

By Post & Email

Hon Paul Chan Mo-po, GBS, MH, JP
Financial Secretary, Hong Kong SAR Government
25/F, Central Government Offices
Tamar, Central

26 January 2018

Dear Financial Secretary,

Civic Exchange's Proposals for the 2018-2019 Budget
“Investing in a Healthy, Green-living Future for Hong Kong”

Civic Exchange is pleased to submit its proposals on how the Government can best allocate its budget surplus, to meet its stated aims of protecting and enhancing Hong Kong's environment. Civic Exchange's proposals are in response to the Government's Budget Consultation for 2018-19 under the theme “investing in a healthy, green-living future for Hong Kong”.

Maintaining a healthy environment is a vital part of any liveable and sustainable city. This requires financial support and policy backing. Civic Exchange offers its recommendations as a financial stimulus package, which needs to be integrated into larger policies. We have identified ten main ways in which Government could do this, which will be explained in greater detail in the attached paper.

- (I) Allocate a higher portion of government revenue, surplus and reserves to enhance Hong Kong's living environment.
- (II) Combat climate change through carbon levy and climate finance.
- (III) Provide the framework for Hong Kong as a green and sustainable finance hub.
- (IV) Encourage water conservation.
- (V) Combat air pollution from power plants, ships and vehicles, and reduce emissions and exposure.
- (VI) Facilitate smart mobility and clean transportation.
- (VII) Facilitate better urban planning in the areas of public open space and walkability.
- (VIII) Cut waste at source, facilitate recycling and promote a circular economy.
- (IX) Plough back increased fines and tariffs to finance green incentives.
- (X) Improve communication spending to advance civic education.

We would like to see the Hong Kong Government put more focus and emphasis on its funds, valued at over HK\$ 1 trillion, to address the deteriorating quality of our environment and to build a better future for all our citizens, and in order to remain competitive with other major world-class cities.

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Financial Secretary, HKSAR Government

A two-way approach to more effective budgetary allocation

It is understood that Government has adopted a bottom-up budgetary system for its annual budget exercise, in that each policy bureau submits its budget requests based on existing policies. We understand that many of our proposals are related to new policy recommendations, which need to be approved prior to the allocation of funds.

Civic Exchange recommends that, as part of the Administration's new fiscal philosophy, the Financial Secretary should take on a more up-front position to drive policy formulation that is best for Hong Kong citizens. The budgetary process should be an example of joined-up government with the overarching aim of funding a better Hong Kong, rather than achieving departmental aims.

We trust that the attached recommendations will be helpful. Please feel free to let us know if you have any questions on the matters covered in this submission, and we look forward to the opportunity to meet with you to explore our recommendations further.

Yours sincerely,



Winnie CW Cheung
Chief Executive Officer

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CIVIC EXCHANGE'S PROPOSALS FOR THE 2018-2019 BUDGET
“INVESTING IN A HEALTHY, GREEN-LIVING FUTURE FOR HONG KONG”

(I) Allocate a higher portion of Government revenue, surplus and funds to enhance Hong Kong's living environment

1. Civic Exchange recognises and applauds that Government has released various sustainability-related schemes, including the most recent “Smart City Blueprint”, “2030+ Plan”, “Climate Action Plan 2030+”, and “Biodiversity Strategy and Action Plan” (BSAP).
2. We were also pleased to find an alignment of aims between ours and in the Financial Secretary's 2017 Budget Speech: *“The Government will continue to invest substantially to protect and enhance our environment, striving to further improve the air quality, water quality, green and blue assets and waste management; and step up efforts to combat climate change and conserve nature, thereby making Hong Kong an even more liveable city.”*¹

The numbers and the narratives don't tally

3. However, when we study the numbers, there appears to be a non sequitur between what is promised and how much money Government has actually allocated to “Environment and Food”, which is the policy grouping for environmental protection, conservation, power and sustainable development, environmental hygiene and agriculture, fisheries and food safety – all key elements of a healthy city:
 - i. Little of the massive surplus of HK\$ 110 billion at 31 March 2017 finds its way towards environmental development in the 2017/18 budget. [see Appendix A]
 - ii. Only one out of the 11 major infrastructure projects underway that is allocated funding from the Capital Works Reserve Fund (CWRF), standing at HK\$ 100 billion at 31 March 2017, is related to environmental development. [see Appendix B]
 - iii. For fiscal year 2017/18, budgeted spending on “Environment and Food” is only 4.4%, or HK\$ 23.3 billion out of total budget spending of HK\$ 531.8 billion. [see Appendix C]
 - iv. This percentage share for “Environment and Food” has been the same for the last five years and been declining in each successive year from 5.4% in 2013/14; 5.2% in 2014/15; 5% in 2015/16; 4.1% to 4.4% in 2017/18.
4. If the Government is serious about making the initiatives of its various blueprints and stated aims towards a sustainable environment a reality, it should devote significant investment, substantially more than what it has done, to spur the whole community into action.
5. The current 2017/18 fiscal year has already recorded a surplus of HK\$57.2 billion for the first eight months to November 2017. This takes the total fiscal reserves to well over

HK\$1 trillion. We propose that there is a strong case for Government to dedicate a substantial part of this surplus to meeting its vision for a smart and liveable environment for Hong Kong.

