



5 November 2015

The Honourable Leung Chun-ying, GBM, GBS, JP
Chief Executive
Hong Kong Special Administrative Region
Chief Executive Office
Tamar, Hong Kong
E-mail: ceo@ceo.gov.hk

Dear Chief Executive,

Submission on the 2016 Policy Address

Views from

Business Environment Council Limited 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 a charitable membership organisation, currently with about 200 member companies that span across 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 but may not necessarily correlate with the positions of individual members.

This year our Policy Address submission is arranged to cover BEC's core advocacy areas: (1) climate change; (2) energy policy; (3) transport and logistics; (4) waste management; (5) natural capital including biodiversity, water and air; (6) Green Business and Finance; (7) environmental, social and governance ("ESG") reporting and performance; and (8) the Harbourfront Authority.

This submission is structured into two parts:

1. Overview of key challenges and summary of recommendations for 2016
2. Detailed recommendations covering BEC's core advocacy areas

BEC looks forward to working constructively with the Government in taking our policy recommendations forward. Indeed, the business community is ready to act and work with the Government in finding appropriate solutions to the environmental issues we continue to face now and in the long term. BEC is keen to support stronger policy development for a greener and more sustainable Hong Kong. If there are any questions or concerns in regards to the content of this submission please contact our Chief Executive Officer, Ms. Agnes Li, at agnesli@bec.org.hk or 2784 3950.

Yours sincerely,

JOHN CHAI

Prof John Chai
Chairman
Business Environment Council Limited

cc Ms Agnes Li, CEO, Business Environment Council

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BEC 2016 Recommendations

Overview of Recommendations

This is a summary of BEC's recommendations to the Government, with reference to the key environmental challenges faced by Hong Kong. It covers BEC's core advocacy areas: climate change, energy, transport & logistics, waste, natural capital (including water, air and biodiversity), Environment, Social & Governance reporting and performance, ("ESG reporting and performance"), Green Business and Finance, and the Harbourfront Authority.

A. CLIMATE CHANGE

Key Challenges

- What Hong Kong ("HK") should do to play its part in combating climate change, given the current global trajectory, China's commitments on climate change, and its own potential leadership role through the C40 group of cities.
- Designing a policy framework that supports reduced emissions and greater resilience on the part of business

1. Put in place a long-term stable policy framework on climate change, to enable action by business.
2. Engage business in considering how best to incorporate the key elements of China's climate policy, which may include setting mid to long term carbon reduction targets, and ways to achieve them such as carbon pricing and carbon offsetting by renewable energy projects.
3. Establish a cross-departmental governance structure, to monitor progress on combating climate change and adaptation/resilience.
4. Continue to work on a regional level with Guangdong province, moving beyond sharing of information to put in place cross-border initiatives for example on standards for resilient buildings.

B. ENERGY

Key Challenges

- Reducing the carbon intensity of the fuel-mix of HK, which despite improving with the shift to gas is still heavily fossil fuel dependent, whilst ensuring stability of supply and affordability.
- Developing a set of policy measures to support the implementation of the Energy Saving Plan on green buildings. This policy framework needs to create the right incentive structure for new and existing buildings to be highly energy efficient, addressing the weak incentives in tenanted properties and on the part of developers, as well as the capital costs involved.



The Fuel Mix

1. Continue to lower the carbon emissions of the electricity grid through a multi-pronged strategy which includes: (a) incentives for renewable energy ("RE") generation by the electricity companies; (b) allowing grid access for clean distributed energy on fair and reasonable terms and in a manner that ensures safety; and (c) considering opportunities for importing clean, low carbon energy (including nuclear and RE) from Mainland China provided such clean low carbon energy meets the 'additionality' and reliability tests.
2. Provide a policy framework that can encourage and promote diversity in sources of supply of Liquefied Natural Gas ("LNG") including policy support for the construction of a LNG terminal, to facilitate the move to more natural gas.

Demand-side Management

3. BEC welcomes the Energy Saving Plan and the opportunity for BEC to work with the Government on developing a "greener and greater plan" to promote green buildings, and recommends that arrangements be put in place swiftly and with a broad remit.

Energy Efficiency – New Buildings

4. BEC supports Government plans to regularly update mandatory buildings energy efficiency standards (Buildings Energy Code, thermal values for the building envelope ("OTTV")), so they are progressively raised to reflect technological progress.
5. Consider making the Residential Thermal Transfer Value mandatory in the longer term, and review it to consider whether it is desirable to raise the current standard.
6. Stimulate green building development through requiring all new buildings and retrofits in New Development Areas, and urban regeneration areas like Kowloon East, to meet the BEAM Plus Gold rating.
7. BEC welcomes leadership by the Government through new public sector buildings, and suggests they are used to showcase good practice and communicate the benefits of different approaches through collecting and publishing data on energy savings made.

Energy Efficiency – Existing Buildings

8. BEC welcomes leadership by the Government in existing public sector buildings, which should also be used to showcase and promote best practice.
9. Address the split incentive problem in tenanted properties through promoting the piloting of green leases by statutory bodies.
10. Establish a new energy efficiency fund for retrofitting private sector buildings and put in place an initiative for retrofitting public and charitable sectors buildings.
11. Review the regulatory system for gas and electricity to remove any barriers to energy efficiency measures as well as renewables.

Targets, Grids and Tariffs

12. Strengthen the shift towards energy efficiency through targets and incentives for energy companies, a plan for a smart grid and meters, and tariffs to manage peak demand.

Behavioural Change

13. Promote the use of energy efficiency benchmarking tools e.g. Hong Kong Green Building Council BEST series, and transparency of energy use in way that allows comparison.

C. TRANSPORT AND LOGISTICS: CLIMATE CHANGE AND AIR POLLUTION

Key Challenges

- Addressing the continuing air quality problem in Hong Kong, exacerbated by local transport emissions.
- Making more of the opportunity to use new technologies and fuel types that may be well-suited to HK such as electric vehicles and hybrids, as well as biodiesel and biogas, to improve our environment and stimulate research and innovation locally.



Addressing Congestion and Pollution Hotspots

1. Bring forward measures to address hotspots of pollution and congestion, including consulting on congestion charging/road pricing and extending the current low emission zones, as well as smarter traffic management approaches, making use of new technologies.
2. Work with business to develop a plan for smarter management of logistics and other ways of reducing emissions of the logistics sector. The latter may include a transition to Euro VI standards and greater use of biodiesel from waste cooking oil.

