EV has introduced measures to curb these emissions, including, ceasing registration of fossil fuel-propelled private cars by 2035 and tax concessions for private EVs.

Use of EV in public transportation and other road transport vehicles, including in the transportation of goods, can reduce 11.8% of carbon emissions. Over 90% of total passenger trips each day are taken by public transportation. While the Government's Roadmap commits to promoting trials for electric public transport and commercial vehicles, including buses, taxis, and goods vehicles, with a "concrete way forward and timetable" in 2025, there are currently no specific policy measures or targets for the use of EV in road public transportation and commercial vehicles.

## RECOMMENDATION

**Create a Low-emission Transport System** in Hong Kong to effectively meet Hong Kong's carbon neutrality target on time.

Hong Kong aims to achieve zero vehicular emissions by 2050, which is in line with its goal to achieve carbon neutrality by 2050. However, measures proposed through the Roadmap on popularisation of EV are only stringent for electric private cars. In comparison, Shenzhen has already electrified 100% of its public transportation, Singapore has pledged to electrify its entire bus fleet by 2040, and South Korea plans to electrify 40% of its bus fleet by 2025. Hong Kong's policies for commercial vehicles including public transportation and goods vehicles are inadequate.

In order to achieve zero vehicular emissions, more stringent policies and initiatives are recommended, including to:

- **Electrify 100% of public transportation**
- **Expand EV charging infrastructure network**
- **Extend the policy to prohibit new registration of fuel-propelled private cars to all road vehicles** to encourage adoption of EV and other alternative fuels
- **Introduce Electronic Road Pricing** to encourage usage of public transportation

# Policy Proposal 2: Create a Low-emission Transport System

## RECOMMENDATIONS

1

### **Electrify 100% of public transportation by 2030**

- Electrify all buses, minibuses and taxis
- Convert existing public vehicles to EV
- Mandate the use of EV in new public vehicles
- Import EV technology from Mainland China to accelerate pace of transition

2

### **Expand EV charging infrastructure network by 2030**

- Mandate and subsidise all indoor parking lots (public and private) to be fully equipped with chargers through the **Carbon Fund**
- Conduct a spatial analysis of charging infrastructure to identify gaps. Based on results, target areas lacking infrastructure to:
  - Convert 10% of existing gas stations into charging stations
  - Equip 50% of gas stations with charging stations
  - Trial curb-side charging and scale up to 50% of all curb-side charging if proven successful

3

### **Extend the policy to prohibit new registration of fuel-propelled private cars to all road vehicles by 2025**

- Extend policy to all road vehicles, including goods vehicles
- Continue to increase license fees for fossil fuel-propelled vehicles to accelerate adoption of EV and other alternative fuels
- Provide subsidies for the adoption of EV and other alternative fuels through the **Carbon Fund**

4

### **Introduce Electronic Road Pricing (ERP)\* by 2025**

- Implement toll charges on private vehicles according to time and congestion levels
- Reduce toll charges for EV cars to encourage adoption of EV
- Transfer toll charges collected to the **Carbon Fund**
- Increase buy-in from the public through outreach activities to:
  - Increase transparency about the objective of the policy and how it would work
  - Spread awareness about the benefits of such a policy for individuals, the community as a whole, and the environment
  - Provide comparisons of similar policies in place in other cities e.g. Singapore, London, Milan etc.

\*ERP is a traffic management tool to alleviate road traffic congestion and encourage public transportation, thereby reducing emissions.

# Policy Proposal 3: Circular Plastic Waste Management



**TARGET: Reduce total plastic volume sent to landfills by 80% by 2030**

## BACKGROUND

Following transportation and electricity generation, waste is the third largest contributor to Hong Kong's greenhouse gas emissions at almost 10%. Plastic makes up for over 20% of total solid waste in Hong Kong, but less than 5% is recycled. As Hong Kong will start incinerating solid waste by 2025, burning plastic will release high levels of greenhouse gases, and thus are a significant source of emissions that need to be tackled.

Not every type of plastic can be recycled, and even if they can be recycled, there is a lack of consumer awareness for proper sorting. The most effective way to reduce plastic waste sent to landfills is to reduce the initial consumption of plastics and to encourage uptake of plastic alternatives. Furthermore, stricter legislation targeting plastic producers can improve recycling rates and its surrounding infrastructure. Given this, transitioning into a low carbon economy will require transforming Hong Kong's linear waste economy into a circular one.

A Government policy underway is the long-delayed bill on a mandatory waste disposal charging scheme. The bill is expected to reduce solid waste by 40% by 2022, equivalent to 0.8kg per capita per day. Successful implementation of such a bill can complement circular waste policies in plastics.

