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**Response to the Public Engagement on Hong Kong 2030+
Towards a Planning Vision and Strategy Transcending 2030
Views from Business Environment Council 商界環保協會有限公司**

Over the last two decades, Business Environment Council Limited 商界環保協會有限公司 (“BEC”) has taken a leading role in advocating the business case for environmental excellence in Hong Kong. Our members are committed to actively engaging with the HKSAR Government (“the Government”) on a range of issues relating to the environment and sustainability.

BEC is an independent charitable membership organisation comprised of approximately 200 member companies ranging from major holding companies to small and medium-sized enterprises in Hong Kong. Views expressed in this submission are those of BEC, and are based on consultation with our members and our own research, and may not necessarily be the same as the position of each individual member.

General Views

BEC welcomes the HKSAR Government’s engagement on “Hong Kong 2030+”. We largely agree with the 3 building blocks and the conceptual spatial framework, but take the view that this forward-looking plan could be enhanced. It can be even more “visionary”. Just as Hong Kong in the 1990s or 1970s was a different world, we can expect Hong Kong of the 2030s to be very different again – much smarter, greener, and more liveable. Hong Kong 2030+ should also in our view be more closely aligned with other longer term goals including climate change and protecting our natural environment. The 5 principles we urge the Government to take on board are:

General Principles

- 1. Ensure the strategic plan is sufficiently ambitious to steer Hong Kong towards meeting the goals of the Climate Action Plan 2030+ and the longer term goals of the Paris Agreement – essentially reaching carbon neutrality in GHG emissions in the second half of the century.** The importance of all countries playing their part in

environmental stewardship is reflected in Building Block 3. However, Hong Kong 2030+ could do more to articulate and develop a vision of a Hong Kong which has net zero carbon emissions – a very different city, but one for which Hong Kong has excellent foundations – and encourage the development of an evidence base to define that future more clearly. Global studies¹ suggest this future will have ultra-low emission vehicles, mainly use public transport, be supported by a low carbon electricity grid, and buildings, industry and the urban environment will be low energy, making more of passive design approaches as well as energy efficiency technologies. Green finance instruments such as green bonds could be made use of to finance the development and implementation of systems and technology. Business sectors that are aligned with this vision will need to be encouraged by the Government, as well as improvements in existing businesses, and relevant steps to do so can usefully be laid down in Hong Kong 2030+.

2. **By the 2030s, Hong Kong should stand out as a healthy, liveable city as this is key to Hong Kong’s appeal to businesses and to people and can help ensure that we can manage an ageing population with longer lifespans.** To reflect this, Building Block 1 and the “smart, green and resilient” element of Building Block 3 should include actions that are about making smart and innovative developments the norm. Many of the actions needed are already listed such as enhanced pedestrian and cycling facilities, better air quality and leveraging green and blue assets, as well as continued revitalization efforts of degraded built up areas. But the Government should be more ambitious so that Hong Kong is an exemplar liveable city, drawing in talent and business. We recommend a number of actions in relation to the headings below:

- **Ensuring excellent air quality:** meeting WHO targets, through continued reduction of emissions from the power sector, marine vessels, and air and road transportation. To support this, Building Block 3 on infrastructure should emphasize rail, marine and road-based public transport, low emission private modes of transport like walking and cycling, and applying smart approaches to the use of road space rather than increasing road capacity.
Please see [BEC’s Roadside Emissions Taskforce Report](#) for further information on transport.
- **Addressing noise pollution:** noise reduction as well as noise mitigation designs and measures should be proactively incorporated in infrastructure (e.g. road

¹ International Energy Agency 2°C Scenario

surfaces), NDAs and as part of urban regeneration efforts. Measures with environmental co-benefits, such as double glazing windows and using vegetation as noise barriers, could be more widely used.

