



Hong Kong General Chamber of Commerce
香港總商會1861

HKGCC Climate Change Strategy and Action Agenda

Introduction

1. Since the Hong Kong General Chamber of Commerce (HKGCC) presented its study report to the Government in 2008 detailing 43 action-oriented policy recommendations for tackling air pollution, its Environment and Sustainability Committee, which spearheaded the effort, has been continuing its studies and advocacy. Much of the impetus has come from the heightened awareness of the urgency of climate change issues. Indeed in our 43 recommendations we had included ambitious targets for local greenhouse gas (GHG) emissions. The scope of our work has since been broadened, culminating in this paper after wide consultation among HKGCC members.
2. As the HKSAR Government (Government) launched the consultation on its proposed climate change strategy and action agenda, our report serves both as a study report which sums up our work and, in a timely fashion, our response to the public consultation.
3. With this report, the HKGCC will continue to engage in policy discussions with the Government and other stakeholders on climate change and other related issues along the following lines:
 - (i) The HKGCC welcomes the study of the Government on Hong Kong's climate change strategy and action agenda. The consultation document is written in a clear and straight forward manner with appropriate explanatory notes, allowing the general public to better understand the issues, and to participate in the consultation process.
 - (ii) The HKGCC welcomes the Government's initiatives for combating climate change, and accepts the proposed carbon intensity reduction target of 50%-60% by 2020. This seems achievable, although challenging, providing that the fuel mix strategy for electricity generation, proposed energy efficiency and GHG emissions reduction measures, as well as the efficient use of hydrocarbon fuels could be attained.
4. The proposed definitive targets have formed a solid basis for putting in place the appropriate reduction strategies. If the right transition plan is put in place, it is possible to achieve the reduction targets of 50-60% in carbon intensity and 19-33% of total GHG from 42 million tonnes to 28-34 million tonnes, which translate into a 27-42% per capita GHG emissions reduction from 6.2 to 3.6-4.5 tonnes. Once attained, Hong Kong will have made good progress among developed economies, given that current average per capita emissions are 5.6 tonnes per year.
5. The impact of climate change is gradually being felt in Hong Kong, for instance in weather patterns and temperatures as noted by the Hong Kong Observatory. It would

be beneficial for Hong Kong to develop an emergency preparedness plan for extreme weather events, storm surges or extended hot periods. Furthermore, the design of new infrastructure and (re)development of areas should take into consideration potential climate change impacts as a good adaptation practice. Initiatives should be linked to parallel efforts to improve quality of life in Hong Kong.

6. We support in principle the proposed climate change strategy and action agenda as a start to developing a low carbon economy, that could bring in new business opportunities once relevant policy initiatives and incentives are in place. These policy initiatives and incentives need to be prioritized and harmonized in conjunction with the proposed air quality improvement measures and the AQO review. Appropriate institutions should be developed to support the measurement, reporting and verification of carbon emissions across the entire business sector.
7. However, the consultation document seems lacking in clarity on the cost impacts of implementing the climate change strategy, such as electricity pricing. The success of the strategy will require a pragmatic approach to implementation, with careful consideration of the potential impacts on businesses and the community when determining the appropriate policy measures, incentives and alternatives, as well as a wider perspective covering the PRD, as elaborated in the following:

Revamp fuel mix for electricity generation

8. The most critical GHG reduction measure is the revamp of the fuel mix for electricity generation, which accounts for around two-thirds of local GHG emissions. In principle, any reduction in coal-fired power supply is the right direction.
9. The HKGCC supports in broad terms the proposed fuel mix and the replacement of coal with additional gas-fired generation and nuclear power by 2020. We support the use of natural gas as it is cleaner and more efficient, although it is also a fossil fuel contributing to GHG emissions. Having a secure, safe and reliable supply of electricity is essential, and such a supply should come with the lowest practicable environmental impact and at a reasonable cost.
10. As the consultation document points out, nuclear power has been a stable, reliable and relatively low cost electricity supply to Hong Kong for more than 15 years. Adding extra nuclear power appears to be an obvious option, but the document does not elaborate on issues like current and future availability of nuclear power sources and nuclear fuel, safety issues and measures for disposing of spent fuel. The wider community in Hong Kong will need reassurance in relation to the risks associated with nuclear power, as well as nuclear power supply for Hong Kong in the future. This is important because without such assurances, it may be too difficult at this stage to state or to accept that nuclear should be the unequivocal preferred route.
11. It is obvious that Hong Kong needs better integration with Mainland China to secure a stable and reliable source of electricity. As the proposed fuel mix is highly dependent on nuclear and gas sourced from the Mainland, the Government should conduct a risk analysis on this dependency and explore possible options for risk mitigation. Such risks may include interruptions to the operation of nuclear plants and gas pipelines, and fuel shortages in the Mainland. It may be necessary to maintain a certain number of

coal-fired or oil-fired generators for emergency use in the event of unforeseen fluctuation in natural gas and nuclear power supply.