## RECOMMENDATION

### Promote circular plastic waste management in Hong Kong

**2023**

Ban single-use plastic

Over 77 countries have introduced a partial or full ban on single-use plastic, including China. Hong Kong can follow suit to reduce plastic consumption.

**2025**

Commercialise Plastic Alternatives

In keeping up with the global shift towards sustainable development and building a circular economy, the follow-up from banning single-use plastic requires encouraging and commercialising the uptake of plastic alternatives to promote its rapid adoption in Hong Kong.

**2030**

Expand PRS for all recyclable products

Producer Responsibility Schemes (PRS) have long been proven as an effective method to share the responsibility for circular waste management among manufacturers, sellers, and consumers, but Hong Kong only has one for plastic bags and electronic waste.

# Policy Proposal 3: Circular Plastic Waste Management

## RECOMMENDATIONS

1

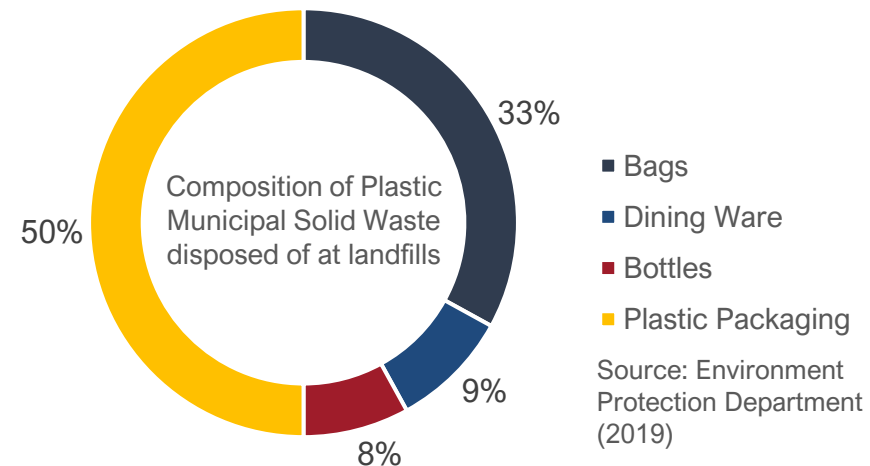
### Ban single-use plastic by 2023 & commercialise plastic alternatives by 2025

- Identify and ban single-use plastic items most commonly found in Hong Kong
- Limit the use of single-use plastic products excluded from the ban through:
  - Reducing consumption awareness-raising measures
  - Introducing design requirements e.g. tethered caps on bottles
  - Introducing labelling requirements to inform consumers about the plastic content and disposal options
- Mandate the use of sustainable plastic alternatives and make them easily available and affordable in Hong Kong
- Import and scale up the use of innovative plastic alternatives being used in other parts of the world

2

### Expand producer responsibility schemes (PRS) for all recyclable plastic products by 2030

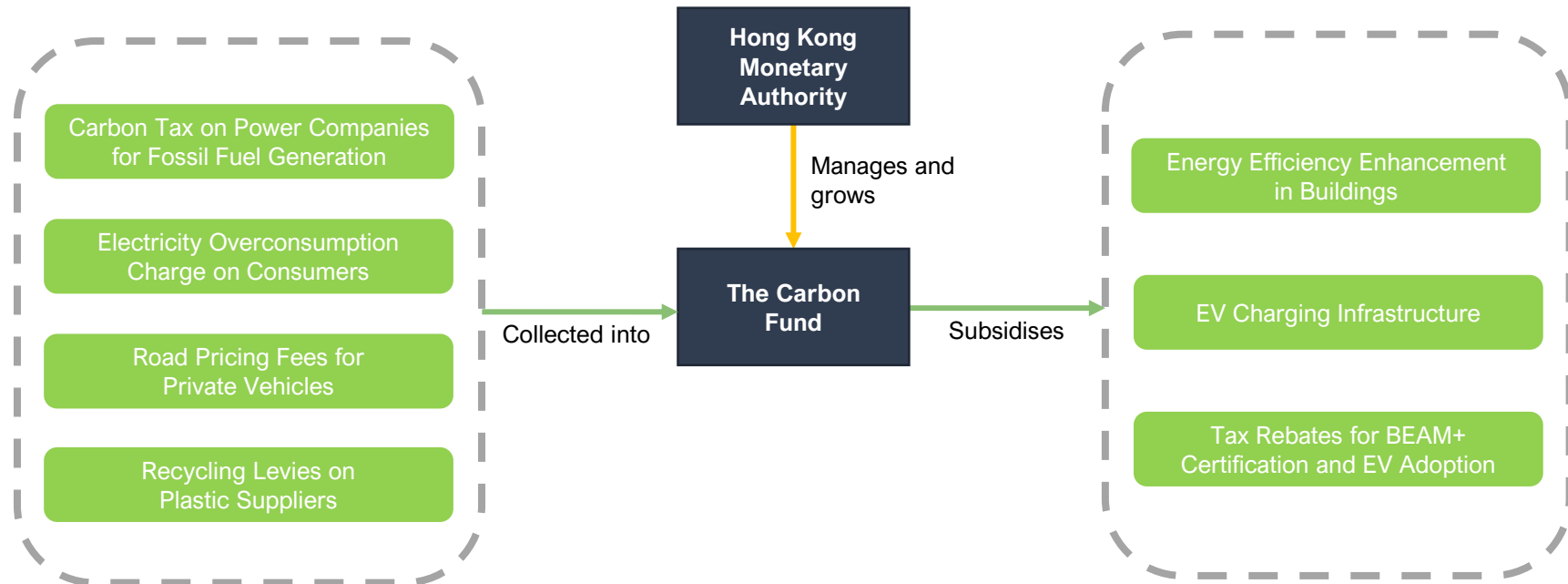
- There are currently only PRS for plastic shopping bags and waste electrical and electronic equipment, with plans underway to introduce a PRS on plastic beverage containers.
- PRS should be expanded to all plastic products that are recyclable, including dining ware and plastic packaging.
- Through the PRS:
  - Suppliers would pay recycling levies, and
  - Sellers would provide recycling guidelines for consumers.
- Recycling levies collected would contribute to the **Carbon Fund**.