Rationale for more allocation

6. Civic Exchange is concerned about many aspects of sustainable development in Hong Kong. These include the impact of air pollution on public health; crowding, congestion and pressing mobility issues; lack of living, walking, public space and the impact on mental health; landfill capacity being rapidly used up, etc. We have world-renowned country parks, trails and biodiversity, but they are constantly under threat of destruction to make ways for housing and building projects, when we should be investing to preserve and enhance them.²
7. Global warming is an ever worsening threat. It is already causing Hong Kong to have hotter summers and more extreme weather events such as strong typhoons and floods. As a leading global city, Hong Kong has a responsibility to set targets to move to zero CO₂ emissions by 2050 or soon thereafter.
8. In a recent research conducted by Civic Exchange, Hong Kong residents responded with a rating of 5.8 when asked to rate their lives and wellbeing on a scale of zero to 10. This is much lower compared to residents of Singapore (7.1) and Shanghai (7.4).³
9. It is reasonable to expect that Government could and should put aside a bigger share of its wealth to meet its stated aim of protecting and enhancing our environment to make Hong Kong a more liveable and human-centred city, and safeguard the long-term sustainability and wellbeing of our future generations.
10. We are not suggesting that this proposed increase in expenditure on the environment should be a trade-off with other important policy areas like education, health, and social welfare, etc. Rather, we suggest that there should be a larger allocation of revenue and surpluses and funding from capital reserves that is devoted to environment policy areas and for environmental improvements. Research confirms that a better environment is linked to better citizen well-being. Therefore, investment in the environment today should reduce public health and social costs to the Government in the long run.

How to accomplish this

11. The Government could deploy taxes, subsidies and regulations to close the gap between the private cost and social cost of pollution. It should also deploy market-based tools and promote green and sustainable finance that aim to internalise environmental externalities and adjust risk perceptions for the sake of increasing environmentally-friendly investments.⁴

12. We also submit that emphasis has to be placed on CWRP spending on soft infrastructure: modern new intangible capital assets such as jobs creation and re-skilling of the labour force to meet challenges of global warming, livability, technology disruption and aging population, and not just tangible capital assets.

(II) Combat climate change through carbon levy and climate finance

13. The United Nations notes that even if all the commitments from the Paris Agreement were met, this would still not be enough to keep global warming within a “safe” level.⁵ The UN has termed this a global crisis and warned that much more needs to be done, not just by reducing emissions but eventually removing CO₂ emissions already in the atmosphere. This will be humanity’s single biggest challenge in future decades.

14. The Government has made a good start and we support its 4T operational framework for its “Climate Action Plan 2030+”. We believe, however, that the Government can and should do more to expedite actions – in particular, following the example of other governments in envisaging how Hong Kong can move to near net-zero carbon emissions by, or soon after, 2050. Much of the change may happen through markets with government regulations and incentives, enabling action by market players to comply with new standards.

Three step approach to putting a price on carbon emission: from carbon levy to emission trading

15. Global thought leaders on climate change recommend that a price be put on carbon emissions to incentivize the move to a low-carbon economy. This can be done either through a carbon levy or through a carbon emissions trading scheme. China has announced it will introduce a national emissions trading scheme covering the power and heat sectors.

16. Hong Kong is Chinese sovereign territory but under ‘one country two systems’ will not join China’s National Emissions Trading Scheme (NETS) initially. There are, however, advantages in joining the scheme once it is well established, and we trust under the Closer Economic Partnership Agreement (CEPA), Hong Kong is in an advantageous position to seek a role in the Scheme. Joining it is likely to reduce the cost of cutting Hong Kong’s carbon emissions and facilitating Hong Kong’s exchange and financial services to have a role in servicing the Scheme.

- Follow Switzerland’s three-step approach:
 - a) Carbon pricing
 - b) Carbon trading
 - c) Linking up with China’s National Emissions Trading Scheme (NETS)

17. Hong Kong may consider the example of Switzerland, which is a small economy surrounded by the much larger economy of the European Union. In the early 2000s when the European Union was planning its Emissions Trading Scheme (EU ETS) Switzerland adopted a three-step approach:

- i. Putting a price on carbon emissions through a levy.
- ii. Introducing carbon trading within Switzerland among the bodies paying the carbon levy.
- iii. Linking with the EU ETS.

18. Switzerland's three-step approach follows the Chinese saying of "crossing the river by feeling the stones". By following it, Hong Kong can align with NETS without exposure to any complications which may happen during its initial operation. Switzerland introduced its carbon levy in 2007 but, given the difficulties the EU ETS has had, has only agreed this year to linking starting in 2019/20.

19. One way for Hong Kong to put a price on carbon emissions from its power sector is a revenue neutral switch from Rates and from excise taxes on petrol, to a carbon levy on fossil fuel imported into Hong Kong. The impact of such a switch on different energy consumers in Hong Kong would need to be studied before a change is made, and Civic Exchange is happy to provide further input.

20. Hong Kong has the potential to establish itself as Asia's centre of expertise for the services necessary to run successful emissions trading schemes. We suggest the Government explores models that are relevant to Hong Kong such as Tokyo's cap and trade scheme. Government should also take steps to foster the development of local industry clusters of these service providers here, carrying out activities such as:

- i. Monitoring, reporting and verification of emissions levels.
- ii. Design and distribution of carbon derivatives products.
- iii. Risk management and advisory services.

(III) Provide the framework for Hong Kong as a green and sustainable finance hub

21. The demand for sustainable investment is gaining centre stage with an increasing portion of global monies looking for Socially Responsible

- Foster the development of local clusters of service providers

Investments (SRIs). At the same time, businesses are under increasing regulatory as well as investor pressure to address their environmental and social impacts and business sustainability. What we can see is that much of the development of green finance will be driven by the sheer volume of funding needed to facilitate Asia's development and urbanisation, including Belt and Road. The bulk of this financing will need to come from the private sector. For example, the People's Bank of China forecasts that China needs to spend over US\$1 trillion annually for the next five years to meet its environmental targets – but the government has the capacity to finance only 15%, while the rest must be met by private sources.