12. There should be more attention on renewable energy and energy efficiency. Owing to land supply constraint, there are limits to large scale use of renewable energy such as solar and wind in Hong Kong. However, appropriate promotional and incentive programmes should be taken to encourage individual users to install small renewable energy systems, with the target of producing 3-4% of total electricity generated from renewable sources, as suggested in the document. This can be facilitated by a combination of the following measures: streamlining the relevant building code and regulations, simplifying electricity grid connection requirements whilst maintaining reliability, and offering appropriate Government financial incentives.
13. The costs and benefits of different approaches, including the Government's proposals, should be compared and studied in detail. The Government has the responsibility to clearly set out the costs and benefits, particularly for electricity pricing, so that the whole community may discuss and hopefully endorse. If there are measurable benefits, e.g. saving on electricity bills due to installation of appropriate lighting devices, more businesses and households will be willing to follow suit.

Define sectoral targets

14. The Government should be more specific about what it hopes to achieve in reducing GHG emission in individual business sectors (e.g. quantitative targets of reduction in percentage terms). The Government should also seek to define a clear and equitable delineation of responsibilities - who should pay and be responsible. A package of policy measures and incentives, carrying both "carrots and sticks", should be developed to facilitate businesses, particularly the property and transport sectors, to invest in low carbon infrastructure and technologies:

Property

15. We believe that the actions proposed in the consultation paper do not go far enough to improve the efficiency of our building stock. The Chamber is eager to see policies that would engender a significantly higher degree of energy savings.
16. The strategy to maximize energy efficiency in buildings is another key driver for GHG reduction. Apart from the proposed agenda listed in section 5.8 of Part V, the Government should investigate into various aspects of electricity consumption in buildings and associated demand side management, including energy efficiency in vertical transport (lifts/escalators). It should formulate technical guidelines to help building owners identify improvement opportunities and measures, as well as develop GHG emission (or energy) benchmarking for different types of buildings, so as to enhance owners' understanding of the GHG reduction performance of their properties.
17. The Government should enhance the financing tools for carbon reduction projects in retrofitting works of buildings, which consume some 90% of the total electricity generated, and offer incentives to phase out the use of inefficient applications such as centralized air-cooled air conditioning, lighting, motors, water heating systems, etc.

The phase-out programme should in time become mandatory if it would start with a voluntary phase.

Transport

18. The greening of road transport is a major component of the GHG reduction strategy. The Government should be applauded for their foresight in supporting railway development. In addition to the suggested agenda mentioned in sections 5.12 to 5.15 of Part V of the document, due consideration should be given to:
 - 18.1 Accelerate the development of comprehensive rail-based transport, and extension of rail network where practicable, including conventional and light rail systems, with a view to reduce road transport; and
 - 18.2 Support the development of low emissions buses, mini-buses and taxis, perhaps with their electric equivalents when they become available. This could include trolley buses, trams and super-capacitor buses;
19. To further promote hybrid and electric vehicles (EVs), the Government should:
 - 19.1 Secure more early supplies of R/H drive models from the makers;
 - 19.2 Set aggressive targets or policy for use of EVs in the Government's fleet and even perhaps the rest of the Hong Kong fleet in order to encourage more volume for R/H drive manufacturing;
 - 19.3 Provide greater financial incentives and preferential tax write-off for early adopters and businesses investing in EVs;
 - 19.4 Provide extra allowance for developers who install EV charging facilities in their new buildings;
 - 19.5 Harmonize the EV infrastructure (e.g. repairing and battery charging facilities) with Guangdong to encourage greater use of EVs in cross boundary transport;
 - 19.6 Support faster roll-out of private and public charging solutions; and
 - 19.7 Initiate research and development of technologies for converting existing motor vehicles to hybrid and EVs, and subsequent technology demonstration and promotion to the public.
20. It should be recognized that carbon intensity in transport can be attained not only through promotion of specific technologies but also modal switching. Consideration should be given to increasing inter-modality between the various transport modes, with a view to increasing the ridership of more energy efficient transport systems.
21. In addition to free-wheeling battery electric vehicles¹, the Government should take a

