



28th September 2017

Office of the Government Chief Information Officer
15/F, Wanchai Tower, 12 Harbour Road, Wan Chai, Hong Kong
Email: info@smartcity.gov.hk

Dear Ir Allen Yeung, JP

Submission on the Public Consultation on Hong Kong Smart City Blueprint
Views from
Business Environment Council Limited 商界環保協會有限公司

We are writing to provide our comments on the Report of the Consultancy Study on Smart City Blueprint for Hong Kong released for consultation.

As you may know, over the last 25 years, BEC has played a leading role in advocating the business case for environmental excellence in Hong Kong. Our members are committed to actively engage with the HKSAR Government on a range of issues relating to the environment and sustainability. Our ongoing work reflects the increasing interest in Hong Kong's business and finance world in supporting environmental protection and a low carbon economy.

We are a membership organisation with over 190 members spanning major listed and multi-national companies as well as small and medium-sized enterprises, from a wide range of sectors. We also have affiliate members from trade associations, NGOs, and academic institutes. Views put forward in this submission represent the views of BEC as a whole, and may not necessarily correlate with the views of individual members.

We are strongly supportive of a continuing transition to a smart city, and recognise the progress made to date, including through the Study on Smart City Blueprint ("the Study"). Considering the pace at which technology changes and the role that will be played by business as well as finance, research institutes and academia, we stress the importance of an excellent high level plan rather than a comprehensive blueprint. This is not to say that some details should not be included, but that the overarching key aspects of the framework are of greatest importance. We set out below

our recommendations mainly of a general nature and a few specific points on the actions included in the study the Blueprint.

Recommendation 1: Blueprint should provide clarity as to goals and vision

We note progress in developing much-needed clarity as to the aims behind the Blueprint as well as a vision of a smart Hong Kong. However, we would like to see greater clarity in this respect, and recommend the following:

- **Goals:** the goals that underlie becoming a smart city are in the Mission section of the smart city vision. We would like to see these goals moved upfront into the Objectives (see paragraph 2.2 of the Study) as in our view being “smart” is a means to achieving certain goals, not an end in itself. It is this clarity as to the goals of a smart city that gives direction to business and civil society. Having such clarity will also aid Government to make choices: in some cases caution may be desirable, for example in relation to artificial intelligence, and some technological approaches may be more desirable than others.
- **Vision:** with the world approaching various planetary limits we take the view that the vision statement (paragraph 2.4.2 of the study) should be in clearer terms, and reference the environment. We suggest wording along these lines:

“Smart Hong Kong – Embracing innovation and technology to build a strong economy, bring quality living, protect and enhance our environment, and make HK a well-known Smart City.”

- To reflect the point we make on the Goals, the third point under the Mission, which as stated earlier should be formulated as a goal within the objectives of a smart city, needs enhancement to ensure clarity of purpose, with our suggested wording shown below:

“For the benefit of current and future generations, and as a member of the global community, Hong Kong will be more environmentally friendly: by transitioning towards a low carbon and circular economy, consuming less resources, minimising pollution, and protecting nature and biodiversity, whilst maintaining its competitiveness, efficiency, liveability and vibrancy.”

Recommendation 2: Break down silos, explain interconnections and ensure inter-bureaux/departmental coordination

We note the 6 components of the smart city set out: smart mobility, smart living, smart environment, smart people, smart government, and smart economy. There is an important relationship between these components with some being conducive towards other objectives. For example, smart mobility is in part a means to achieving a smart environment, though also

about ease of movement. So making decisions on mobility without regard to the environment will be highly detrimental. Similarly smart living in the sense of energy efficient living or good management of waste helps to achieve a smart environment. We recommend a greater emphasis of the interconnection of the various components, with a systems map that shows the interconnections, to avoid a silo approach which is a real risk and would hugely reduce the benefits of a smart city blueprint.

To ensure a co-ordinated approach across the Government, better structures and linkages are critical. We make the following points:

- The importance of a single high level authority, led by a very senior official to champion the smart city agenda and ensure that all bureaux/departments in particular ENB, FHB, DevB, THB, CEDB, ITB, as well as FSTB are behind this and collaborate on achieving this agenda. In other words, we recommend an enhanced version of the Blueprint's proposals for co-ordination, which we support namely a Smart City Steering Committee, Smart City Programme Office, and cross-departmental project team, as we consider this to be vital to ensure co-ordination and timely implementation.
- The Blueprint should make a reference to alignment with other long term plans and targets, and to establish links with other steering committees including those on climate change and waste.
- To help break down these silos, whilst also bringing in new ideas and constructive challenge, the Government should put in place a cross-bureaux forum for systematic and regular dialogue with businesses and other stakeholders.