# Financing Mechanism: The Carbon Fund

## How it works:



While there is consensus on the need to combat climate change and thus transition to a low carbon economy, there is little incentive for both the entire supply chain and consumers to take ownership of the development and implementation of low carbon initiatives. A charging mechanism as depicted in the flow diagram above will allow for the creation of a Carbon Fund to support the building of the needed low carbon infrastructure and initiatives.

→ Flow of money

→ Flow of services

Examples of financial activities that would flow in and out of the fund

# Low Carbon Economy

## SMART TOOLS TO CREATE A RESILIENT CITY

Smart tools to monitor, analyse and report data is key to enabling the reduction of carbon emissions. BEAM+ is an example of such; it assesses sustainability performance in new and existing buildings by analysing the full life cycle of a building's design and management in energy, waste, materials, water, and air quality. The ability to monitor usage and adjust emissions based on the collected data has the potential to significantly reduce emissions from buildings, thus making it pertinent for legislation to be introduced to mandate the use of such tools in the design, construction and operation of buildings as proposed in this section.

Hong Kong's One Taikoo Place (pictured above right) is BEAM+ Platinum certified and includes features such as rainwater collection facilities, greywater recycling and a green roof for heat absorption.

EV technology is another example of smart technology that can transform the transportation sector when scaled up. Private investors in Hong Kong are also investing in hydrogen fuel cell technology start-ups, providing Hong Kong with alternative technologies to experiment with.

Scaling up the use of plastic alternatives in Hong Kong will also lead to better waste management and support new growth of industries.

Hong Kong has all the smart tools it needs to transition to a low carbon economy. Accompanied with the necessary legislation and an urgent implementation timeline, the city will be better equipped to meet its decarbonisation goals.







# QUALITY BUILT ENVIRONMENT





# Introduction

The built environment refers to man-made surroundings that provide the setting for human activity, ranging from buildings and open space to supporting infrastructure such as streets and transportation. By inherently connecting physical space with social wellbeing, the built environment strongly impacts human and environmental health and wellbeing.

Hong Kong's limited land supply has made it difficult to create quality spaces for living, working, and leisure. The recent pandemic has brought these issues to the fore, and coupled with a rapidly ageing society, new factors need to be considered in building our environment to improve the quality of living for Hong Kong's citizens.

Research has shown that public open space, in particular, plays an important role in fostering community wellbeing, by encouraging people to exercise and facilitating social interaction, thereby improving mental health. For many Hong Kong people who live in small living quarters, this becomes ever more important. A quality built environment is thus essential to improve health and wellbeing, strengthen social cohesion, and create a thriving community.

The policies in this section focus on creating quality public open spaces and catering for our ageing population through the following three areas:

- Facilitating ageing in place
- Increasing and optimising the distribution of public open space (POS)
- Strengthening public participation in public space projects



# Current Challenges

## 1. Substandard quality of life for elderly

### 1 Lack of barrier free access in homes

- Existing home environments are often unsuitable for ageing needs and disabilities, leading to reduced self-reliance in elderly.

### 2 High rate of poverty in elderly

- 30% of elderly live in poverty in Hong Kong and find it difficult to afford rising costs in basic needs including housing, healthcare, and food.