- Improvements to the public spaces: BEC welcomes the commitment to improving these spaces and leveraging green and blue assets. We are keen to see improvements in urban ecology through high quality landscape design, vibrant areas for social interaction and exercise such as Victoria Harbour as a world class asset, and a better pedestrian/leisure experience in the city including waterfront areas, with shading, shelter and engaging experiences (eateries, etc.). High quality recreational spaces, making use of Hong Kong’s rich biodiversity, such as at waterfronts and even through created public spaces over roads and railways, should be developed and made the norm insofar as is feasible.
- Excellence in design and operation of buildings: with regards to aesthetics, heritage, permeability/connectivity and urban ecology, increasing the extent of social interaction, maintaining the identity of different localities i.e. “place-shaping”, noise mitigation, and indoor air quality (which requires cross-bureaux collaboration to achieve multiple objectives). Buildings should contribute to their inhabitants’ health and well-being in a more pronounced and transparent manner.
- Improvements to our country parks: through better management plans, and stronger protection of terrestrial and marine areas that are rich in ecological and landscape value and support leisure activities. Improved pedestrian connectivity between urban areas and country parks with regard to the carrying capacity of the green spaces, is also supported. Also, see response to Question 11, and [BEC’s Submission on the Biodiversity Strategy and Action Plan](#) (BSAP).
- Develop a circular economy approach: with ambitious waste reduction efforts, thereby reducing the need for land intensive and polluting waste infrastructure.

3. **Through an outward-looking business-related vision of a “green, resilient and sustainable city” focused on cultivating human capital and business expertise, make the most of economic opportunities arising from urban development in the PRD and beyond.** As a leading city in terms of sustainable urban development – particularly in terms of compact urban-design and protecting natural assets, Hong Kong

has a competitive advantage which can be reinforced and enhanced by a strategy focused on deepening professional and other expertise in this field. Hong Kong 2030+ can help position Hong Kong as an exemplar in urban design, energy efficient buildings including the use of new materials and technologies, protecting and enhancing urban ecology and surrounding landscapes, and good waste management including recycling and reuse (the circular economy). To put in place the foundations for a high level of capacity and expertise related to sustainable urban development, the Government should also develop and enhance related commercial capacity such as in green finance, following through with the recommendations made by the Financial Services Development Council's Green Finance Working Group². The development of such expertise and human capital should be mirrored and supported by the deepening and expansion of higher education institution research and teaching in these areas. In this way, Hong Kong can leverage its position in the PRD, Belt and Road, and beyond to make use of this capacity (i.e. professional services connected with the new economy) as the economic opportunities arise from a greater interest regionally and beyond in sustainable cities.

To incorporate this goal into Hong Kong 2030+, the building block on “economic opportunities” should be amended to include a commitment to make Hong Kong a testbed for development, application and commercialization of these approaches and technologies. This outward-looking approach is similar to that adopted by Singapore which has developed human capital in water resource management and high tech cities. The plan should also provide for space for micro-businesses and SMEs (from “live –work spaces” to shared space buildings) that can contribute to the innovative approaches needed.

- 4. Minimise embodied carbon in infrastructure and buildings.** This aspect of a green and resilient city is partially developed in the strategy, and we recommend that a low embodied carbon strategy be enshrined as a goal in public procurement policy as well as Development Bureau/Buildings Department/Civil Engineering and Development Department regulations and guidance documents. This brings benefits of lower carbon emissions, more attractive spaces, and lower costs of construction. Specific actions would

² Here, we are referring to the recommendations presented in FSDC Paper No. 23 “[Hong Kong as a Regional Green Finance Hub](#)”, published in May 2016.

include:

- Using less of high carbon building materials such as concrete and steel, and sourcing from manufacturers who use low-carbon processes;
- Using new construction technologies such as prefabrication to efficiently utilize construction materials and to reduce construction waste;
- An emphasis on refurbishment and prolonging the lifespan of built infrastructure, including planning/designs in new buildings to allow for easy refurbishment later;
- Using physical infrastructure efficiently and optimally, through use of technologies and practices – which is the essence of “smart city”³, and making more of “ecological infrastructure” such as street trees and plants⁴, which provide ecosystem services such as addressing the heat island effect;
- Incorporating a requirement for assessing the greenhouse gas emissions associated with the construction and operational phase of building and infrastructure projects into government tenders would create a competitive driver for carbon reduction and ensure that new infrastructure/buildings are low carbon. This would further strengthen the existing requirements for assessment of embodied energy and life cycle energy that have already been incorporated into the HK-BEAM Plus assessment system. This could be supported by including supply chain emissions in relevant Government Green Public Procurement specifications.

5. **Embedding the value of the natural environment – both marine and terrestrial into policies and appraisal methodologies.** Though this is recognized in Building Blocks 1 & 3, in terms of landscape and regenerating environmental capacity, greater emphasis should be put on:

- Systematically identifying brownfield areas for redevelopment and optimising the use of existing built-up land⁵. Further evidence collection on potential use of brownfield land and existing buildings and premises, in a transparent way engaging business in doing so, is supported.
- Protection and enhancement of land of high ecological value (or land degraded in recent times to deter intentional degradation). Also see response to Question 11

³ A broader concept of infrastructure to incorporate investment in energy efficiency e.g. smart grids, energy efficiency retrofits can support this.