Public Transport

3. Continue to expand the MTR but also enhance the bus network through expanding the network of priority lanes for buses and ensuring improved maps to link usage of the bus with the MTR, whilst continuing with bus route rationalisation.
4. The Taskforce on Electric Vehicles (including electric vehicles and hybrids) to make recommendations for an overarching plan with clear targets and milestones, including financial incentives, the roll-out of a comprehensive charging infrastructure and clear standards for charge points as well as priority vehicle types e.g. taxis and mini-buses. The Taskforce could also look at other innovative technologies and as well as the full lifecycle management of EVs, including end of life possibilities for batteries in particular.

Walking and Cycling

5. Establish a cross-departmental taskforce to improve the walkability of HK which should consider pedestrianisation schemes; improved connectivity between buildings, and innovative schemes like the Tsui Ping river project.
6. Develop the cycling infrastructure in new developments and urban regeneration areas, including the Harbourfront.

Shipping Emissions

7. Continue to work with port cities in the PRD region and the neighbouring coastline to develop a regional agreement to support the new low sulphur emissions policy.
8. Develop a longer term plan for electrical on-shore berthing facilities, or other environmentally friendly facilities, in Kwai Chung and Kai Tak.

D. WASTE AND RECYCLING

Key Challenges

- Implementation of the HK Blueprint for the Sustainable Use of Resources 2013-2022, and putting in place a fallback plan.
- Identifying those links in the “circular economy” which do not function, for key products, and putting in place the necessary measures to address them.

A Strategic Approach to the Circular Economy

1. Identify and address issues at different stages of the loop and facilitate cross-border collaboration with Mainland China to enable the loop to operate.
2. Put in place through a new Circular Economy Fund a set of projects to support green technology, that help Hong Kong lead in these fields.
3. Set up a business-government task group to develop proposals for the regulatory and tax framework beyond Municipal Solid Waste (“MSW”) Charging and Producer Responsibility Schemes (“PRS”).

Regulatory Framework

4. Implement MSW Charging, without delay and in a manner consistent with the polluter pays principle.
5. Earliest possible implementation of the PRS for WEEE and glass beverage bottles, and consideration of an extension to plastic bottles.



Recycling Fund

6. Review and refine the operation of the Recycling Fund taking on board comments in BEC's 2015 Policy Submission and other key issues e.g. current restrictions on new businesses applying.

Recycling Practices

7. Commission a study or report to consider how to ensure the proper functioning of each link of the loop, from reducing food waste to the food waste collection system.
8. Closely monitor the transportation of recyclables to ensure they go to recyclers and not landfill sites, with appropriate enforcement action to maintain trust in the system, making use of innovative technologies like tracking systems.

Waste to Energy

9. Explore the best way of using energy generated from the proposed Organic Waste Treatment Facilities, including consideration of using biogas for the gas network or to fuel vehicles, as well as generating electricity for the grid or local use. Take action to ensure gas from landfill sites is fully utilised.
10. BEC welcomes regulations on waste cooking oils and fat ("WCO") to ensure food safety. It urges the Government to develop plans for a requirement of at least 5% mandatory blending with biodiesel, made from WCO, in respect of diesel supplied in HK.

Public Sector Purchasing Power

11. Enhance the current approach by taking into account lifecycle impacts, recognising the environmental benefits of local recycled materials.

E. NATURAL CAPITAL: BIODIVERSITY, WATER AND AIR

GENERAL

Key Challenge

- Developing a consensus and agreed methodologies on how to achieve a balance between protecting natural capital and economic growth.

1. Develop guidelines on how to value natural capital for the purpose of decisions on development projects.

BIODIVERSITY

Key Challenges

- Achieving a good balance between biodiversity/the natural environment and other social considerations, like housing.
- Reducing Hong Kong's substantial impacts on biodiversity outside its territory through the supply chain of products.

1. Raise public awareness of threats to biodiversity in Hong Kong, as well as the impacts of our consumption on biodiversity outside Hong Kong through the supply chain.
2. Commence consultation on the proposed Biodiversity Strategy and Action Plan swiftly.

WATER

Key Challenges

- Ensuring water security in the light of heavy dependence on a single source.
- Improving water quality in beaches and in the harbour, to maintain HK's reputation as a clean and liveable city.



1. Introduce a comprehensive plan to reduce water dependency on a single source, and bring the Water Supplies Department and Drainage Services Department together to enable a holistic water management approach.
2. Include water recycling, rainwater harvesting and water efficiency measures in conditions for new developments.
3. Redouble its efforts on reducing water leakage.
4. Review the water tariff structure to ensure it reflects the true value of water.
5. Monitor water quality and develop a plan to improve areas of poor water quality.
6. Strengthen action to clean up the harbour including through enforcement action.

AIR

Key Challenge

- Addressing pollution from across the border as well as from local transport & logistics and energy generation.

Cross-border Collaboration

1. Strengthen collaborative work to make progress across the PRD, and include business in the formal processes.

F. GREEN BUSINESS AND GREEN FINANCE

Key Challenges

- Developing HK as a centre of green technology and environmental industries, making the most of its world class universities, entrepreneurial business sector, financial services sector, legal system, and proximity to a growing market in China.
- Positioning HK's financial services sector so that it can make the most of the opportunity from the transition to a low carbon economy in Mainland China and beyond, and enable HK to contribute to carbon reduction globally.

Developing a Green Technology Action Plan

1. Set up an inter-departmental taskforce to develop an action plan for HK to become a centre of green technology and industry.
2. Target innovation funds towards solving local environmental issues including energy efficiency and low carbon energy generation, and encourage collaboration between business and universities, whilst ensuring sufficient long term innovation funding.

HK taking the Lead on Green Finance

3. Ensure that the Green Finance Working Group has a broad remit to include all aspects of green finance like a Green Investment Bank and green bonds, and is well-funded and works with business/industry as well as the financial services sector to develop its plans.

Making Use of Public Sector Purchasing Power

4. Actively implement the approach recently reaffirmed, reporting on progress in a 2-year period, and strengthen it to introduce a greater focus on driving innovation.