22. Hong Kong has an opportunity to establish itself as the hub for these financing flows, which need to be scaled up rapidly from mainstream institutions, not just the SRI niche. Hong Kong institutions (public and private) certainly have the skills, experience and financial resources to design financial products and risk management and credit enhancement tools that will enable private funding to flow into low carbon sectors - but a proactive decision has to be made to focus on this area, which is complex and challenging.
23. The opportunity is huge for Hong Kong to position itself as a green finance hub for the Asia region, and contribute to greening the Greater Bay area and Belt and Road development. This aligns with China's "greening policy" underpinned by President Xi Jinping's 19th Congress speech.
24. Other financial centres such as the City of London's Green Finance Initiative are using green finance as a driver of competitiveness. If Hong Kong wishes to remain competitive, the Government must take proactive steps to establish Hong Kong's green economy and itself as a green finance hub and to foster expertise.
25. To attract both sides – global investors seeking green projects to finance, and businesses seeking funds to finance their green projects – Hong Kong's regulatory framework needs to evolve to cater for the specific investor protection and product development requirements of this growing market. Such a framework would involve having a trusted body to regulate standard setting (what is green?) and certification of green projects, ensure compliance and foster experience.⁶

26. There are significant potential benefits for building out Hong Kong’s bond markets, establishing a yield curve etc. Funding for low-carbon infrastructure, mitigation and adaptation in the capital markets could generate much greater diversity, both in terms of tenor, and also bond type e.g. project bonds (refinancing operating assets), asset-backed securitisation, and insurance linked securities. It is very important that Hong Kong has the aspiration go beyond corporate “green bonds” (which might be a reasonable first step). If Hong Kong can finally get to do this, it could help to attract the kind of high-quality, long term institutional investors that would be good for the market.
27. Hong Kong Government should shape effective, predictable and enabling policy environments that minimize market failures and create the conditions for a rapid scaling up of green finance. They can use broader policy packages including environmental regulation, pricing reforms and fiscal policy, but also interventions to support the greening of financial markets, with options such as:
- i. Creating smart and efficient incentive systems to catalyse green finance. The Monetary Authority of Singapore, for example, has recently announced a subsidy scheme that will cover the additional cost of issuing a green versus a vanilla bond, such as the price of green certification – an effective way to ensure quality, attract green bond issuers and build a financial centre profile.
 - ii. Using public means effectively. To optimize the leverage of private funds, governments should use public finance to de-risk the specific aspects of green investments – which may differ across sectors – that may discourage private investors.
 - iii. Supporting harmonization, capacity building and data provision. To implement forward-looking, scenario-based environmental risk analysis as recommended by the Task Force on Climate-related Financial Disclosures (TCFD), governments can promote knowledge sharing and support asset owners and managers with harmonized tools, sector-specific scenario data, learning platforms, and by teaching the teachers.
 - iv. Support development of a Hong Kong Green Investment Bank – as a vehicle for scaling up investments in low-carbon infrastructure, serving as a centre of expertise in Hong Kong, helping to educate banks and investors about the opportunities in low-carbon sectors, directly financing low-carbon projects, providing capital to other financial entities which would then deploy it in project, or offer a range of financial mechanisms to reduce the risk of green

- Enable policy environment for a rapid scaling up of green finance
- Catalyse green finance
- Use public finance to de-risk green
- Supporting harmonization, capacity building and data provision.
- Support development of a Hong Kong Green Investment Bank

investments for private investors.⁷

28. Other actions:

- i. Complete the issuance of a green bond in the next financial year.
- ii. Promote the establishment of green bond certification schemes that meet with international standards – therefore Hong Kong Government should consider issuing its "green finance guidelines".
- iii. Hong Kong Monetary Authority (HKMA) should consider issuing guidelines on green banking/lending.
- iv. Hong Kong's Financial Services and The Treasury Bureau (FSTB) should issue Hong Kong green bond guidelines.
- v. The Securities and Futures Commission (SFC) and the Hong Kong Stock Exchange (HKEx) should consider issuing a roadmap for environmental information disclosure for listed companies.
- vi. MPF should allocate a higher percentage of its portfolio to green investing and incubate green asset management capacity in Hong Kong.
- vii. Collaborate with China Green Finance Taskforce.⁸
- viii. Hong Kong is now listed as a member of the International Network of Financial Centres for Sustainability – Hong Kong Government should collaborate and learn from other leading cities to identify its own Roadmap for Sustainable Finance Action Plan.⁹
- ix. Hong Kong should join other major capital markets in leading global convergence of green standards to ensure a comparable and consistent market for this development to flourish.

- Issue sovereign green bond
- Establish green bond certification scheme
- Issue guidelines for green finance, green banking/lending, HK green bond
- Develop roadmap for environmental information disclosure for listed companies
- Allocate higher percentage of MPF portfolio for green investment
- Collaborate with China Green Finance Taskforce
- Develop Roadmap for Sustainable Finance Action Plan
- Lead global convergence of green standards

(IV) Encourage water conservation

29. Water stress worldwide will be exacerbated by population growth, climate change, pollution and waste. We need concerted efforts to use water wisely.

30. The Hong Kong Government imports the majority of its water (62% in 2015) and, in recognition of the need to manage the risk over long-term supply, is planning an expensive desalination plant. Yet, it greatly subsidizes the price at which water is sold to consumers, which contributes to increased consumption and wastage.

31. Civic Exchange's recent research finds that:

- i. Hong Kong is one of the world's highest per capita users of water. Hong Kong's average domestic water consumption per person per

day is 21% higher than the global average, and much higher than Macau and Singapore.¹⁰ Despite efforts by the Water Supplies Department (WSD), like its “Let’s Save 10L Water” campaign launched in 2014, overall fresh water consumption rose by a cumulative 7% during the five years to 2016, while per capita consumption rose from 130 m³ in 2013 to 135 m³ in 2016.¹¹

- ii. Hong Kong’s ‘unaccounted’ fresh water is more than 30% of our total water consumption. Between 2004 and 2015, the WSD would have lost as much as HK\$17 billion of water in money terms.¹² Losses from seawater mains were even more severe; while this is not an issue of freshwater loss, it results in energy wastage with financial consequences, and leaked salt water also causes erosion to building structures.