⁴ Natural systems have a significant role to play as “urban infrastructure”: <https://www.epa.gov/green-infrastructure/what-green-infrastructure>

⁵ [BEC's Submission on the Biodiversity Strategy and Action Plan](#)

below.

- Bringing nature into the city through a holistic approach to urban ecology, which means excellence in design of buildings (reviewing the architectural typology so it can support richer urban ecology), quality landscaping, and ensuring new hard infrastructure, including pavements, slopes and roofs, make use of Hong Kong's rich diversity in plant/tree species.
- Ensuring sufficient value is given to ecosystems/nature using natural capital and ecosystem valuation approaches. By this we mean, for example, taking on board the value of "ecological infrastructure" in addressing the heat island effect and air pollution, and the value of the marine ecology abutting the city, in appraising and designing works (in EIAs, SEAs etc.).
- Building developments and infrastructure projects should be assessed not individually but in the context of the other such projects that have occurred and may follow. This is important to avoid significant cumulative loss of ecosystem services, such as natural flood risk mitigation and access leisure space or damage such as water pollution, taking place on an incremental basis.
- Swift implementation of the actions set out in BSAP. We would like to see closer integration of BSAP objectives with Hong Kong 2030+.

BEC recognizes that a key challenge is the implementation of the proposals of Hong Kong 2030+. To this end, BEC suggests the establishment of a ministerial level inter-departmental steering committee to identify and oversee all the regulatory and administrative changes that will be required in order to achieve this vision, in a holistic and impactful way, in line with the HKSAR Government's strategies for the sustainable development of Hong Kong (e.g. climate change, waste and biodiversity).

We hope that our comments are of assistance to the bureaux/departments responsible for this wide range of policy areas, and welcome the opportunity to meet with relevant officials to discuss our recommendations in more detail.



If there are any queries, please contact our Chief Executive Officer, Mr Adam Koo at adamkoo@bec.org.hk or 2784 3950.

Yours sincerely,

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Annex: Questions in Consultation Paper

1) How would you rate the liveability of Hong Kong?

We rate this as good but potentially excellent. BEC is pleased that the Government has expressed its ambition to improve the city's liveability, particularly by setting a target with respect to the Mercer 2016 Quality of Living Survey. Hong Kong has characteristics of high liveability, such as an excellent public transport system, a reliable power supply infrastructure, large areas of country parks⁶, beaches and water front areas, some good public and private recreational facilities as well as high levels of safety and security. However, BEC considers liveability can be further enhanced and encourages an ambitious approach as set out in Principle 2 above.

2) In overall terms, how much do you agree with Building Block 1: Planning for a Liveable High-density City? It means to plan for a city with the following eight attributes: compact; integrated; unique, diverse, and vibrant; healthy; leveraged green and blue assets; enhanced public space and public facilities; rejuvenated urban fabric; and inclusive and supportive.

BEC agrees with the 8 attributes within this building block. We recommend some enhancements to the strategy:

- As part of the concept of compact multi-layered use of landspace, BEC urges further exploration and greater use of existing and potential underground space, particularly for uses such as road transport, car parking, waste collection, and waste management facilities. This could assist with improved street level air quality and leave more street level space for walking, leisure and social interaction, greatly enhancing public spaces. BEC broadly supports use of underground space, but takes the view that a case by case analysis to consider all the costs and benefits is important.
- In respect of an integrated city, reducing private car use, or at minimum ensuring the numbers do not rise, should feature in this section.
- Enhancement of public space along most of Hong Kong's urban waterfronts in a sensitive and appropriate way to enable improved pedestrian access and connectivity, including cycling facilities where possible, and made vibrant and safe through having a wide range

⁶ [AFCD Country Park and Special Areas](#)

of eateries and other activities, as well as making use of Hong Kong's wide range of native plant and tree species. Though each area needs to be unique, there is much to be learnt from the successes to date including at Kwun Tong and Sai Wan Ho/Tai Koo, as well as the studies and other experiences related to Victoria Harbour, which should be maintained as a world class asset after 2030. Detailed, site-specific studies which engage communities and local or interested businesses are recommended for other areas to ensure place-specific plans.