G. ENVIRONMENTAL, SOCIAL AND GOVERNANCE ("ESG") REPORTING AND PERFORMANCE

Key Challenges

- Encouraging Sustainability Reporting or ESG disclosure by many more businesses in order to create a new norm regarding environmental practice, without creating excessive administrative responsibilities.
- Maintaining high standards of expertise amongst sustainability practitioners.
- Ensuring a well-informed business community and civil society that supports high performance on sustainability.



1. BEC supports mandatory ESG disclosure to stimulate ESG performance amongst companies, and supports Hong Kong Exchanges and Clearing Limited (“HKEx”) using a mandatory ‘comply or explain’ approach for listed companies.
2. Engage business on how to refine the Carbon Repository to increase the usefulness of information provided.
3. Support non-listed companies in complying with the Companies Ordinance CAP 622, section 388, by providing a programme of training.
4. Take steps to professionalise the sustainability profession by supporting a formal certification system with continuing education requirements, akin to that for other professions.

H. HARBOURFRONT DEVELOPMENT AND REGENERATION

Key Challenges

- Establishing the Harbourfront Authority (“HFA”) without delay.
 - Having good interim organisational arrangements in place, so that the future harbourfront is an exemplar of good development globally, and is developed in a consistent and holistic manner.
1. Grasp the opportunities that flow from the harbourfront regeneration, in terms of diversifying the economy, reduction of congestion through walking and cycling, and general recreation and well-being.
 2. Speed up the process for establishing a permanent HFA, ensuring the legislation or other documentation is in place, before the end of the current administration, and ensure that in the meantime the Harbourfront Commission is properly resourced.



BEC POLICY SUBMISSION FOR CHIEF EXECUTIVE'S POLICY ADDRESS 2016

INTRODUCTION

To remain competitive and to attract investment and talent, Hong Kong needs to continue to be efficient, forward thinking and innovative, and an attractive place to live and work.

- An efficient city for business and households means that essentials like energy and water are affordable and reliable, and that risks are well managed.
- A forward-thinking and innovative Hong Kong is quick to use and develop new technology and approaches, supported by its finance sector, contributing to a transition to a low carbon and resource efficient economy.
- A liveable city has green spaces and biodiversity with excellent air quality, a clean harbour and beaches, and is pleasant for walking and cycling.

DETAILED RECOMMENDATIONS FOR BEC'S CORE ADVOCACY AREAS

A. CLIMATE CHANGE

Background

- Climate projections show the world on a trajectory to a continuously worsening climate¹. Hong Kong Observatory's forecast is of sea level rise of approximately 1 metre by 2100, without taking into account the unknowns such as melting of major ice shelves, and a temperature increase of 3.1 – 5.5 degrees Celsius. China has taken a lead in advance of the 2015 UN Conference of the Parties ("COP 21") in Paris in making commitments², including introducing carbon trading and environmental taxes³. It is a good time for Hong Kong to decide its next steps.

Policy Recommendations

1. BEC welcomes the Government's on-going work including amongst other things carbon targets for the year 2020, an action plan on energy savings and clean air, and a leadership role through its membership of the C40 group of cities. We **encourage the Government to build on this by putting in place: longer term emission reduction targets, for 2030 and beyond, a cross-departmental action plan on resilience, and a package of policies on reducing emissions that provides a business case for action by the private sector.**
2. BEC recommends that the Government begins to engage business in the near future on how best to incorporate key elements of China's climate policies, for example a carbon price, in a way that works best for Hong Kong. BEC notes that the Central Policy Unit has included carbon trading as one of its indicative research areas. It welcomes publication of this research as a good basis for discussions with business as to the range of options.

¹ UNFCC AR 5 states that current emissions put the world on track to scenario 6 to 8.5. See p.8 Synthesis report. http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf

² <http://www4.unfccc.int/submissions/INDC/Published%20Documents/China/1/China's%20INDC%20-%20on%2030%20June%202015.pdf>

³ http://news.xinhuanet.com/english/2015-06/10/c_134315209.htm



3. BEC recommends that a **governance structure be put in place to monitor progress on climate policy to ensure a stable framework for business. BEC takes the view that a key part of the governance structure should be an inter-departmental committee, supported by an advisory committee independent of the Government and a stakeholder dialogue platform that meets several times a year. It should monitor progress against clear milestones at 3-5 year intervals.**
4. Hong Kong benefits from sharing information with peer cities and strengthening regional co-operation to make the most of skills, expertise and markets across the region. For this reason, **BEC welcomes the continuation and strengthening of the Hong Kong/Guangdong Joint Liaison Committee on Climate Change, and recommends greater co-ordination of activity⁴ for example on construction standards that relate to landslip, flood risk and energy efficiency, and of possible collaborative projects that enable business to supply to a bigger market, for example the use of biogas from Hong Kong's proposed anaerobic digestion plants.**

B. ENERGY POLICY

Background

- BEC welcomes the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+ ("ESP") issued by the Environment Bureau in May 2015, explaining the measures taken by the Government to date in driving energy efficiency in buildings and transport. We note the targets for energy intensity of Hong Kong, reduction in energy use in public buildings, and next steps for developing a more detailed plan, referred to as an "agreed greener and greater plan".
- Residential and commercial buildings account for 90% of Hong Kong's energy use⁵, with over 65% from commercial buildings. Note that considerable progress has been made on new buildings, as described in the ESP. Though there is more that can be done in this respect, the existing building stock, commercial and residential, now needs to be given greater priority.

Policy Recommendations

The Fuel Mix

1. BEC affirms its recommendations in its consultation response made in June 2015 in response to the 'Public Consultation on the Future Development of the Electricity Market', in particular a **multi-pronged strategy to reduce carbon emissions through: (a) incentives for renewable energy ("RE") generation by the electricity companies; (b) allowing grid access for clean distributed energy on fair and reasonable terms and in a manner that ensures safety; and (c) considering opportunities for importing clean, low carbon energy (including nuclear and RE) from Mainland China, provided such energy meets the 'additionality' and reliability tests.**
2. BEC recognises early decisions are needed to facilitate the move towards the use of more natural gas in our city in a manner that ensures fuel security through diversity of sources of gas supply. BEC recommends that **the Government takes early steps to provide a policy framework that can encourage and promote diversity in sources of**

⁴ <http://www.info.gov.hk/gia/general/201508/31/P201508310790.htm>

⁵ Combating Climate Change – Energy Saving and Carbon Reduction in Buildings. Council for Sustainable Development (2011)



gas supply, including policy support for the construction of a local Liquefied Natural Gas terminal.