## 2. Current POS does not meet community needs

### 1 Low supply

- Hong Kong residents on average have access to 2.7 m<sup>2</sup> of open space per person vs. 5.8 – 7.6 m<sup>2</sup> in other Asian cities.
- The Government's proposed increase to legislated POS to 2.5 m<sup>2</sup> by 2030 is too low. 1.84 million residents live in environments with less than the legislated 2 m<sup>2</sup> per person

### 2 Uneven distribution

- There is a large gap between the rich and poor; in high-income areas, residents on average have more than 8 m<sup>2</sup> of open space, whereas in low-income areas, residents have just 0.6m<sup>2</sup>.

### 3 Inaccessibility

- 11% of POS are within private developments. Many of these privately-owned public spaces (POPS) are unknown to the public and hard to access.
- There is no central repository of POS.

### 4 Fragmented management

- POS is managed by different Government departments with little coordination.

## 3. Lack of active public participation in public space projects

### 1 Limited stakeholder engagement

- Public engagement is limited to stakeholder group discussions with prominent individuals and organised interest groups.
- The process has little transparency, contributing to a poor sense of belonging to the resulting public space.

### 2 Complex tendering process

- There is complex tendering and procurement process in the design, construction and operation of POS.
- POS may only be tendered to an approved list suppliers, which limits opportunities for non-traditional or local talent to contribute to the projects and community engagement.

# Policy Proposal 1: Silver Home Fund



**TARGET: Provide 100,000 low-income elderly households with age-friendly home renovations by 2030.**

## BACKGROUND

Hong Kong is ageing rapidly; projections by the Census and Statistics Department predict that the elderly population will double to 2.44 million between 2018 and 2038. A demographic change this significant requires changes in how we design our built environment. While design guidelines for barrier free access have been implemented by the Buildings Department since 2008, these guidelines are limited to communal areas.

“Ageing in Place” refers to empowering elderly to live in their homes or familiar community as long as possible, without having to move to elderly care homes or other institutions. For elderly to be able to age in place, age-friendly adjustments within homes are essential. Apart from increasing elderly health and wellbeing and allowing them to live with dignity in the comfort of their own homes, age-friendly homes would reduce the burden on Hong Kong’s already overwhelmed healthcare system.

However, cost is a key barrier. Over 30% of elderly (391,200 people) are living in poverty, and thus unable to afford age-friendly home renovations to facilitate ageing in place.

## RECOMMENDATION

Establish a **Silver Home Fund** to subsidise age-friendly home renovations for elderly living in poverty to facilitate ageing in place

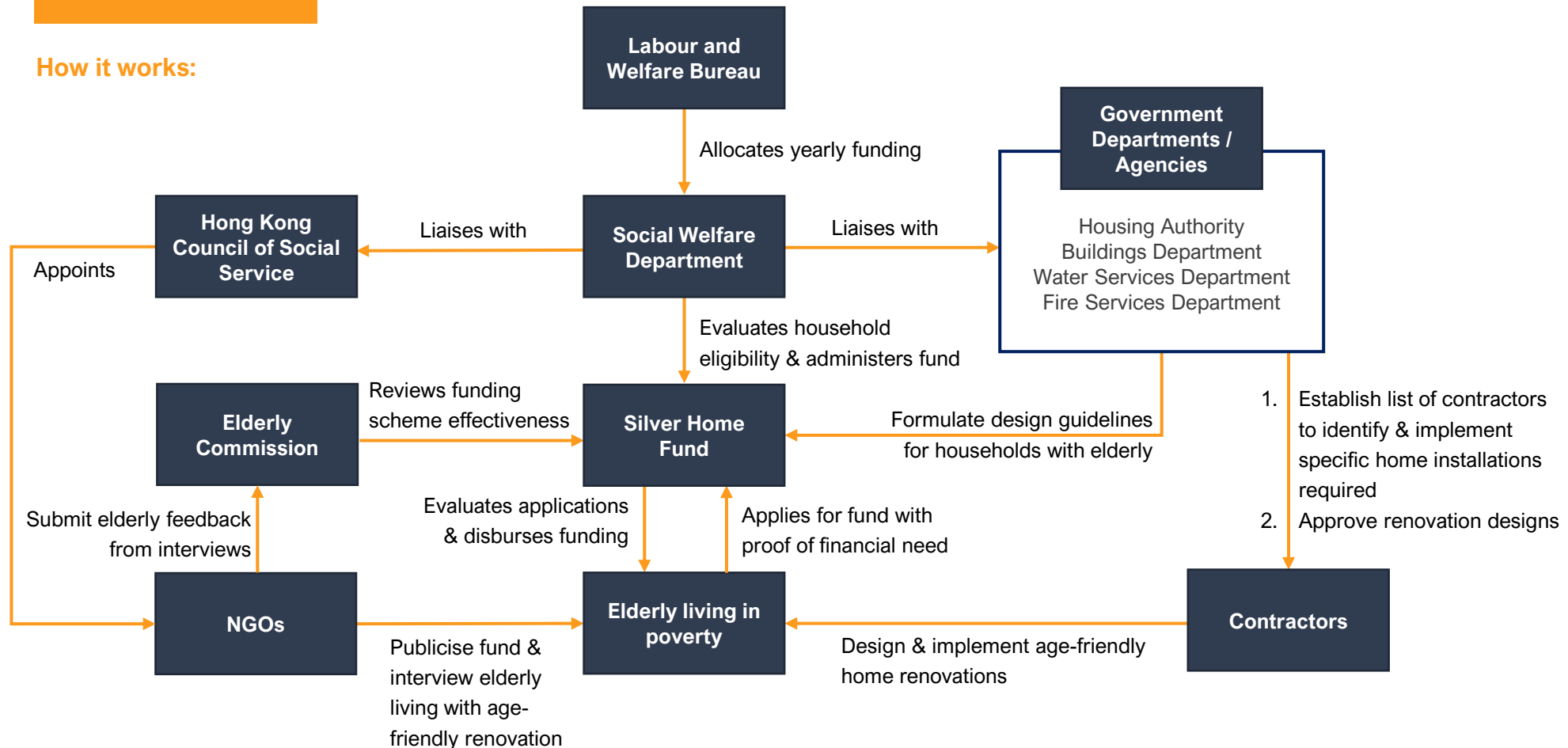
The Silver Home Fund aims to promote self-reliance by improving safety, accessibility, and mobility within homes to enable elderly to live dignified and fulfilling lives. By creating an age-friendly built environment, elderly can remain productive and integrated in society.