- Rejuvenation of the urban fabric section of this document should reference environmental objectives, specifically retrofitting buildings with the aim to improve energy efficiency, as well as reducing the embodied carbon from new construction, and installing district cooling where possible. For more information on BEC's views on reducing the carbon footprint of buildings – both new and existing, please see [BEC's Submission on the 2017 Policy Address](#). Furthermore, retrofitted buildings should be designed to a high standard to provide a safe and healthy environment for those who inhabit or work in them – particularly in terms of indoor air quality and noise pollution.

3) Please rate the importance of providing more land for public spaces and community facilities.

BEC welcomes the proposed increase of public space per person target. Such spaces should be properly distributed across the territory, potentially per head of population. An adequate amount of public spaces in particular green spaces, which add to our rich urban ecology, within built up areas is important within business districts as well as residential areas, to ensure a pleasant urban environment and leisure space for all age groups and occupations. Appropriate pedestrian access to natural open spaces like waterfront areas or country parks is also important in contributing to the open space needed for a healthy population. We recommend that the periphery of built-up areas be considered for new public open space: it is not always best suited for development (as suggested in Building Block 3) considering the benefits of adequate public open space and current lack of balance in its distribution. BEC acknowledges that some of these objectives are reflected in the BSAP, and would like to see some of these goals more clearly incorporated in Hong Kong 2030+. For more information, please see [BEC's Submission on the Biodiversity Strategy and Action Plan](#).

4) Please rate the importance of adopting universal design in residential flats in an ageing and inclusive society.

BEC views it as important that new residential unit designs provide for easy conversion into suitable units for the elderly, including universal access. Adopting universal design in all premises to enable this, especially residential flats, is essential.

An aspect of universal design that needs further consideration is how developments can best provide adequate and pleasant common space for those from different age groups to interact. This means easy access to services and shops at a sufficiently local scale and also to open space and leisure space. This common space could be in the private realm such as podium gardens, or in the public realm such as parks and waterfront spaces.

In addition to universal access, the concepts of smart homes and smart communities should be further considered and explored to cater to the needs of an ageing population. These may include automation of lighting and space conditioning in homes, systems that ensure excellent indoor air quality, as well as user-friendly access, safety and security systems.

5) Please rate the importance of stepping up the Government’s urban regeneration efforts and policies to address the large bulk of ageing building stock in addition to the continual reliance on private initiatives.

BEC gives this a high rating. It recognizes there are multiple objectives from urban regeneration efforts, from creating an energy efficient, low carbon city, to protecting the historical and cultural value of buildings, ensuring safety and decent housing conditions, improving indoor air quality, incorporating elements of universal access into buildings, and addressing embodied carbon from new construction. Also see our response to Question 2 above. We consider that there is a significant role for Government to play in urban regeneration considering the “public goods⁷” involved.

BEC supports a “boost to maintenance and management initiatives to extend buildings lifespan” as longer lifespans typically lead to lower environmental impacts. For more information on BEC’s views on reducing the carbon footprint of buildings – both new and existing, please see [BEC’s Submission on the 2017 Policy Address](#).

However, though we regard urban regeneration as opposed to new buildings as more sustainable

⁷ By which we mean, benefits accrue to the wider society, not the owner of the property.

in terms of not requiring quantities of carbon intensive construction materials and not generating so much construction waste, each case needs to be considered on the facts. In some areas, higher density new housing may be better in overall social and environmental terms.

6) In overall terms, how much do you agree with Building Block 2: Embracing new economic challenges and opportunities? It means to plan for adequate land for addressing existing shortfalls and future demand of economic land; to promote a diversity of economic sectors and quality jobs of a range of skills; to foster innovation and technology; to nurture/retain/attract human capital; and to provide adequate supporting infrastructure.