Energy Efficiency – Demand-side Management

3. BEC welcomes the ESP as an important step in enhancing and bringing together buildings energy efficiency policy in Hong Kong. We are pleased to have the opportunity to work with the Government and other stakeholders on promoting green building, as proposed in the ESP⁶. **We are keen to see progress on the stated initiative to develop an “agreed greener and greater plan” as soon as possible, and for the scope to include consideration of the full range of policy measures from loans and tax incentives to a cap and trade system as introduced in Tokyo.**

New Buildings

4. BEC supports the Government’s plans, as described in the ESP, to regularly review the mandatory buildings efficiency standards (Buildings Energy Code and Overall Thermal Transfer Value (“OTTV”)⁷. **We recommend that the Government, through regular reviews, progressively raises these standards to reflect technological progress and to ensure all new buildings are of a high energy efficiency standard.**
5. In terms of residential buildings, the Residential Thermal Transfer Value (“RTTV”) has only recently been introduced by the Buildings Department as one of the pre-requisites for the gross floor area (“GFA”) concession, but is not mandatory⁸. **BEC encourages the Government to consider making the RTTV mandatory in the longer term. We also suggest that the Government reviews the level at which it has been set in the next two years⁹ to determine whether it is desirable to raise it.**
6. To stimulate green building development, BEC recommends in new development areas (“NDAs”) and urban regeneration areas such as the Kowloon East area, that **all new buildings and major retrofits are required to meet the BEAM Plus Gold standard¹⁰ at minimum.**
7. BEC welcomes leadership by the Government through new government buildings including public housing¹¹, especially the 5% energy reduction target and the goal to outperform the Buildings Energy Efficiency Regulations (“BEER”) by at least 10%. **BEC recommends that the Government uses these buildings to showcase best practice, and to communicate the energy savings from different technologies and practices through collecting and publishing data on the energy savings made.**

Existing Buildings

8. BEC agrees with the Government that the existing 42,000 strong building stock needs to be made fit for the future, and that the Government can lead by example. We welcome the intention to demonstrate best practice in government buildings¹². **As with new buildings, we suggest this initiative is used for showcasing best practice and**

⁶ ESP, p.45

⁷ http://www.bd.gov.hk/english/documents/code/e_ottv.htm

⁸ <http://www.bd.gov.hk/english/documents/pnap/APP/APP156.pdf>

⁹ ESP p.69 refers to a review twice before 2025 and 2030.

¹⁰ Only assessment and essentially procedural pre-requisites currently needed for GFA concession.

<http://www.bd.gov.hk/english/documents/pnap/APP/APP151.pdf>

¹¹ <https://www.devb.gov.hk/filemanager/technicalcirculars/en/upload/336/1/C-2015-02-01.pdf>

¹² ESP p.49



providing information as to costs and benefits. This may include opening buildings up to visits by professionals.

9. In order to address the limited incentives in rented commercial properties for improvements in energy efficiency, **BEC suggests that the Government promotes the use of green leases¹³, through encouraging statutory bodies like the Hong Kong Science and Technology Park and the Urban Renewal Authority to pilot them.**
10. At present, it is common for schools to retrofit buildings with subsidies from the Environment and Conservation Fund. This requires them to go through the hurdle of establishing that there are educational benefits from doing so. For private sector buildings, as the Buildings Energy Efficiency Fund ("BEEF") is now at an end, the funding available for capital costs is very limited. To make swift progress and develop expertise of benefit to the private sector too, **BEC recommends that: (a) an initiative is put in place to fund the retrofitting of public sector buildings like schools and hospitals as well as buildings operated by NGOs and charities; and (b) a new energy efficiency fund be set up for private sector buildings, to replace the BEEF. In implementing this initiative and administering the Fund, the Government should make full use of the opportunity to use green technologies including trialing new technologies.** It is recognised that consideration is needed as to whether the fund should be made up of contributions from the government or from the ratepayer.
11. BEC recommends that the Government reviews **the existing regulatory system relating to both energy efficiency and renewables to remove unnecessary regulatory barriers.** For example, at the moment there are complex approval systems for the installation of biodiesel generators and limited flexibility around the use of communal space in buildings.

Targets, Smart Grids and Tariffs

12. BEC notes the positive steps taken by electricity companies to date. It is supportive of strengthening the drivers towards energy efficiency, and refers Government to our detailed submission in this respect. **BEC recommends in particular that the Government puts in place: ambitious energy efficiency targets supported by incentives for electricity companies, a plan for phasing in smart grids and meters, and tariff structures that help manage demand in peak hours.**

Behavioural Change

13. BEC is supportive of policy measures for behavioural change as set out in the ESP. To strengthen this part of the programme, **BEC recommends that the Government actively promotes the use of benchmarks, such as Hong Kong Green Building Council's energy benchmarking tools, and encourages transparency of energy use by companies in a consistent way that allows for comparison.**

¹³ Leases which incorporate terms as to how a building is to be occupied, operated and managed in a sustainable way, in particular to address the principal-agent problem that hinders action to make buildings more efficient in terms of energy, water and waste management.



C. TRANSPORT AND LOGISTICS: CLIMATE CHANGE AND AIR POLLUTION

Background

- Hong Kong is a world leader in compact urban development and public transport¹⁴.
- There are opportunities to improve the infrastructure, whilst also stimulating the development of innovative technologies.