32. Water charges to consumers are low due to heavy Government subsidy (using taxpayers’ money) and those rates have not increased since 1995. We believe decisions in the mid-1990s to not increase prices were made to help households and businesses, but are an example of good intentions gone wrong. The low price placed on water by the Government subsidy has led to the undesirable effect of excessive usage. Lack of a rational pricing policy has also contributed to a recurring annual deficit in WSD’s budget of over HK\$1 billion in 2015, which has acted as a barrier to taking more vigorous action to reduce leakage in Hong Kong’s water supply system.

33. We propose the following:

- i. A review of water tariff is called for and charges should be raised for high-usage consumers without compromising low-income or low-usage consumers.
- ii. We suggest the review covers a long-term policy for water usage charges that should include the cost of both water supply and waste water treatment, with an extension of the current policy of lower charge rates on consumers with low usage, and higher charge rates on consumers with high usage.
- iii. For business consumers, which account for about 34% of total fresh water consumption, Government should adopt a ‘user pay’ concept, and charge these profit-making businesses, which are able to afford it, on a full cost basis rather than a heavily subsidized basis, as is currently the case.

- Review of water tariff that includes water supply and waste water treatment costs
- ‘User pay’ concept for business water users.

- iv. Investment should be made to carry out a community-wide inspection and repair scheme to stop water leaks and wastage. This should cover both public pipes and private pipes. Inclusion of water pipes in the Mandatory Building Inspection Scheme (which currently only covers drainage pipes) or creation of a similar scheme for water pipes (like for fire safety and gas safety) would expedite the progress of addressing this issue through an already practiced public-private sector measure. To provide the carrot for the stick, Government could provide a voucher to owners for water pipe inspection and repair works, and set a time frame for such incentive to expedite action.
- v. Hong Kong needs a holistic, long-term water governance policy with good cooperation between departments addressing water scarcity, wastage and conservation, currently served by three separate departments: Water Supplies Department, Drainage Services Department and Environmental Protection Department.

(V) Combat air pollution from power plants, ships and vehicles, and reduce emissions and exposure

34. Hong Kong has the inherent problem as a densely built, sub-tropical, urban centre that smog and air pollution are felt strongly. For example, the “street canyons” caused by high-rise buildings trap excess heat and unhealthy air, affecting social and physical wellbeing.
35. Hong Kong has made improvements to air quality over the years. However, we still fall short of Hong Kong’s Air Quality Objectives (AQO) with respect to some pollutants, and are far from World Health Organization standards.
36. Of concern is that during the 11 months to Nov 2017, Hong Kong recorded an overall worsening of air quality.¹³ Our recent research indicates that indoor pollution, which is not as recognized as much of a problem as outdoor pollution, also needs to be addressed.¹⁴

Measuring exposure

37. Civic Exchange recommends that the Government support R&D projects for new-generation technology to measure individual pollution exposure.

- Invest in community-wide inspection and repair scheme to stop water leaks and wastage

- Develop a holistic water governance policy

- Support R&D projects for new technology to measure individual exposure.

38. In addition, more funding should be given to mitigate the effects of indoor air pollution – not just outdoor pollution – including development of green buildings and technologies and publicity campaigns to educate the public.

Roadside emissions

39. Transport is a major source of emissions and pollution, and traffic congestion is a key contributor to this pollution. We suggest actions on reducing traffic congestion under the headings “Smart mobility and clean transportation” in Section VI and “Urban planning for walkability and open space” in Section VII. In addition, as measures to reduce roadside emissions, we suggest the following:

- i. The Government could promote the switching to cleaner transport by giving special exemptions from First Registration Tax for a switch from standard cars to cleaner vehicles like plug-in (pure/other electric) and hybrid (petrol-electric/diesel-electric).
- ii. The Government incentive-cum-regulatory scheme to phase out all pre-Euro IV diesel commercial vehicles (DCVs) by the end of 2019 should be expanded to include the phasing out of Euro IV DCVs as the on-going efforts to tackle emission and step by step move to zero emission.¹⁵

40. The Government could and should lead and spur R&D on ways of reducing diesel use for heavy-duty vehicles and for Hong Kong-based applications of compressed natural gas (CNG), biofuels and electrification.¹⁶

41. Hong Kong should have standardized emissions testing for vehicles, for pollutants like NO_x. The Government should review the needs and benefits of allocating more budgetary and land resources for dynamometer-based emissions tests at all vehicle test centres, including those that are privately owned.¹⁷

Ship emissions

42. In order to incentivize the shipping industry for taking further steps in reducing air emissions from their vessels while operating in Hong Kong waters, Civic Exchange suggests the Government extend but modify the current incentive scheme so that ocean-going vessels that are using 0.1% Sulphur fuel will be eligible for the rebate.¹⁸

- More funding to mitigate indoor air pollution: green buildings technologies & public education
- Incentives to switch from standard cars to electric or hybrid vehicles
- Step up incentives for replacing pre-Euro IV to Euro IV DCVs
- Fund R&D for reducing diesel use for heavy vehicles
- Fund standardized emissions testing
- Incentivize the shipping industry to reduce air emissions
- Modify the incentives for ocean-going vessels that use 0.1% Sulphur fuel

(VI) Facilitate smart mobility and clean transportation

43. We support public policies that drive down the number of private cars on the road, incentivize the use of public transportation and walkability for a healthier city for Hong Kong.
44. We support the reduction of first registration tax exemption on Electronic Vehicles (EVs) in the last budget as the exemption had the undesirable effect of encouraging car ownership in our already crowded city.
45. We suggest further fiscal measures to cut private car ownership to reduce city congestion and improve walkability by:
- i. Raising first registration tax on all private cars.
 - ii. Accelerating the introduction of electronic road pricing, move all vehicles to mandatory electronic tags, or install license plate recognition.
 - iii. As a further application, shifting to multi-lane free-flow charging for harbour crossing will save up space. A big toll plaza can be equivalent to 1 kilometer worth of length of a 6-lane highway in land take.
 - iv. Improving downtown hotspots with the regulation of private cars in particular zones. For example: either a total ban or entry-only at certain times; or introduce restricted-access licenses; or offer preferential charge rates to electric cars, hybrids or other greener vehicles.