BEC strongly supports this building block, however we stress the importance of placing it within the context of sustainable development and the 5 principles outlined above. BEC suggests some enhancements to the strategy:

- Through supporting the development, testing and commercialization of environmentally friendly construction practices, buildings and technologies, the Government can support the development of human capital and expertise, gained from trialling and testing innovative concepts and technologies. Such development of human capital should also be supported and complemented by the advancement of higher education institutions in these areas, in terms of placing a greater emphasis on the research and development of innovative sustainable urban development approaches as well as providing education and training in these fields. Through a sustainability focused approach to human-capital, Hong Kong can embrace likely opportunities presented by its strategic location within the PRD area as well as the Belt and Road Initiative.
- Regarding land supply, sufficient space is needed to trial new approaches and technologies. The NDAs should be clearly identified as pioneer areas for test of innovative environmental technologies and concepts, but existing urban areas may be suited for trialling other technologies and practices such as energy efficiency retrofits, multi-layer use of landspace and urban cycling. BEC urges the Government to strive to position Hong Kong to become an exemplar in terms of implementation of smart and sustainable technologies and concepts.
- Space for SMEs and micro-businesses that can often be highly innovative is also welcomed.

- BEC recommends that the strategic plan seeks to prioritise those sectors consistent with the goal of bringing about a healthy, low carbon and environmentally friendly Hong Kong. It should also recognize that nearly all businesses will need to reduce their environmental footprint in the years to come.

7) Please rate the importance of providing more of the following types of land / premises to enhance the long-term economic competitiveness of Hong Kong. Prime office premises (e.g. Grade A Offices); General business premises (e.g. non Grade-A offices); Land for the innovation and technology industry (e.g. science park and industrial estate); Co-working spaces for start-ups; Land for special industries including: modern logistics centres, data centres; Workspaces for creative industry; Facilities for Meetings, Incentive Travel, Conventions and Exhibitions (MICE); Facilities for alternative tourism (e.g. ecotourism, cultural tourism, heritage tourism, sports tourism); Others.

BEC is not in a position to say how much more land is needed for each of these uses. Instead it takes the view that prior to providing more land and developing new premises, the Government should assess the demand for the various land use types and rezone land or convert existing premises to other uses as needed – taking into account the land use needs by “sunset” industries as well as allowing for new economic demands. This is to minimize the social and environmental impacts caused by new developments. To this end, the Government should facilitate the revitalization and conversion of existing under-utilized industrial buildings to other uses by removing minor regulatory barriers, as well as putting forth a plan to expedite the process. For more information about land supply, please refer to the response to Question 11.

There are two sectors not considered in depth in Hong Kong 2030+ for which we take the view that more land may be needed, though at least in terms of the latter, minimum impact may be had on the area. Firstly, for the continued development of the local waste management and recycling industry, having regard to the goal of resource efficiency and an eventual circular economy. Space to support collection and innovative technologies e.g. organic waste treatment facilities, are needed. Secondly, there may be opportunities for ecotourism though this requires further study as eco-tourism is by definition, small scale low environmental impact tourism, a new approach for Hong Kong. It is possible that lodges or campsites can be set up that create jobs and increase our attractiveness as a tourist destination. But any ecotourism-related development on or near green and blue assets should be mirrored by stringent restrictions and regulations, to

avoid imposing unnecessary impacts to the natural environment and should in fact seek to enhance the natural environment and local ecosystems. Development of ecotourism can allow for the development of expertise, which may be complex, from waste water recycling, low energy buildings, protecting biodiversity, and rainwater capture, which will help leverage business opportunities in other countries.

8) In overall terms, how much do you agree with Building Block 3: Creating Capacity for Sustainable Growth? It means the adoption of a vision-driven capacity-creating approach to plan sufficient and timely development capacity to meet various social and economic needs, to provide maneuvering spaces to improve quality of living, and to cater for unforeseeable opportunities and challenges, and at the same time to enhance the environmental capacity for the sustainable growth of Hong Kong.

BEC agrees with the broad aims, particularly the smart, green and resilient city strategy, but takes the view that the limits imposed by sustainable development need to be clearly set out. We also take the view that an outward-looking growth plan or a plan that focuses on certain sectors may not require considerable additional landscape to enable growth. We recommend further studies to identify possible sectors for Hong Kong as well as developing a better understanding of “sunset” sectors which means that rezoning rather than new landscape is needed.

The plan should bring out in the context section what sustainable development involves. These factors, and in fact opportunities, include:

- As to climate change mitigation, the targets in the Climate Action Plan 2030+, and clarity as to the consistency and connection of the two plans, including the parameters within which Hong Kong must operate in terms of carbon emissions. Please refer to Principle 1 above.
- As to climate adaptation and resilience, a clearer description of the expected risks would help ensure a common understanding of what is required beyond a “low carbon” city. For example projections and implications as to rising sea level and water resource risk could usefully be noted. The sea level figures shown in Hong Kong 2030+ describe only what has occurred to date, rather than what’s projected with climate change which needs to inform building design and development. The plan requires more enhancements to take on board what is intended in relation to managing urban drainage and flood control, which

may mean avoiding development in some areas, as well as measures to address increased extreme weather events. Please see [BEC's Climate Resilience Roadmap](#) for our explanation of the risks. The potential to use natural ecological infrastructure should also be taken on board and studied in further depth.