Policy Recommendations

Roadside Emissions

Addressing Congestion And Pollution Hotspots

1. Pollution levels vary considerably from area to area because of the large contribution of pollutants from local transport patterns, particularly on busy roads in dense urban districts. **BEC recommends that the Government introduces measures to address hotspots of pollution and congestion beginning by consulting on proposals for congestion charging/road pricing and larger low emission zones. These can be designed to incentivise low emission vehicles, staggering of commuting and car-pooling. In addition, BEC recommends the use of “smart” traffic control systems, which make use of new technologies, and stricter law enforcement in respect of illegal parking.**
2. Considering the high emissions from goods vehicles¹⁵, the efficiency of logistics and deliveries needs to be improved. **BEC recommends that the Government works with business to: (a) develop a plan for this sector to improve its efficiency, through for example smarter management systems; (b) ensure that heavy goods vehicles, the most highly polluting vehicles, rapidly transition to Euro VI standards or other low emission equivalents as they become available; (c) promote the use of biodiesel locally through requiring a proportion of diesel¹⁶ supplied in Hong Kong to be blended with biodiesel made from waste cooking oil (See Waste section for further detail), whilst also exploring the potential to reduce emissions through the promotion of “After-market-diesel additives”¹⁷.**

Public Transport

3. Given the increase in private cars by 20% in the 5 years between 2007 and 2012¹⁸, a trend out of line with OECD countries as a whole where car numbers are stabilising, growing slowly or falling¹⁹, making public transport more attractive is important. **To maintain the high level of usage of public transport, BEC encourages the Government to develop proposals for a more extensive network of bus priority lanes²⁰, continued expansion of the MTR with housing close by, improved maps linking usage of bus routes with the MTR, as well as continued bus route rationalisation.**

¹⁴ <http://2014.newclimateeconomy.report/wp-content/uploads/2014/11/Transport-and-urban-form.pdf>

¹⁵ See Clean Air Plan, p.16.

¹⁶ This is in line with a renewable transport fuel obligation in the USA and EU, but focused on biodiesel from organic waste, because of its low carbon footprint.

¹⁷ <http://www.epa.gov/otaq/fuels/registrationfuels/index.htm>

¹⁸ Clean Air Plan, p. 26. The number of registered vehicles reported as increasing from 372,203 in 2007 to 447,260 in 2012 and projected to increase to 537,453 in 2017. Increasing roadspace to provide for this trend has high costs in terms of infrastructure and land. <http://2014.newclimateeconomy.report/wp-content/uploads/2014/11/Transport-and-urban-form.pdf>

¹⁹ <https://tfl.gov.uk/cdn/static/cms/documents/technical-note-12-how-many-cars-are-there-in-london.pdf>, http://www.oecd-ilibrary.org/transport/long-run-trends-in-car-use_9789282105931-en

²⁰ Wikipedia entry shows Hong Kong as having 22km of bus lanes, compared with 220miles in Singapore, 294 miles in Beijing and 200 miles in London. https://en.wikipedia.org/wiki/Bus_lane



Ultra-low Emission Vehicles

- Hong Kong has the potential to act as a testbed²¹ for ultra-low emission technologies such as electric vehicles and hybrids (collectively known as “EVs”), as recognised in the Central Policy Unit’s recent report. This will provide a stimulus for local research institutes and universities.
 - Studies show that the well-to-wheel energy efficiency of EVs is higher than gasoline counterparts’ by over 70% to over 100%²², and that even with Hong Kong’s current level of carbon intensity of electricity generated, which is less than 700gC/Kwh, EVs emit less carbon. Air pollutants from electricity generation are regulated by law, emitted outside residential areas and dispersed through tall chimneys. EVs are also quieter, and generally charged at night increasing the efficiency of electricity generation. However, for EVs to take-off, co-ordination is required, in particular on charging infrastructure.
 - Pollution from heavy goods vehicles may at this stage be more efficiently addressed by a shift to vehicles of a Euro 6 standard and using blended diesel. This is because of vehicle costs and battery size and the availability of biodiesel locally.
4. BEC is supportive of the Taskforce on Electric Vehicles²³ and **recommends that it swiftly makes recommendations to put in place an overarching stable and long-term plan, with clear, realistic targets and milestones and a comprehensive set of measures including roll-out of a charging infrastructure, e.g. in both new and existing buildings, and clear standards for charge points.** The Taskforce could helpfully identify vehicle categories and types of usage where use of an EV is most desirable, for example taxis considering their high mileage. It could also consider financial incentives e.g. grants/loans (to cover the higher upfront costs), lower license fees or lower congestion charges (if and when these are introduced). **The Taskforce is also encouraged to look at the lifecycle impacts of these vehicles including end of life issues such as the reuse of batteries. We also suggest that the remit of the Taskforce is extended to consider other low emission vehicles and new technologies to encourage the use of the right technology in the right circumstances e.g. innovative fuel types like biogas and biodiesel.**

Walking and Cycling

5. BEC congratulates the Government on the good progress made in the Kowloon East development²⁴ on walkability with significant health and amenity benefits. We note that the proposed Harbourfront improvements, West Kowloon Cultural District, and the new housing estates offer excellent opportunities to trial new approaches. There is potential to draw on experience from other cities like Tokyo and Vancouver. **BEC recommends the Government, through establishing an inter-departmental taskforce including Transport and Housing Bureau, Development Bureau, Food and Health Bureau, and Environment Bureau, develops a comprehensive walkability strategy.** The strategy should cover pedestrianisation schemes; improved connectivity between buildings through raised walkways or sheltered pleasant street level routes; and innovative schemes like the Tsui Ping River project that have wider benefits²⁴.

²¹http://www.cpu.gov.hk/doc/tc/research_reports/study_report_on_promotion_of_electric_vehicles_in_hk_with_english_executive_summary.pdf

²² http://cafcip.org/sites/files/W2W-2014_Final.pdf;

[http://ec.europa.eu/transport/themes/strategies/consultations/doc/2009_03_27_future_of_transport/20090408_ea_bev_\(scientific_study\).pdf](http://ec.europa.eu/transport/themes/strategies/consultations/doc/2009_03_27_future_of_transport/20090408_ea_bev_(scientific_study).pdf)

²³ http://www.enb.gov.hk/en/boards_committees/electric_vehicles

²⁴ http://www.ekeo.gov.hk/filemanager/content/public/en/TFKT_20150430_ppt_item3a.pdf



6. New developments as well as urban regeneration initiatives, including on the Harbourfront, offer opportunities to put in place a safe cycling infrastructure. **We recommend that the Government seeks to develop the cycling infrastructure in these areas**, exploring more cycle parking close to MTR stations, dedicated cycle lanes between stations and major concentrations of housing, and cycle awareness and proficiency training.