The fund, which is to be administered by the Social Welfare Department (SWD), would be allocated **HK\$750 million per year** to subsidise age-friendly home renovations for **12,500 households a year**. Each household is eligible for a subsidy of up to **\$50,000** based on proof of financial need, including household income. Home installations would be identified based on an assessment of specific needs of each elderly recipient. By 2030, the fund would have provided financial aid for **100,000 households** with elderly living in poverty.

# Policy Proposal 1: Silver Home Fund

## RECOMMENDATIONS

### How it works:



Note: Approximately 15% of the yearly budget from the Silver Home Fund would be allocated to expenses incurred by NGOs and contractors for providing their services

# Policy Proposal 1: Silver Home Fund

## SMART TOOLS TO CREATE A RESILIENT CITY

In recent years, gerontechnology, which focuses on the application of technology towards elderly-related products and services, has been a key enabler in facilitating ageing in place for elderly. Examples of gerontechnology products include electronic door locks, ramps, handrails, wheelchairs, shower chairs, and smart toilets. In January 2021, the SIE Fund led by Hong Kong Council of Social Service launched a one-stop Gerontechnology Platform to foster the development and application of gerontechnology in Hong Kong.

The Silver Home Fund will incorporate the use of gerontechnology in its design and implementation, including when:

- Formulating the design guidelines for households with elderly
- Identifying the specific needs of each elderly recipient, and
- Installing the age-friendly home renovations.



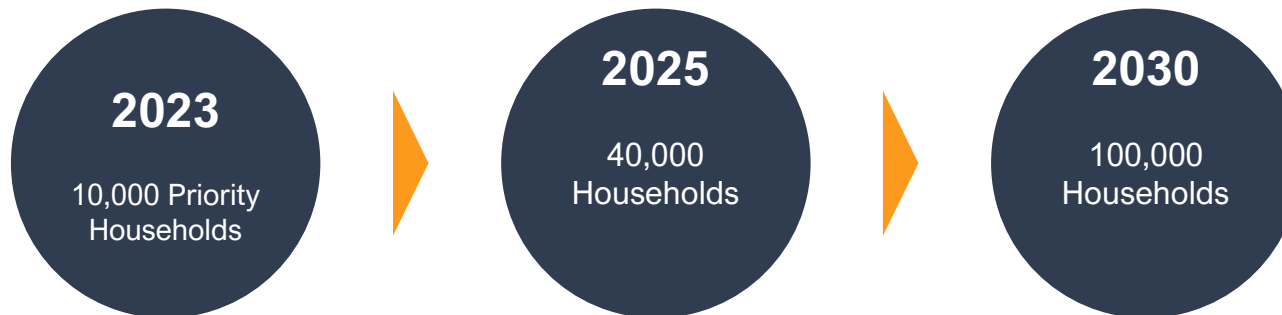


# Policy Proposal 1: Silver Home Fund

## IMPLEMENTATION TIMELINE

- 10,000 elderly households with severe mobility impairment will be prioritised for age-friendly home installations by 2023.
- Fund application process from eligibility to approval should be completed within 4 months.
- Households with elderly with severe mobility impairment should be prioritised for timely support and installation.
- The Elderly Commission will review the Fund's effectiveness and monitor progress every 3 years.
- In the long term, a knowledge hub connecting NGOs, age-friendly home improvement innovators, and medical practitioners could be established.