- Design principles and appraisal methodologies e.g. for EIAs, SEAs, also need to be reviewed to ensure that for example the benefits of reducing air and water pollution, as well as the value of natural green spaces and marine and terrestrial ecosystems, to ensure the ecosystem services they render in terms of biodiversity, food, clean water, clean air, and recreation are fully taken on board. Please refer to Principle 5 above.
- BEC would like to see a continued clear commitment to protect green space and country parks, which offer high quality rest and relaxation space. Further studies to understand the limits of the carrying capacity of key currently-undeveloped areas, such as South Lantau, are recommended to avoid irreversible damage from excessive traffic, tourism, and development.

9) Under the above vision-driven capacity-creating approach, how much do you agree with the creation of a reasonable land reserve such that unforeseeable land use needs could be responded to swiftly if required?

BEC considers that before identifying new land for developments to meet unforeseen demands, the Government should prioritize measures to:

- Ensure that spaces in developed areas and brownfield sites are being utilized optimally, giving consideration to the currently foreseeable demand for various types of land use.
- Ensure that existing buildings are being utilized or occupied optimally, taking on board longer term trends. Studies should be carried out to examine the trends in terms of need for retail and office space. Long-term trends like hot desking and electronic commerce, for example, may reduce commercial office space and retail space required.

Overall, BEC recognizes the need of land reserve for currently unforeseeable land use needs, such as for potential new businesses. However, we stress the importance of robust figures and projections to support the proposed land reserve, and clarity as to how land reserves will be managed i.e. mechanisms for determining when development should be allowed on the land

identified. Certainty, or at the minimum more clarity, in respect of the status of these land reserves is essential for the business community.

10) Please rate the importance of enhancing the capacity of the following aspects. Land for meeting housing needs; Land for open space and government, institution and community (GIC) facilities to meet the needs and aspirations of the population; Land for meeting economic needs; Increasing supporting transport and other infrastructure capacity; Enhancing and regenerating environmental capacity (i.e. biodiversity enhancement and environmental improvement); Others.

BEC values land for all these purposes, but cannot comment on the amount of land needed for housing, business or these other needs. We affirm the importance of detailed studies to look at how to optimize the use of existing space. Moreover, we stress the importance of studying the various means to make the most effective use of transport infrastructure e.g. smart traffic management, electronic road pricing, rather than increasing road space, considering land scarcity and the social value of green space. On this topic, Please see [BEC's Roadside Emissions Taskforce Report](#) and refer to the response to Question 12 for more information.

Regeneration of environmental capacity should be regarded as having a high social value, considering its recreational value and the wider range of ecosystem services it provides. Please see [BEC's Submission on the Biodiversity Strategy and Action Plan](#) for further information.

11) Please rate the importance of the following land supply sources to provide more developable land. Strategic growth area (i.e. sizable, comprehensively planned new towns or districts); Urban fringe (i.e. greenfield sites with low ecological/buffering/recreation values at the edge of urban area and new towns); Infill of built-up area (i.e. vacant or under-utilized land within built-up areas); Others.

BEC takes the view that infill land and other brownfield land (such as areas that were previously landfill or industrial sites) should be priority for development, but subject to the importance of urban open space for recreation and social interaction as well as the need for a case by case approach to potential greenfield development rather than a rigid one size fits all approach. To this end, BEC urges proactive, systematic, and transparent efforts to continue to identify and publicly list brownfield land for development, while engaging businesses in the process for so doing. BEC welcomes the Study on Existing Profile and Operations of Brownfield Sites in the New Territories,

and looks forward to the results of the survey being taken on board.

BEC urges the Government to explore innovative methods for development, considering current pressures; for example, some spaces above roads may be suitable for public open spaces and it may even be possible to build commercial space or housing above roads, railway lines, etc.

BEC recognizes that some greenfield land, especially where of low ecological and landscape value, may be suitable for sensitive development. In some cases, the impact of development on the natural environment can be reduced by providing for land of high ecological value to be protected in exchange for development to a higher plot ratio on land of lower ecological value. Furthermore, while BEC acknowledges its complexity, we support the exploration and development of transparent and systematic process of non-in-situ land exchange to conserve areas of high ecological value, and other areas with high preservation value, while freeing up areas of lower value for other uses.