Recommendation 3: Blueprint should set out roles of different bodies

Considering the number of bodies essential to the direction and implementation of making Hong Kong a smart city – the Government, business, finance, research institutes in particular – clarity as to their respective roles is vital.

As to the Government's role, in our view this should be:

- Giving firm but broad direction, leaving the specifics to business and the community, and providing structures for receiving new ideas. The experience of other cities is that some top-down direction is important combined with Government setting a framework. In other words, the Government's role is "a referee" with a critical role in kick-starting the process and facilitating or enabling change.

- In some cases a clear policy and a regulatory framework that provides certainty and consistency is critical for business action or investment. For example, clear direction on car sharing can help ensure the insurance sector provides the necessary insurance product.
- Where “public goods”¹ are involved, Government investment, finance, or requirements as to the infrastructure needed will be essential. For example, creating better bus interchanges that facilitate inter-modal transport, and support for new technologies that need to be tried and tested before reaching maturity.
- Developing legal frameworks or supporting the development of protocols for example on data sharing to support a “smart city”.
- Draw up a plan and set of policies relating to acquiring the “human capital” needed for a Smart City which should cover STEM at schools and Universities, life-long learning, as well as policies for attracting people from overseas with the right skills and expertise.

As to the role of business, this is in developing ideas and implementing them. Individual citizens, community groups, NGOs and academia can offer ideas and constructive challenge. Providing structures and a framework for smart city ideas to be refined, trialled and implemented is for Government. We would like to see a commitment to pilots that will enable not only trialling of ideas but for these different roles to be better understood.

Recommendation 4: Fostering a culture of innovation and trialling

The Blueprint should explicitly recognise that technology and practises change quickly. It is helpful to set out desired practice and indeed in some cases decisions need to be made on investing in relevant infrastructure e.g. smart grid, EV charging. However, what is most important is to have an overarching framework in place to foster a culture that is dynamic and seeks out innovative approaches and technologies. The key building blocks are:

- **Permissive rather than prescriptive:** the framework should be flexible, focusing mainly on goals and allowing new ideas to come forward. Ideas and actions cannot all be anticipated in advance.
- **Bottom-up and transparent approach:** The community and businesses can be a rich source of ideas. Establishing a framework that allows these ideas to come to the fore, as

¹ A public good is a product that one individual can consume without reducing its availability to another individual, and from which no one is excluded. Economists refer to public goods as “non-rivalrous” and “non-excludable.” The private sector has little incentive to provide such goods voluntarily.

well as for projects to be tailored to the needs of the community. We regard an open and collaborative approach to pilots so that new proposals for pilots can be put forward and others can input suggestions into these pilots, as well as learn from them, as central to this framework.

- **Funding for pilots and policy framework to support scaling up:** it is important that funding is made available for pilot projects, and these need not be tried and tested approaches². The current Innovation and Technology Fund is focused on research and development, but we take the view that funding of actual trials or pilots is of greater importance. For upscaling, the right policy framework is necessary. Capital funding may not be sufficient or appropriate for self-sustaining and financially viable businesses.
- **A healthy start-up ecosystem:** this involves providing physical space and encouraging finance for start-ups, as well as developing entrepreneurship skills.
- **Learning from pilots:** this is critical to success and we note the six pilot proposals. However, provision is needed for learning from pilots – to optimize the value of these projects and develop solutions for upscaling and self-sustainability.
- **Defined goals and timelines set to prevent delay:** the Blueprint should emphasize achieving milestones with pace through setting clear goals and timelines.

Recommendation 5: Smart mobility

We are broadly supportive of the actions proposed, but have some specific points in this area of importance in terms of Government action:

- As smart mobility is in part about smart decisions on infrastructure needed, considering the high land, carbon and noise costs of road building, we take the view that the Blueprint should **commit to rail** as the default means of land-based transport (other than where movement levels do not support it). The recent Tung Chung plans suggest roads however are still regarded by the Government as the default means of transport. Where rail is not appropriate, the Blueprint should be clear that choices may need to be made between different modes of road transport and ferry which can also be a sustainable alternative.
- Moving to **electric & hybrid vehicles** is a critical part of the pathway to a carbon neutral economy, and an ambition to find the best way to achieve this in terms of policy and investment should be included.