### No. of Households serviced by the Silver Home Fund



# Policy Proposal 2: Public Open Space (POS) Commission



**TARGET:** Increase public open space from 2.7 m<sup>2</sup> to 3.5 m<sup>2</sup> per capita by 2035.

## BACKGROUND

POS plays a crucial role in improving quality of life by promoting active lifestyles and facilitating social interaction. However, the provision and management of POS is fragmented and lacks coordination:

- The Planning Department determines the provision of POS.
- The Chief Executive in Council approves zoning for POS.
- 59% of POS is managed by the Leisure and Cultural Services Department (LCSD), while 38% is managed by the Housing Authority (HA).
- 3% of POS is privately owned and managed.

There is also low transparency among the public about the availability of POS. Only LCSD maintains a record of spaces under its management.

Furthermore, the Audit Commission has pointed out that while there are lands zoned as "open spaces", they are yet to be developed. If they were developed, the average POS per capita would increase to 3.39 m<sup>2</sup> per person, but a more thorough review is needed to analyse its distribution by district.

## RECOMMENDATION

Establish a **Public Open Space Commission**  
to oversee the development of POS holistically

Reinventing public space and enhancing public facilities is a key proposal in Hong Kong's 2030+ strategy to plan for a liveable high-density city. Research has also demonstrated that improvements in POS leads to more tangible improvements in quality of life for people.

The fragmented management of POS is hindering improvements in the supply, distribution, and management of POS. Establishing an overarching POS commission can facilitate cross-departmental collaboration between the different POS providers and stakeholders, and thus accelerate improvements in POS policy, design and implementation.

In particular, the POS Commission would:

- Upgrade existing POS and transform existing public facilities to meet community needs
- Create new POS, targeting dense, low-income areas with low POS per capita, including by developing vacant and underutilised land
- Increase the sociability, accessibility, and utilisation of POS through active community engagement

# Policy Proposal 2: Public Open Space (POS) Commission

## RECOMMENDATIONS

### Proposed Members:

The **Planning Department** would be ideally positioned to chair the POS Commission given their responsibility to principally determine the provision of POS in Hong Kong.

Other key members would include, **government departments/agencies** including the:

- Leisure and Cultural Services Department,
- Housing Authority,
- Architectural Services Department,
- Environment Protection Department, and
- Home Affairs Department.

The POS Commission would be mandated to engage the private sector, civil society and residents in all its activities through the **Public Participation Platform** as proposed in Policy Proposal 3.

### Proposed Terms of Reference:

1

#### Upgrade existing POS to meet community needs

- Review current state of existing POS under different Government departments and private organisations, including their upkeep, design, and accessibility.
- Redesign POS prioritised due to poor maintenance and low usage.
- Facilitate district-wide community workshops to:
  - identify POS community needs per district, and
  - determine root cause for low usage of specific POS.
- Engage owners of existing privately-owned POS to determine action plan to improve public awareness and accessibility of their spaces.
- Create a centralised database of all POS in Hong Kong that is accessible to the public and includes information on location, opening hours, types of facilities, events, and activities available at the space, and opportunity to provide user experience feedback.

2

#### Create new POS targeting dense, low-income areas with low POS per capita

- Review existing research and studies done by Hong Kong academic research labs examining design innovations to increase POS in dense areas, and incorporate into new POS development strategy.
- Establish legally-binding design guidelines for new privately-owned POS to improve public awareness and accessibility.
- Examine the potential of vacant and underutilised lands to be zoned as new POS.

# Policy Proposal 2: Public Open Space (POS) Commission

## RECOMMENDATIONS

### Proposed Terms of Reference (continued):

#### 3 Increase the sociability, accessibility, and utilisation of POS through active community engagement

- Conduct active community engagement throughout the life-cycle of a space, including in the design and usage of POS through the Public Participation Platform (refer to Policy Proposal 3).
- Collaborate with civil society to conduct:
  - Community engagement workshops for user feedback on POS design,
  - Tactical urbanism activities to introduce low-cost, temporary, innovative changes to POS to improve neighbourhoods in the long-term,
  - Social events at POS for the promotion of POS as venues for sports and recreation, and arts and culture, and
  - District-level social events at a designated POS per district every 6 months.