Any development on greenfield land should be subject to stringent restrictions to ensure adequate protection of landscapes and local ecology, and that development is appropriate and carried out in a sensitive way.

12) How much do you agree with the following means to reduce new requirement for transport infrastructure? Boost the usage of public transport; Curb private car growth; Reduce private car use; Promote walking; Promote non-motorised modes of transport (e.g. cycling); More balanced spatial distribution of homes and jobs; Others.

BEC is pleased to see the continued expansion of the MTR, and affirms its support for railway to be the backbone of Hong Kong's public transportation system. We also strongly support the bus network and consider that this can be improved to reduce pressure on the MTR. It can also be made more attractive to encourage those who use private cars to use buses. This can be done through implementing bus lanes and bus priority junctions as well as improvements in buses themselves. Hong Kong has very few bus priority lanes and no provision for bus or tram priority junctions. In 2030 and beyond, we would expect public transportation to be the dominant, preferred mode of transportation.

BEC takes the view that private vehicle numbers should at least be held constant if it cannot be reduced, considering the increase of 4.8% a year at present. We support reducing car use and

at minimum curbing its growth. Public transport can help facilitate this, as can other non-motorised forms of transport.

- Walking has considerable potential as a means of commuting, and not only for the first and last mile. Hong Kong 2030+ should set out a clear vision of all-weather walkway connections, improving the street level experience by introducing shading of pavements and safer junctions and pedestrian crossings, as well as longer walking routes for example along urban waterfronts.
- Cycling also has a role to play; routes and shared space should be designed with a view to establishing cycling as a mode of commuting, not solely for recreation. On this note, BEC supports the continued expansion of cycling tracks in the New Territories and in NDAs. Furthermore, the Government should seek to set a sufficiently ambitious target in this regard, and in the meantime pilot urban cycle routes to develop safety protocols and the best ways of sharing space in a dense city. Hong Kong has more than 222 km of public cycling tracks. However, Singapore, for example, has 240 km⁸ of cycling paths at the moment and aims to develop a comprehensive cycling network over 700 km in length by 2030. By 2030, it should be possible for cycling facilities – shared space or segregated routes – to be developed across Hong Kong, not only in the NDAs.

Prior to constructing new infrastructure, optimizing existing roads and infrastructure should be given priority. These resources should be used in a “smart” way. To this end, Hong Kong 2030+ should take on board the potential from:

- Shifting the use of road space so that more is given to buses and trams. In this way, we can increase the average speed of the buses for passengers and the speed of movement for the majority of people.
- Expediting the implementation of electronic road pricing systems and other traffic management systems.
- Better routing and logistics systems for commercial vehicles and buses.

Please see [BEC's Roadside Emissions Taskforce Report](#) for more information.

In addition, a multi-modal integrated approach should be considered, which may mean

⁸ <https://www.mot.gov.sg/About-MOT/Land-Transport/Cycling/>

supplementing existing routes using water-based transport instead of road transport. At present some such routes exist, but there appears to be potential for more water-based transport in particular with growing centres of population in new towns such as Tseung Kwan O and Kai Tak.

13) How much do you agree with the following focuses of the proposed smart, green and resilient (SGR) city strategy? Minimise demand for and use of land resources; Promote low-carbon smart living; Promote low-carbon smart economy; Promote smart mobility; Promote integrated smart, green and resilient infrastructure; Others.

BEC is broadly in support of these objectives but would like clearer more precise goals, as well as concrete plans to achieve these goals, in this respect.

We see smart systems as a means towards a city with good air quality and low carbon emissions, for example reducing the need for extended road transport infrastructure and better usage of the existing road network. Smart grids and smart meters can support a low-carbon energy efficient future, also helping put Hong Kong businesses in a good position in other markets through expertise in utilization of green technologies. Smart use of data for example in relation to flood risk can also increase resilience. “Smart city” is a means to an end, and these ends need to be defined more clearly and align with community preferences.

BEC takes the view that the Government can and should help promote a low-carbon economy through its strategic plan – supporting a low carbon fuel mix, supporting demand-side reduction and addressing embodied carbon. For more information, please see [BEC's Submission on the 2017 Policy Address](#). BEC also acknowledges the importance of higher education institutions in the development of “smart city” approaches and the cultivation of human capital in these fields. Hence, higher education institutions should be supported and encouraged to advance in these areas.