² The approach for example under current Recycling Fund which requires processes to be tried and tested may in fact stifle innovation and smart city development.

- **Managing demand for transportation** through a combination of measures such as electronic road pricing, which needs to be implemented swiftly, staggered work start times, and provision for video-conferencing and working from home.
- **Improved intermodal transport**, which can increase the efficiency of movement of people and goods, through aggregating transportation data, both real-time and historic, across all modes of transportation. Investment in the physical infrastructure for a one-stop intermodal/multimodal transport system as well as a system for collecting reliable real-time city wide data is essential to support this.
- Support **improvements to private vehicle parking systems** with real time information as to parking availability in private car parks and on the street as well as electric vehicle charge points, plus “park & ride”³ schemes which can help reduce congestion in certain areas e.g. Sai Kung District. Improvements on this front should be aligned with this underlying goal of controlling private vehicle ownership and managing vehicular movement.
- Encourage the development of **the sharing economy** for example carpooling and shared EV chargers.

Recommendation 6: Make sustainable behaviour a central part of smart living

Energy efficient living, walking and cycling, and sustainable consumption are all part of smart living. They support well-being in terms of health, comfort and cost, and should be referenced in this section. The Blueprint should recognise that smart behaviour may be supported by:

- Technology and data which have a vital function in enabling such change, for example information as to energy consumption patterns through a smart grid.
- Flexible and mobile working practises e.g. dress codes and working from home.

Recommendation 7: Enhance the section on smart environment

As set out above, clarity as to outcomes is critical for the Blueprint to support effective concerted action by so many parties. An environment that continues to support us and future generations must be one of those outcomes. We would like to see this section improved with:

- A clear list of environmental objectives: climate change, energy efficiency, minimizing pollution, protecting nature and biodiversity, resource efficiency/good waste management (towards a circular economy), and water management.

³ Provision of parking space at a location at which the passenger can then access public transport. E.g. transport nodes in Sai Kung area.

- Proposed approaches set out with reference to the aims that they relate to, and prioritised in terms of impact. At the moment the Blueprint puts aims and actions together with insufficient clarity as to the objective (e.g., “intelligent buildings”) and includes actions which may not be that significant (e.g. “neon signs”). We also suggest the following initiatives be added:
 - Stricter regulations on retrofitting buildings to speed up the transition to a low carbon economy, building on policy measures to date encouraging action.
 - Resource efficiency including smart waste management systems to reduce waste, for example, reduce overstocking of perishable goods, and improving systems for collection and transportation of waste.
 - Distributed renewable energy, though this requires consideration of competing landscape needs.
 - Sensors and data – also of relevance to this field.

In our view, some of the items included here and in other sections are minor. The Blueprint would be most impactful if the most important initiatives are listed and those which require Government action. Others can usefully be set out in an annex for information. This relates to our point as to the role of the Government – as an enabler and facilitator rather than implementer.

Recommendation 8: Adopt a positive approach to big data and open data

We welcome plans to make more datasets open to the public and to support data analytics capacity. We take the view that big data and open data is central to a smart city, as it supports innovative data-driven services, such as inter-modal transport services and energy management.

- This section of the Blueprint should therefore set out a more positive approach to capturing the benefits of open data, not only a commitment by the Government to share datasets, unless prevented by privacy or commercial confidentiality issues, but also steps to encourage and to support businesses to share data on such portals. However, concerns as to personal privacy and commercial confidentiality are valid and in some cases sharing will not be appropriate and in others provision is needed to address concerns for example through the development of protocols.
- To make the release of data effective, we would like to see a single data portal and release of datasets in as usable a form as possible.

We look forward to liaising with the relevant bureaux/departments in the coming months to



discuss our recommendations and to liaise with them on the detail of policy development and implementation. We have a proven record in convening dialogues on important topics and can bring businesses together, and will be organizing a conference on transitioning to a smart and sustainable city.

If there are any queries as to this submission, please contact our Chief Executive Officer, Mr Adam Koo at adamkoo@bec.org.hk.

Yours sincerely,

Richard Lancaster
Chairman
Business Environment Council Limited