Shipping Emissions

7. BEC is supportive of progress made in addressing emissions from shipping²⁵, through regulations on sulphur content and through the voluntary Fair Winds Charter. **BEC encourages the Government to continue to work with port cities in the PRD region and the neighbouring coastline to develop a consistent approach, possibly through putting in place an emissions control area drawing from the North American Emission Control Area²⁶ and the coalition of North Sea ports.²⁷**
8. BEC notes that the Government has decided not to proceed with on-shore electrical berthing facilities in Kai Tak and Kwai Chung, because this is considered premature. However, as similar on-shore electric berthing facilities are being put in place in North Sea ports and the USA, the Government is encouraged to **develop a longer term plan for electrical, or indeed other environmentally friendly port facilities**, to enable Hong Kong to be in the lead as a clean port city.

D. WASTE AND RECYCLING

Background

- The Government has made progress in implementing the Hong Kong Blueprint for Sustainable Use of Resources 2013-2022 ("Blueprint"). However, most of the policies are still either at the legislation stage or not fully implemented. Business has concerns that the timetable in the Blueprint will not be met.
- The Blueprint focuses on a regulatory framework and investing in infrastructure which aims at achieving behavioural change and waste reduction, but more is needed for a circular economy to operate in Hong Kong. This should increase the value obtained from resources entering Hong Kong through recycling and upcycling.

Policy Recommendations

A Strategic Approach to the Circular Economy

1. There is potential to introduce a circular economy approach with benefits in terms of jobs and growth²⁸, as in the Government's Blueprint, through a comprehensive set of measures addressing different stages of the loop. For these measures to be effective, considering space restrictions in Hong Kong, cross-border working may be necessary. **BEC recommends the Government facilitates regional collaboration with Mainland China and other Asian countries, as Hong Kong may not have factories or space for factories which produce final products making use of recycled materials from Hong Kong.**

²⁵ *Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation*

²⁶ <http://westcoastcollaborative.org/files/sector-marine/the-north-american-eca-1.pdf>

²⁷ Clean North Sea Shipping http://cnss.no/wp-content/uploads/2014/03/CNSS_Recommendations_Web.pdf

²⁸ See studies relating to the EU. http://www.mckinsey.com/insights/sustainability/europes_circular-economy_opportunity



2. **Going beyond the Recycling Fund, BEC urges the Government to put in place through a Circular Economy Fund a set of projects to support a circular economy.** This would involve collaborative work between business and research institutes to develop processes relating to the recycling of particular materials. This should include a focus on some traditional products like plastics and glass, but also on more complex materials which may enable Hong Kong to lead in these fields²⁹.
3. **BEC recommends the Government to set up a business – government task group to develop proposals for the regulatory and tax framework beyond Municipal Solid Waste (“MSW”) Charging and producer responsibility scheme (“PRS”), which bolsters existing measures such as the Recycling Fund.** This could include banning of certain materials from landfill like food waste and Polyethylene Terephthalate (“PET”)³⁰ and tax breaks for recycling businesses as well as for the purchase of products made from recycled materials.

Regulatory Framework

4. **BEC welcomes plans to introduce MSW Charging, but this needs to be introduced without delay, and in a well-thought out plan** for example as to charging occupiers of buildings in a way that reflects the waste they generate. Otherwise, the polluter pays principle would not be well applied and the policy goal of reducing waste is unlikely to be met.
5. **BEC urges the earliest possible implementation of the PRS** for waste electrical and electronic equipment (“WEEE”) and glass beverage bottles. BEC also recommends that the Government engages with business in respect of extending the PRS tin due course to other products plastic bottles in particular.

Recycling Fund

6. **BEC is pleased to see the approval of the Recycling Fund but recommends that this be reviewed and refined** taking on board our comments in our 2015 Policy Submission as well as those set out below:
 - focusing this fund on recycling businesses and addressing awareness raising through other funds, to ensure sufficient finance to support business;
 - allowing new start-ups with potentially innovative ideas to benefit; and
 - supporting businesses that develop products by using recycled materials as a raw material.

Recycling Practices

7. BEC acknowledges the complexity of collecting food waste, but there are many examples which can be drawn from. We urge the Government to put in place a food waste collection system. **A study or report should be commissioned looking at different elements of the cycle from reducing food waste (some to go to charity or for animal feed), and food waste collections to cost-effective waste to energy facilities and use of the residual material.**

²⁹ The World Environment Forum in its Towards a Circular Economy Report (2014)²⁹ sets out different categories of waste materials from traditional materials like paper to new materials such as those used in 3-D printing, and explains the steps that can be taken. <http://reports.weforum.org/toward-the-circular-economy-accelerating-the-scale-up-across-global-supply-chains/>

³⁰ This has been a success in a number of EU countries. Please see <http://www.plastval.pt/conteudos/File/Publicacoes/Plastics%20-%20the%20Facts%202014.pdf>



8. A good trusted collections system for recyclables is important to avoid seriously demotivating the general public in resource separation. **BEC urges the Government to closely monitor the transportation of recyclables** to ensure they go to recyclers and not landfills, with appropriate enforcement action being taken as well as ensure proper provision of information to avoid contamination of waste streams.

Waste to Energy

9. BEC welcomes the proposals to develop organic waste treatment facilities in HK ("A Food Waste & Yard Waste Plan for Hong Kong 2014-2022"), using Anaerobic Digestion ("AD") Technology and asks that these are introduced swiftly. **BEC recommends the Government explores the best way of using the fuel generated from the different sites, including using biogas for the gas network, to fuel vehicles as is done in other countries like Denmark, or to generate electricity to be supplied to the grid or used locally. We also recommend that the Government seeks to ensure that landfill gas is fully utilised.** It should explore the possibility of a broader regional scheme in due course, and of making use of other innovative technologies for making fuel from organic waste.
10. In terms of management of waste cooking oils and fats ("WCO"), BEC welcomes the proposal to require WCO producers to send their product to licensed recyclers. This approach can be strengthened by raising the demand for the main product of WCO as an input for biodiesel. **BEC supports the introduction of regulations to ensure food safety, which the Government is currently consulting on, and urges the Government to develop plans for introducing a requirement of at least 5% mandatory blending with biodiesel in respect of diesel supplied in Hong Kong and such biodiesel should be made from WCO³¹.** This will support the use of biodiesel locally reducing its carbon footprint from transport across the world and promote the proper use of WCO.