# Policy Proposal 3: Public Participation Platform



**TARGET:** Increase community engagement in POS projects by launching 10 pilot projects on the Platform by 2025.

## BACKGROUND

While the Government does have a public engagement process in place for new policies and initiatives, it limits engagement to partner organisations, advisory bodies, professional bodies, district councillors and other organised groups with vested interests. These groups are important to engage, but they do not always accurately represent the needs of the community, nor is there transparency embedded in the process.

Several studies have found that embedding community engagement and placemaking as a core component throughout a space's life, from design to governance, increases community attachment and usage of that public space. As such, introducing participatory processes for citizens in the development and governance of public spaces can help remove institutional barriers between the Government and public and build strong engaged communities and social cohesion.

As primary users of the space, the community also has a unique set of knowledge and expertise that can be leveraged to improve the quality of spaces.

## RECOMMENDATION

Establish a **Public Participation Platform** to enable active community engagement in the design, construction, and operation of public space projects

The online Public Participation Platform would formalise community engagement and increase transparency and accessibility in the design, construction and operation of public space projects to effectively serve the needs of the target community. The Government aims to upgrade and renovate 170 open spaces by 2025 – 10 of which can act as pilot projects for the Platform, when launched in 2023.

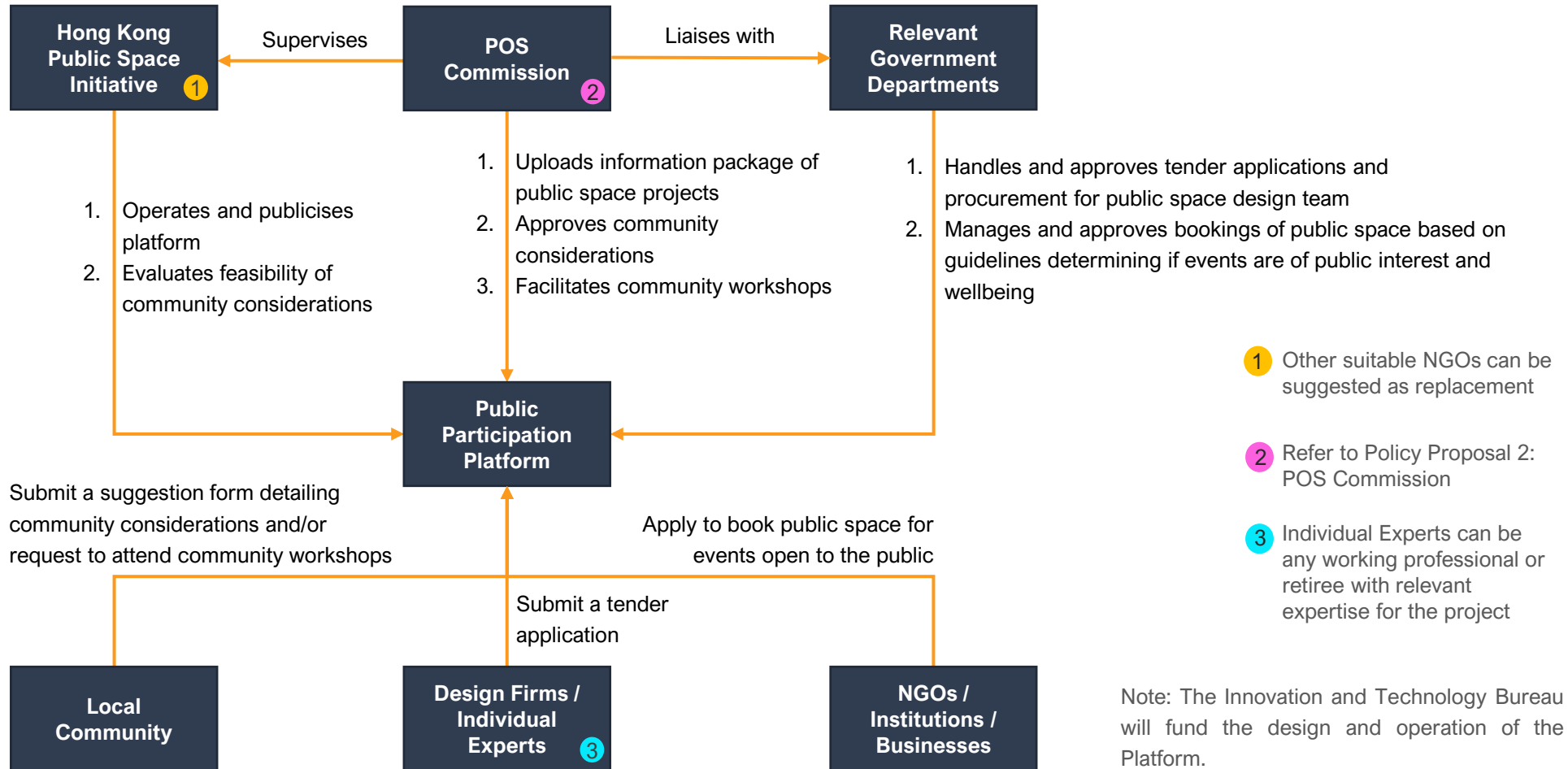
The Platform will also create new job opportunities by providing direct access to the design and construction of public space projects, bypassing complex tendering processes, and provide opportunities for NGOs, academic institutions and businesses to engage the broader community through events of public interest.