- Support reduction of First Registration Tax (FRT) exemptions on electric vehicles
- Raise FRT
- Introduce Electronic Road Pricing
- Limit access to busy roads at certain times

(VII) Facilitate better urban planning in the areas of public open space and walkability

46. A healthy city is one where citizens can walk around comfortably, in a safe and secure environment with sufficient public open space, clean air and streets that can promote social interactions and feelings of community.
47. The Transport Department invests in walkability, especially infrastructure like hillside escalators and pedestrian overpasses. However, walkability is about more than just hardware. Civic Exchange identifies four levels of walking, starting from “possible to walk”, “efficient to walk”, “comfortable to work,” to “interesting to walk”.¹⁹

An affluent city like Hong Kong should invest to make our city comfortable and interesting to walk.

48. Financial resources should be allocated to ensure streets are actively managed. This includes elements such as:

- i. Easy to navigate with good signage.
- ii. Safe, with separation between pedestrians and car traffic.
- iii. Comfortable, with smooth and level pavements.
- iv. Clean, with management of trash, odors, pollution, construction debris and noise.
- v. Aesthetically pleasing, with good street design, street furniture, etc.
- vi. Interesting, with street-level shops, eateries, windows, entrances, plus enhancements that showcase Hong Kong’s culture and history.
- vii. Dotted with small parks that are not set off in “isolated” locations, plus accessible use of space beneath bridges and flyovers.
- viii. “Built on a human space”.
- ix. Shaded by trees or awnings, which provide cooling and protection from weather.
- x. Green – lined with greenery and plants.

49. The Government should allocate a portion of its budget to pedestrianise, under a road-sharing scheme, the 1.4 kilometers from Pedder Street to Western Market by investing in the Walk DVRC (Des Voeux Road Central) project. This will include:

- i. Create a walkable and liveable Central Business District that begins with the revitalization of a decaying DVRC.
- ii. Transform a critical, traffic-clogged road into a dynamic, inclusive and smart public realm worthy of a city of Hong Kong’s image and status.
- iii. Connect this essential artery to the cultural and heritage sites that surround it.²⁰

50. We recommend that the Government allocate:

- i. HK\$10 million for a Traffic Impact Study that would look at the implications, including modeling, pedestrian surveys, long-term traffic diversions, congestion issues, etc. under a road-sharing pedestrianisation scheme for Des Voeux Road Central.
- ii. HK\$20 million for an Environmental and Social Impact Assessment Study that would evaluate air pollution, congestion, economic benefits and social inclusion issues.

- Allocate resources to ensure streets are actively managed

- Allocate budget for pedestrianisation

- Pedestrianise Des Voeux Road Central
 - a) Fund a Traffic Impact Study
 - b) Fund Environmental and Social Impact Assessment Study

51. Hong Kong residents have only 2.7-2.8 m² of public open space per person in urban areas.²¹ We have far less urban space than residents in similar Asian cities: Tokyo, Seoul, Shanghai and Singapore get 5.8-7.7.6 m².

52. Civic Exchange recommends increased funding on urban planning in the following areas:

- i. Create new major regional open spaces, such as urban parks like Hong Kong Park and Kowloon Park, and allocate resource to ensure they are designed and maintained at a world-class level.
- ii. Invest HK\$ 2.3 billion over five years for urban Open Space Improvement Programme, similar to the Universal Accessibility Programme, to construct and improve local and district open spaces.²²
- iii. Increase funding for the Leisure and Cultural Services Department (LCSD) to focus on comfort and enjoyment of users and move away from standardized spaces designed for ease of maintenance.^{23 24}

53. We submit that the above proposed public policies and funding directed to better urban planning and a better built environment to improve open space and walkability would help to improve public health, and in the long run, cut public costs on medical and social care.

(VIII) Cut waste at source, facilitate recycling and promote a circular economy

54. Hong Kong's landfills are filling up, in a city with little land to spare. Not enough of our solid waste is recycled. New waste import laws in China may reduce that outlet for Hong Kong, which exports most of its recyclable waste. This will exacerbate our landfill issues.

55. In Hong Kong, recycling seems to be done mostly by private enterprises which collect, package and ship waste.

56. Here are some points we would raise for the Government's consideration:

- i. In Sept 2017, the Government set aside HK \$20 million to help local recycling companies with upgrades. We suggest funding should be increased for greater promotional efforts and further incentives such as sponsorship, or tax allowances and deductions.

- Create new open spaces
- Invest in urban Open Space Improvement Programme
- Increase funding for open space which provide comfort and enjoyment

- Increased funding for recycling programs and facilities

- ii. Landfill land should be rezoned so that it can also hold recycling facilities.
- iii. Civic Exchange supports the Government's proposed Municipal Solid Waste Charging Scheme, with prepaid bags for domestic households, and other charges for Private Waste Collectors (PWC) disposing directly into landfills. The charges should be used for more recycling facilities.
- iv. Government could do more to help cut waste at source, such as providing public water dispensers that are clean, convenient and well designed to reduce purchases of single-use plastic bottles, launch a deposit and return scheme for plastic, and an environmental tax for the manufacture and import of plastic bottled water and beverages.²⁵

- Re-zone landfill land to hold recycling facilities
- Waste charges be used for recycling facilities
- Incentives to cut waste at source

(IX) Plough back increased fines and tariffs to finance green incentives

57. Civic Exchange has called for various new fines and fine increases on traffic violations, illegal roadside parking and idling. We advocate electronic road pricing, the raising of tariffs (water) and taxes (car registration). The Environmental Protection Department (EPD) has used charging schemes in the past (50-cent plastic bags) and plans more (waste collecting).
58. The prime objective of these fines and tariff increases is to change behaviour and promote conservation rather than fund the Government. Any tax on local businesses should come with a "carrot" to help them comply with regulations.
59. We recommend that these additional revenues go specifically to provide environmental incentives. For example, car registration tax or traffic fines should be used to improve public transport and walkability. An increase in water tariffs should be used to provide repair grants for leaking water pipes and for investigatory inspections performed by private owners, and revenue from carbon levy could be used to incentivize businesses to carry out energy-efficiency improvements.