The Demand-side: Public Sector Purchasing Power

11. BEC welcomes the Government's renewed efforts to use public procurement as a means of supporting a green economy as reflected in the Circular of 17th July 2015³² (Circular 6/2015). It is supportive of its commitment to promote the use of the green procurement standards beyond the public sector. **BEC recommends that this approach is enhanced by taking into account the lifecycle impacts of the whole supply chain in purchasing of products, including embedded carbon, and that the Government forms a business-government committee to support this work. This will mean greater recognition of the environmental benefits of local recycled materials. Possible actions include the designated garbage bags used by the Government for MSW Charging being made from recycled plastic with low transport emissions. Business representatives on the committee should be chosen to contribute product information and product evaluation methods and expertise on labelling-**

³¹ <http://www.epa.gov/otaq/fuels/renewablefuels/regulations.htm>; <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028&from=EN> (Article 3(4) of Directive 2009/28/EC). 5% rather

³² http://www.epd.gov.hk/epd/sites/default/files/epd/english/how_help/green_procure/files/ENB_Cir_2-2011.pdf



E. NATURAL CAPITAL: BIODIVERSITY, WATER AND AIR

GENERAL

Policy Recommendations

Clear Guidelines on Valuation

1. BEC encourages the Government to develop guidelines on a valuation approach. The guidelines should take on board natural capital and ecosystem services accounting methods, and be integrated into existing guidance eg the Environmental Impact Assessment Regulations.

BIODIVERSITY

Background

- Balancing the needs of a large population and the benefits of economic growth against protecting nature, requires a complex analysis of trade-offs. Transparency and certainty for investors as to the methodology is important.
- Hong Kong with its large urban population and as a major transport and logistics hub has substantial impacts on biodiversity outside Hong Kong through its consumption of and trade in, for example, live and dried seafood, paper, timber and palm oil where they are not sustainably sourced.

Policy Recommendations

Raising Awareness: Impacts in Hong Kong and from Supply Chains

1. BEC recognises that for progress to be made in protecting our biodiversity, it is important for the public to be aware of the issues and threats. This will support the Government's plans in publishing a Biodiversity Strategy and Action Plan. For action by business to source sustainably to be viable, awareness on the part of procurers and consumers is also important. **BEC encourages the Government to raise awareness of the risks to biodiversity in Hong Kong, and the impacts of our consumption on biodiversity outside Hong Kong through our supply chain. We also encourage the Government to take such impacts into account in the Government's green procurement policy and standards³³.**

The Biodiversity Strategy and Action Plan ("BSAP") and Valuation Methods

2. **BEC recommends the swift release of the proposed BSAP for consultation,** which should include guidance on valuing biodiversity and trade-offs with other objectives.

WATER

Background

- Hong Kong's reliance on water from the Dongjiang Basin carries risks because of declining rainfall and pressures from industry, population and urbanisation³⁴.
- China Water Risk's assessment shows Guangdong Province as being borderline adequate in terms of water supply. Under the 12th 5-year Plan, the province has to lower its consumption from 46,690 million cubic meters (mcm) to 45,800 mcm.

³³ The Government's procurement guidelines on some products like timber take this into account.

³⁴ <http://chinawaterrisk.org/opinions/a-vulnerable-dongjiang-is-a-vulnerable-hong-kong/>



- Good water quality in the Victoria harbour area and around Hong Kong more generally is important for leisure as well as marine life.

Policy Recommendations

Water Security

1. **BEC reaffirms its recommendation that the Government introduce a comprehensive strategy for water management and encourages the Government to consider bringing water supply and drainage into one department so as to holistically manage and utilise all water resources.** In Hong Kong, water management falls under the remit of two Government departments, Water Supplies Department and Drainage Services Department. By contrast in China, the Ministry of Water Resources is in charge of the management of all water resources throughout the country. A holistic approach should help the Government take forward action including increasing rainwater storage in individual buildings (through planning rules or regulations that apply to new buildings); collecting storm water for example using the underground storm water storage chambers in Kowloon and Hong Kong Island, learning from the current practice in Korea³⁵, for water use for example in parks; and increasing the permeability of surfaces to hold water in the soil.
2. New towns and developments offer opportunities to take forward innovative approaches. **BEC encourages the Government to include water recycling facilities in the design of new infrastructure and new towns as well as the incorporation of water efficiency (eg water systems with minimal pressure and water efficient products) and rainwater harvesting in new buildings³⁶, where feasible, through planning policy or other controls.**
3. BEC congratulates the Government on the progress it has made on tackling the issue of water leakage (non-revenue water ("NRW")). However, it is worth noting that Hong Kong still falls behind the NRW levels of other Asian and International cities. **BEC recommends the Government redoubles its implementation of the Replacement and Rehabilitation Programme of Water Mains, Pressure Management, Active Leakage Control and other measures and efforts in reducing this water loss.**
4. The water tariff for residential as well as businesses has remained unchanged since 1995. BEC believes that the city's outdated water tariff regime, if it remains unchanged, will continue to pose a great barrier to achieving ambitious water conservation goals set under the Total Water Management Strategy. **In order that the Government's efforts at behavioural change as to water are successful, BEC recommends that the water tariff structure be reassessed and altered to reflect the true value of water.**

Water Quality

5. BEC congratulates the Government on progress it has made on the Harbour Area Treatment Scheme ("HATS") programme, and notes that HATS 2B is no longer to be progressed. **It recommends that the Government ensures that there are good monitoring systems and transparency as to water quality, identifies parts of Hong Kong with poor water quality, and develops a long term plan to improve those areas.**

³⁵ <http://www.waterworld.com/articles/wwi/print/volume-27/issue-4/editorial-focus/stormwater-management/south-korea.html>

³⁶ For an interesting example of what can be done, please see this example from Seoul.
<http://www.iwaterwiki.org/xwiki/bin/view/Articles/SeoulsStarCityArainwaterharvestingbenchmarkforKorea>



6. BEC encourages Government to strengthen its Clean Hong Kong campaign to ensure a greater focus on the harbour, and urges the Government to ensure authorities have the power and resource to take enforcement action.