The non-profit organisation, Hong Kong Public Space Initiative, which aims to increase awareness about public space and its value, could be a potential strategic partner to operate and publicise the Platform.

# Policy Proposal 3: Public Participation Platform

## RECOMMENDATIONS

### How it works:



Note: The Innovation and Technology Bureau will fund the design and operation of the Platform.

# Policy Proposal 2 & 3: POS & Public Participation



## IMPLEMENTATION TIMELINE



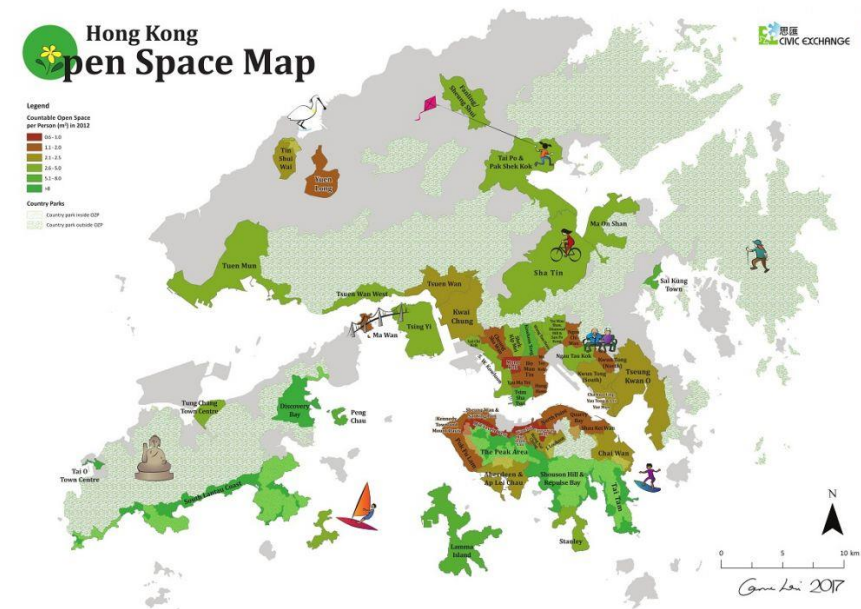
Note: All public consultation processes for POS projects should be addressed and completed within 4 months.

# POS and Public Participation

## SMART TOOLS TO CREATE A RESILIENT CITY

As has been proposed in Policy Proposal 2 and 3, smart technology and design can enable a gaps assessment of the current spatial distribution and user design of POS to create overall improvements in the sociability, accessibility, and utilisation of POS:

- Geospatial data to map out the current distribution of POS can be leveraged to increase public accessibility of POS, and to identify current gaps in the distribution of POS.
- The Public Participation Platform can gather data and analyse user experience of POS by monitoring and collating suggestions made by the community.
- Data can also be gathered to monitor the number of users per POS to gain insight on the sociability and accessibility of the space. It can be particularly useful in tracking the number of visitors at district-level events and other social events.
- Tactical urbanism activities to gather community insights and instigate change in the long-term design of POS.
- Smart and functional design (pictured on the right) to improve the experience of community users of POS, that is also age-friendly and disability-friendly.







# CONCLUSION



# Conclusion

A smart city can mean much more than just connectivity, technology and innovation. As outlined in the vision, a truly resilient smart city would allow people to live with dignity and live well by building an inclusive economy based on social cohesion and trust. Smart cities should be built around people, with technology as an enabler and government as a facilitator.

When individuals thrive, a city thrives. Hong Kong's long-standing socio-economic and environmental challenges cannot be ignored. By factoring health and wellbeing, inclusive economy strategies, future skilling and life-long learning, low carbon initiatives and a quality built environment in policymaking, we can ensure a high quality of life for all Hong Kong people, especially vulnerable socio-economic groups.

While catered for application in Hong Kong, the vision and strategies outlined in this report provide opportunities for cities all around the world, particularly those with regional similarities such as cities in the Greater Bay Area and ASEAN region, where collaboration can lead to stronger outcomes.

As Hong Kong moves forward from the social unrest and global pandemic, such a mindset shift in smart city development is crucial in planning for a brighter future for its people.







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