(X) Improve communication spending to advance civic education

60. The need for better Government communications has come up in our various research reports and submissions: relating to plastic bottle use, wildlife / biodiversity education, indoor air pollution warnings,

domestic water consumption, etc.

61. We recommend that the Government spend more on education and engagement for environmental topics. This may include school programmes, modern messaging (social media), video, user-friendly apps and advertising campaigns, and funding of such civic education programmes by environmental think-tanks and green groups.

- Increase spending on education and engagement

About Civic Exchange

Civic Exchange is a non-partisan think-tank which is committed to evidence-based public policy formulation in addressing urban sustainability and livability challenges. Our output is independent and analytical rather than opinion-oriented, and always solution-focused. Independence, transparency and collaboration form the foundation of Civic Exchange's core values.

Civic Exchange relies on its research to inform policy discussions at all levels of Hong Kong's society, from public and professional forums to government officials' discussions. Through drawing out issues and policy gaps, we clarify complex issues that might fall between official departments or mandates and develop solutions that are acceptable to all stakeholders. We act as a most-trusted and networked convener, such that the best people come to Civic Exchange offering their views and collaboration.

Civic Exchange is ranked as one of the top 50 environmental think-tanks in the world, by the University of Pennsylvania's 2016 Global Go To Think Tank Index and is the only non-governmental, environmental think-tank on that list in greater China.²⁶

END NOTES

¹ Financial Secretary's Office, *2017-2018 Budget*, 22 Feb 2017, HKSAR Government, www.budget.gov.hk

² Leverett, B. et. al., 2007, *Idling Engine: Hong Kong's Environmental Policy in a Ten Year Stall 1997-2007*, Civic Exchange, p. 61

³ DeGolyer, M.E. and Lai, C., *Asian Urban-Wellbeing Indicators Comparative Report: Hong Kong, Singapore, Shanghai*, June 2016, Civic Exchange and WYNG Foundation, pg 2, <http://civic-exchange.org/report/asian-urban-wellbeing-indicators-comparative-report-hong-kong-singapore-shanghai-2016-first-report-full-report/>

⁴ Green finance is a market-based means that acts to increase the flow of funds to environmentally beneficial projects, essentially reducing their costs, as well as by heightening awareness of the financial risks related to environmental change. See, Bank of International Settlements (BIS), *Green Bond Finance and Certification*, 17 Sept 2017, citing the G20 Green Finance Study Group (GFSG) 2016, https://www.bis.org/publ/qtrpdf/r_qt1709h.htm

⁵ UN Environment, *The Emissions Gap Report 2017*, Nov 2017, <https://www.unenvironment.org/resources/emissions-gap-report>

⁶ BIS states: “How can investors be sure that the proceeds of green bonds are invested in an environmentally friendly way, and not merely ‘green-washed’ to give the appearance thereof? While there is no single global definition of what precisely constitutes an ‘environmentally beneficial’ use of proceeds, different standards have gained acceptance among market participants. Various organizations have started to provide green label certifications that indicate adherence to particular definitions of green, including ‘shades’ of green. In so doing, they align the incentives of those who want to invest in these bonds, and make it easier for asset managers to satisfy those preferences.” The more consistent ‘green’ standards across jurisdictions could help to further develop the market. See Bank of International Settlements, *Green Bond Finance and Certification*, 17 September 2017

⁷ Tracy, A., *Leading Asia’s Financial Future – Hong Kong Green Financial Bank, 2017*, Financial Services Business Council of the European Chamber of Commerce in Hong Kong, <http://www.eurocham.com.hk/wp-content/uploads/2017/10/Leading-Asias-Financial-Future-Hong-Kong-Green-Investment-Bank.pdf>

⁸ China has firmly established itself as a global leader on green finance. China – which put green finance on the G20 agenda during its 2016 presidency – is following through on its political commitment to boost the financing required to do this. See, International Institute of Green Finance (IIGF) of the Central University of Finance and Economics (CUFE) and the UN Environment Inquiry, *Establishing China’s Green Financial System: Progress Report*.

This report marked its first in-depth assessment of green finance progress. It looks particularly at progress since the State Council in August 2016 approved a set of recommendations for action on greening China’s financial system.

⁹ Five new cities – Frankfurt, Geneva, Shenzhen, Toronto and Zurich – have joined the International Network of Financial Centres for Sustainability. The founding members of the Network – convened by UN Environment and launched in Casablanca on 28 September 2017 (including Astana, Casablanca, Dublin, Hong Kong, London, Luxembourg, Milan, Paris, Qatar, Shanghai and Stockholm) have all committed to harnessing their financial expertise to drive action on climate change and sustainable development. More than 20 financial centres are now active in green and sustainable finance on the margins of the One Planet Summit. See, UN Environment, *Accelerating Financial Centre Action on Sustainable Development*, December 2017

¹⁰ Civic Exchange and ADM Capital Foundation, *The Illusion of Plenty*, May 2017, <http://civic-exchange.org/report/water2017/>

¹¹ Research Office Legislative Council Secretariat, *Water Consumption and Supply: Statistical Highlights*, 20 December 2017

¹² Civic Exchange and ADM Capital Foundation, *The Illusion of Plenty*, May 2017

¹³ The total hours of air quality categorized as high health risk or above (Air Quality Health Index >7) were 2,870 hours in the first 11 months of 2017. This was an 87% increase, compared to 1,535 hours in 2016, according to EPD data from 13 general stations. Recordings from three roadside stations also showed 876 hours exceeding the level of high health risk during the same period of 2017, which was an 81% rise from 2016. See Hong Kong Environmental Protection Department, <http://www.epd.gov.hk>