In addition, we support a resilient infrastructure as our study shows that even with action to mitigate emissions there will still be some inevitable future impacts including sea-level rise and more severe and extreme weather events. We would like to see a commitment from the Government to assess this longer term risk, put the right guidelines in place, and provide information to the level of detail and granularity needed, including for example detailed risk maps for different parts of Hong Kong, so businesses can assess specific risks more accurately. Please

see [BEC's Climate Resilience Roadmap for Business](#) for further information.

BEC recognizes that many of the challenges in this respect are in the implementation, and we hope to see implementation plans developed shortly to help take Hong Kong 2030+ proposals forward.

14) How much do you agree with the following components of the conceptual spatial framework in meeting the future land, transport and environmental needs and demand? Preserving conservation areas; One Metropolitan Business Core (Comprising the traditional Central Business District (CBD) at and around Central, CBD2 at Kowloon East, and CBD3 at the East Lantau Metropolis); Two Strategic Growth Areas – East Lantau Metropolis, New Territories North; Three Axes – Western Economic Corridor, Eastern Knowledge and Technology Corridor, Northern Economic Belt; Transport Corridors – NWNT-Lantau-Metro Transport Corridor, North-south Transport Corridor between NENT and West Kowloon, Extended North-south Transport Corridor from West Kowloon to East Lantau Metropolis

BEC strongly supports the conservation principle stated in Hong Kong 2030+, and refers the Government to [BEC's Submission on the Biodiversity Strategy and Action Plan](#) in this respect.

As for the East Lantau Metropolis (ELM), BEC stresses the importance of robust consideration of cost and benefits, including alternatives for example incremental development around existing CBDs.

If the ELM and/or NTN strategic growth area proceeds, BEC is pleased that it is intended that these areas will be low carbon and sustainable. However, we encourage a commitment to ensure that the developments are truly exemplary, for example being car free and with ultra-low emission homes and commercial space. This would take on board the value placed by society on clean air, the objectives of the Paris Agreement and Hong Kong's related carbon emissions reduction targets, and other environmental pressures e.g. to reduce waste and protect biodiversity. A further study would be needed in this respect in due course. By using these new areas as testbeds for innovative technologies, concepts, and sustainable urban designs, Hong Kong can also develop the human capital and competitive advantage that needs for the future.

As to Lantau as a whole, BEC supports the “development in the north, conservation for the south”

principle, and would like to see a clear commitment to this principle. This includes avoiding indirect impacts on South Lantau from development in the north, such as potentially increased traffic and people flow, for example, which may be incompatible with South Lantau's carrying capacity.

The potential conflicts between different uses – including residential, conservation space and transport – need to be taken on board in Hong Kong 2030+. The proposed ELM will be located right under the main departure and arrival flight paths of the airport's three-runway system (3RS) in the night period (0000-0600) due to EPD's approved noise mitigation measures in the 3RS EIA. Specifically, 95% of night arrivals in runway 25 direction will need to overfly the west Lamma channel for landing, and all night departures in runway 07 direction will need to overfly the west Lamma channel after takeoff. Furthermore, as a development strategy for beyond 2030, Hong Kong 2030+ should cast some views about the city's aspiration for the airport beyond 2030, and the city's vision of projected future airport expansion beyond that date.⁹

The new transport infrastructure required by the proposed ELM development would inevitably change the traffic flow of North Lantau Highway and the associated air quality impact in North Lantau, such as Tung Chung and Siu Ho Wan. Though the 3RS EIA revealed that the cumulative air quality impact in these areas is marginal compared with the Air Quality Objectives, the Government should, in planning the new transport infrastructure for ELM, review the cumulative air quality impact in the proposed development in North Lantau, by taking into account the associated traffic emissions.

BEC supports the Government's proposal of Transport Corridors that are primarily based on railway, which reduces reliance on road-based transport, does not encourage private vehicle use, and hence leads to improved roadside air quality.

⁹ Planning Department's Hong Kong 2030 study from December of 2003 made reference to Airport Authority's then published MP2020, under the planning direction of "enhancing economic competitiveness", to highlight the need to address eventual saturation of 2RS beyond 2020 by advanced planning of airport development. Please see page 12 of [Hong Kong 2030](#).