AIR

Policy Recommendations

Regional collaboration

1. As a considerable share of the air pollution faced by Hong Kong comes from the Mainland, **BEC looks forward to progress being made across the PRD on air pollution, and calls on Government to strengthen these efforts by involving business more fully** in the on-going regional discussions through including business representatives on the cross-border forum.

F. GREEN BUSINESS AND GREEN FINANCE

Background

- Considering Hong Kong's world-class universities, entrepreneurial businesses, financial services sector and sound legal system, the potential for this sector is high.
- China is taking steps to ensure a comprehensive green finance system, and the challenge for Hong Kong is swiftly positioning itself so that it can play a leading role.

Policy Recommendations

Developing the Environmental Industry Sector and Green Business

1. In order to grow the environmental industry sector, a strategy is required covering amongst other things: regulatory and pricing measures to stimulate the industry from waste recycling to buildings management, action to strengthen the links between academia and industry, and research and development ("R & D"). **BEC urges the Government to set up an inter-departmental taskforce to develop this strategy, possibly as a key part of a broader technology strategy and linked to the Green Finance Working Group. BEC encourages the Government to require the Taskforce to adopt a practical approach of piloting and trialling.**
2. BEC is pleased that the government has put in place the Innovation Technology Fund. To increase the impact of this and other government funding, **BEC encourages the Government to target this funding towards solving local environmental issues including energy efficiency and low carbon energy generation, green transport and logistics, and the circular economy, which should stimulate local enterprise creating jobs and offering Hong Kong's scientists more challenges and opportunities. BEC also encourages the Government to foster a collaborative approach bringing universities and business together, and ensuring sufficient funding for longer term research projects into innovative solutions³⁷.**

Hong Kong Taking the Lead on Green Finance

3. BEC welcomes the establishment of a Green Finance Working Group by the Government, and **would like to see Hong Kong take up this opportunity to develop as a centre of green finance. BEC encourages the Government to: (a) give this**

³⁷ Government can draw on the experience of Japan and Korea who have well-funded research institutes focused on practical developments eg KEITI <http://www.keiti.re.kr/en/index.do>



working group a sufficiently broad remit to explore the breadth of the green finance system (from green bonds, a green investment bank, and supporting policy measures) reflecting the breadth of the People's Bank of China's recommendations³⁸, (b) ensure it is well-funded; and (c) that it works with business/industry groups and the financial services sector to develop its plans. Green Bonds are a particular important area to develop with the People's Bank of China expressing an interest in developing this market to lever in private finance³⁹, and they offer a potential solution to financing the retrofitting of buildings.

Making Use of Public Sector Purchasing Power

4. Hong Kong has made good progress⁴⁰ in using public sector purchasing power to stimulate environmental industry and green technology. **BEC urges the Government to actively implement this approach, reporting on progress every 2 years, regularly updating the standards, The Public Procurement of Innovation approach adopted in the EU could be used as a reference point in developing an approach to foster eco-innovation in key areas like waste management⁴¹.**

G. ENVIRONMENTAL, SOCIAL AND GOVERNANCE (“ESG”) REPORTING AND PERFORMANCE

Policy Recommendations

ESG Disclosure for Hong Kong Listed Companies

1. BEC is supportive of mandatory ESG disclosure to stimulate ESG performance amongst companies in Hong Kong, and **strongly recommends that the Hong Kong Exchanges and Clearing Limited (“HKEx”) proceed with its proposed mandatory ‘comply or explain’ approach for listed companies** which will help embed good practice in a large number of companies.

Carbon Footprint Repository for Hong Kong Listed Companies

2. Ensuring that companies measure their carbon emissions helps drive change, but it is important that systems set up are seen to be impactful. **BEC recommends that the Government engage stakeholders in an open and constructive manner as to how to make better use of information collected through the Carbon Footprint Repository for Hong Kong Listed Companies.**

Non-listed Companies

3. BEC supports HKEx's measures to enable voluntary reporting through its Environment, Social and Governance Reporting Guide, and the Government's efforts to encourage non-listed companies to report on such matters through the annual Directors Report (Companies Ordinance, CAP 622, section 388⁴²). **To ensure that CAP 622 is complied with, BEC recommends that Government puts in place a training programme, to assist non-listed companies to comply with the Director's report, making use of the**

³⁸ [http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=-Establishing China%E2%80%99s Green Financial System-2015PBC UNEP Inquiry Green Task Force Repor.pdf](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=-Establishing%20China%E2%80%99s%20Green%20Financial%20System-2015PBC%20UNEPA%20Inquiry%20Green%20Task%20Force%20Report.pdf)

³⁹ http://www.iisd.org/pdf/2014/growing_green_bonds_en.pdf. The offshore bond market in HK grew from RNB69bn to RMB405bn from 2010 to 2013. (HSBC 2013)

⁴⁰ EPD Circular 2-2011

http://www.epd.gov.hk/epd/sites/default/files/epd/english/how_help/green_procure/files/ENB_Cir_2-2011.pdf

⁴¹ <http://www.innovation-procurement.org/news-events/news-archive/?c=search&uid=34c88535>

⁴² [http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/707C1C4DC6BDF92848257A5500549A21/\\$FILE/CAP_622_e_b5.pdf](http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/707C1C4DC6BDF92848257A5500549A21/$FILE/CAP_622_e_b5.pdf)



HKEx Reporting Guide.

Professionalisation of Staff

4. BEC takes the view that for sustainability professionals to deliver a high standard of advice and input, it would be of benefit to have a professional certification system and continuing education requirements. This will help HK establish itself as a centre of environmental excellence. BEC recommends that the Government supports business in establishing this profession to include certification and continuing education requirements.

H. HARBOURFRONT DEVELOPMENT AND REGENERATION

Policy Recommendations

1. **BEC urges the Government to grasp the opportunities that flow from the expected regeneration of the harbourfront by the proposed Harbourfront Authority** in terms of diversifying the economy, reduction of congestion through walking and cycling, and general recreation and well-being, and ensure a multi-sector strategic plan is developed to create a world-class asset.
2. **BEC urges the Government to speed up the process for establishing a permanent Harbourfront Authority (“HFA”)**, ensuring legislation and other documentation is in place before the end of the current administration. The Government should also enable a well-resourced Harbourfront Commission to begin carrying out research and developing plans.