¹⁴ Ng, S., et al, *Monitoring Personal Exposure to PM_{2.5} in Hong Kong with Next Generation Sensors*, June 2017, Civic Exchange and City University of Hong Kong, <http://civic-exchange.org/report/monitoring-personal-exposure-to-pm2-5-in-hong-kong-with-next-generation-sensors/>

¹⁵ Hong Kong Environmental Protection Department: Out of the 30,908 Euro III eligible DVCs in 2014, 19,738 (64%) were still on the road as at end Oct 2017, <http://www.epd.gov.hk>

¹⁶ We recognize that there are no alternatives to diesel for large vehicles at present, but new technologies are showing encouraging practical possibilities. But we do need a clear pathway towards zero emission on everything. It can be hybrid first then electric, and first taxis, then mini-buses, then buses, then trucks

¹⁷ Seymour-Hart, I. and Lam, S., *Training and Development of Inspection and Maintenance Personnel in Hong Kong for Road Vehicles*, Jan 2016, Civic Exchange and ADM Capital Foundation, <http://civic-exchange.org/report/training-and-development-of-inspection-and-maintenance-personnel-in-hong-kong-for-road-vehicles/>

¹⁸ Originally launched in September 2012, the Port Facilities and Light Dues Incentive Scheme was further extended for 30 months up to 31 March 2018 by the Government to support the shipping industry for complying with the 0.5% Sulphur content fuel requirements, which became effective 1 July 2015.

¹⁹ Ng, S., *Measuring and Improving Walkability in Hong Kong*, December 2016, Civic Exchange, <http://civic-exchange.org/report/measuring-and-improving-walkability-in-hong-kong-final-report/>

²⁰ Walk DVRC aligns with numerous Policy Address goals, namely Improving walkability and the pedestrian environment; improving air quality; encouraging tourism; facilitating arts, culture and heritage conservation; creating elderly- and disabled-friendly public open space; and bringing technology and innovation to the street.

²¹ Lai, C., *Unopened Space: Mapping Equitable Availability of Open Space in Hong Kong*, Feb 2017, Civic Exchange, <http://civic-exchange.org/report/unopened-space-mapping-equitable-availability-of-open-space-in-hong-kong/>

²² Ibid, pg 58

²³ Ibid, pg 59

²⁴ Many urban pocket parks are sparsely planted, lack adequate seating, have walls built around them that hinder access, and are laid out in ways that do not allow flexible use of the space or are inconvenient for social interaction.

²⁵ Lao, M. and Lai, C., *Reducing Plastic Waste in Hong Kong*, April 2016, Civic Exchange and WYNG Foundation, <http://civic-exchange.org/report/reducing-plastic-waste-in-hong-kong-public-opinion-survey-on-bottled-water-consumption-and-attitudes-towards-plastic-waste-full-report/>

²⁶ McGann, J.G., *2016 Global Go To Think Tank Index Report*, January 2017, University of Pennsylvania, https://repository.upenn.edu/think_tanks/12/

| Use of annual surplus in 2016-17 | |
|---|-----------|
| 二零一六／一七年度盈餘的運用 | |
| | (\$B 十億元) |
| Earmarked for 預留作 – | |
| Elderly services and rehabilitation services for persons with disabilities 安老及殘疾人士康復服務 | 30 |
| Sports development 體育發展 | 20 |
| Innovation and technology development 創新及科技發展 | 10 |
| Education 教育 | 18 |
| | 78 |
| Short-term Relief Measures 短期紓緩措施 – | |
| Salaries tax and tax under personal assessment 薪俸稅和個人入息課稅 | 16.4 |
| Profits tax 利得稅 | 1.9 |
| Rates 差餉 | 10.9 |
| Extra payment to social security recipients, etc. 向領取社會保障金額等人士發放額外援助金／津貼 | 3.6 |
| | 32.8 |
| | 110.8 |

32

Use of Annual Surplus in 2016-17 二零一六／一七年度盈餘的運用

Earmark 預留：

- \$30 billion for strengthening elderly services and rehabilitation services for persons with disabilities; 三百億元加強安老和殘疾人士康復服務；
- \$20 billion for sports development; 二百億元作體育發展；
- \$10 billion for supporting innovation and technology development; 一百億元支援創新及科技發展；
- \$18 billion for education. 一百八十億元作教育用途。

Short-term relief measures 短期紓緩措施：

- Reduce salaries tax and tax under personal assessment for 2016-17 by 75%, subject to a ceiling of \$20,000. This will benefit 1.84 million taxpayers and reduce government revenue by \$16.4 billion; 寬減二零一六／一七年度百分之七十五的薪俸稅和個人入息課稅，上限為二萬元，全港一百八十四萬名納稅人受惠。政府收入將減少一百六十四億元；
- Reduce profits tax for 2016-17 by 75%, subject to a ceiling of \$20,000. This will benefit 132 000 taxpayers and reduce government revenue by \$1.9 billion; 寬減二零一六／一七年度百分之七十五的利得稅，上限為二萬元，全港十三萬二千名納稅人受惠。政府收入將減少十九億元；

Capital works projects

基本工程項目

Apart from strategic infrastructure to improve transport links and develop new growth areas, the capital works programme covers cultural, education, environmental protection, hospitals, sports complexes and district projects, etc.

除了為改善運輸通道和發展新增長地區而進行的策略性基建項目外，基本工程項目亦包括文化、教育、環境保護、醫院、運動場館及地區工程項目等。



20

- Strategic infrastructure projects under way 現正進行的策略性基建項目：
 1. Hong Kong-Zhuhai-Macao Bridge 港珠澳大橋
 2. Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link 廣深港高速鐵路香港段
 3. Tuen Mun-Chek Lap Kok Link and Tuen Mun Western Bypass 屯門至赤鱸角連接路及屯門西繞道
 4. Shatin to Central Link 沙田至中環線
 5. West Kowloon Cultural District 西九文化區
 6. Kai Tak Development 啓德發展計劃
 7. New Development Areas (Kwu Tung North and Fanling North and Hung Shui Kiu) 新發展區 (古洞北及粉嶺北、洪水橋)
- Other projects include 其他項目包括：
 8. Health – e.g. construction works for New Acute Hospital at Kai Tak Development Area, redevelopment of Prince of Wales Hospital and extension of operating theatre block for Tuen Mun Hospital 衛生 – 例如在啓德發展區興建新急症全科醫院、威爾斯親王醫院重建計劃及屯門醫院手術室大樓擴建計劃
 9. Environmental protection – e.g. construction of dry weather flow interceptor in Kowloon and Tsuen Wan 環境保護 – 例如在九龍及荃灣建設旱季截流器
 10. Education – primary and secondary schools and tertiary institutions projects 教育 – 小學、中學及大專院校工程
 11. Sports, recreational and cultural – e.g. development of Kai Tak Sports Park and infrastructure works for West Kowloon Cultural District 文娛、康樂及體育 – 例如發展啓德體育園及開展西九文化區相關的工程

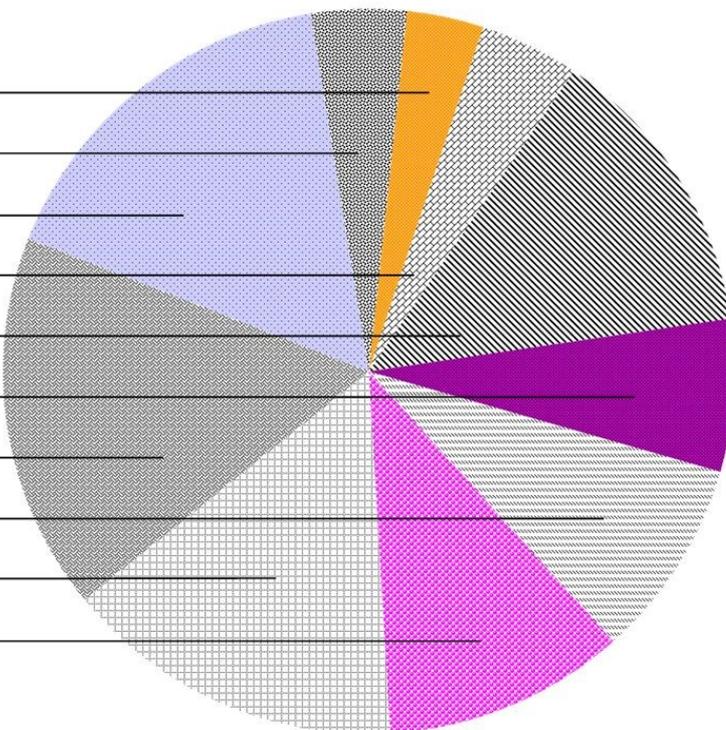
SECTION IV MAJOR CAPITAL PROJECTS PLANNED FOR COMMENCEMENT IN 2017-18

Major capital projects estimated to begin in 2017-18 include –

| | Project Estimates \$ billion |
|--|---|
| Infrastructure | 76.9 |
| — Site formation and associated infrastructural works for development of columbarium at Sandy Ridge Cemetery | |
| — Central Kowloon Route—main works | |
| — Development of Anderson Road Quarry site—remaining works | |
| — Site formation and infrastructure works for development at Kam Tin South, Yuen Long—advance works | |
| — Tung Chung New Town Extension—reclamation and advance works | |
| — Integrated Basement for West Kowloon Cultural District—third stage of construction works | |
| — Upgrading of disinfection facilities in water treatment works | |
| — Design and construction for first stage of desalination plant at Tseung Kwan O—mainlaying | |
| — Site formation and infrastructure works for public housing developments at Chung Nga Road and Area 9, Tai Po—Phase 1 | |
| — Road improvement works at Ma On Shan, Sha Tin | |
| Security | 5.9 |
| — Construction of rank and file quarters for Fire Services Department at Area 106, Pak Shing Kok, Tseung Kwan O | |
| — Construction of Departmental Quarters for Customs and Excise Department at Tseung Kwan O Area 123 (Po Lam Road) | |
| — Redevelopment of Junior Police Officers Married Quarters at Fan Garden, Fanling | |
| Health | 3.0 |
| — Extension of Operating Theatre Block for Tuen Mun Hospital—main works | |
| Support | 2.9 |
| — Reprovisioning of Transport Department's vehicle examination centres at Tsing Yi | |
| Environment and Food | 2.5 |
| — Construction of dry weather flow interceptor at Cherry Street box culvert | |
| — Rehabilitation of trunk sewers in Kowloon, Shatin and Sai Kung | |
| — Enhancement works for Kwun Tong sewage pumping station | |
| Economic | 1.8 |
| — Reprovisioning of Hongkong Post's Headquarters in the General Post Office Building to a Government, Institution or Community site at Wang Chin Street, Kowloon Bay | |
| Education | 1.0 |
| — Academic building at No. 3 Sassoon Road | |

**Percentage Share of Expenditure by Policy Area Group
Total Public Expenditure : 2017-18 Estimate**

| | |
|--------------------------------|--------|
| Community and External Affairs | 3.4% |
| Economic | 4.2% |
| Education | 16.5% |
| Environment and Food | 4.4% |
| Health | 13.2% |
| Housing | 6.8% |
| Infrastructure | 16.8% |
| Security | 8.9% |
| Social Welfare | 15.1% |
| Support | 10.7% |
| | 100.0% |



**Percentage Share of Expenditure by Policy Area Group
Total Government Expenditure : 2017-18 Estimate**

| | |
|--------------------------------|--------|
| Community and External Affairs | 3.7% |
| Economic | 3.7% |
| Education | 17.8% |
| Environment and Food | 4.8% |
| Health | 14.2% |
| Housing | 0.1% |
| Infrastructure | 18.1% |
| Security | 9.6% |
| Social Welfare | 16.4% |
| Support | 11.6% |
| | 100.0% |