¹ *free wheeling electric vehicles* carry their entire power source(s) with them; *Tethered electric transport systems* draw *all* their power from fixed lines above or below; *super capacitor buses* recharge on-board batteries intermittently at bus stops.

comprehensive look at electric transport, covering:

- Free wheeling plug-in battery powered vehicles;
- Free wheeling electric/petrol or diesel hybrids;
- Tethered electric transport (heavy and light rail, trolley buses, trams); and
- Super-capacitor buses

22. The Government should consider funding trials for electric public transport, covering:
- enhancement of tram system;
 - extension of light rail networks;
 - trials for trolley buses, minibuses and taxis;
 - trials for electric delivery vehicles; efforts to replace old diesel vehicles with EV or LPG if new models not yet available; and
 - electrification of all vehicles supporting Hong Kong's international airport, as originally proposed in the AQO study.
23. The Government should take further initiatives to reduce road traffic through:
- more cycling routes where safe, cycle hire schemes are possible and appropriate;
 - more pedestrianised areas, with business access out of peak hours or only for no emissions (electric) delivery vehicles during peak hours; and
 - better planning and coordination to minimize overlapping bus routes.
24. To maximize energy efficiency of port operations and reduce emissions from sea transport, the Government should:
- 24.1 Encourage port operators to measure, record and report GHG emissions; and
- 24.2 Provide incentives for reducing the use of diesel at the ports, and increase the use of electricity for container handling, dockside cranes and associated infrastructure within the ports.

Waste Management

25. The development of the proposed Integrated Waste Management Facilities and food waste treatment facilities should be accelerated to reduce GHG emitted from landfills. While such developments can help manage the problem of landfill shortage in Hong Kong, there is also a need to educate the general public to reduce carbon footprints through waste reduction.
26. The Government should develop policies to facilitate the use of the EcoPark to support the development of the recycling industry in Hong Kong, so as to reduce the pressure on our landfills.

Engage the public sector and business community

27. The Government should take the lead in practising low carbon management and requiring all departments and facilities to conduct regular carbon audit and reporting, and where appropriate setting reduction targets.
28. It is important to facilitate businesses in accounting for climate risks in their decisions and provide support for their initiatives to help Hong Kong become a low-carbon city.

The Government should continue to outreach and regularly consult with the business sector, as close engagement in the early stages of strategy formulation will help generate practical solutions and get strong buy-in.

29. The Government can encourage the regular tracking of emissions by businesses in corporate disclosure and reporting, and provide support with appropriate policy frameworks to ensure that Hong Kong maintains its position as an international business centre that exemplifies global best practices. It should specify the scope of emissions being accounted for and provide tools and facilitation, aiming at helping businesses and eventually their supply chains to embed carbon costs into products and services, as and when such costs can be determined objectively and allocated fairly and equitably.
30. The Government should provide more support to SMEs, which face different issues from MNCs in moving towards the low-carbon economy, such as financial obstacles, knowledge gaps, training needs and guidance on employee engagement. A support framework should be established to help match resources with the relevant needs through, for example, a long standing scheme under the Sustainable Development Fund specifically for SMEs, cooperation projects with the financial sector, mentoring programmes to promote the use of available reporting tools, etc.
31. The financial sector can play a key role in supporting the development of a low-carbon economy, not only through financing, but also creating market and trading mechanisms. Hong Kong's position as an international financial centre implies that it can capture the market and trading opportunities associated with the low-carbon future. But this will not happen without forward-looking policy frameworks and early actions, which are currently not in evidence and should be part of the strategy.

Facilitate demand side management

32. Demand Side Management (DSM) should be encouraged not just from a carbon perspective but also for the conservation of fossil fuel resources. At the individual level, it entails changing behaviour and lifestyle choices. For business enterprises, DSM involves changes in purchasing decisions and operational measures. In both cases, the constraints are (1) lack of choices, (2) inadequate information for making choices, and (3) cost disadvantage inherent in greener options compared to more readily available conventional choices.
33. The Government has a facilitating role in enhancing businesses' contribution to energy efficiency, for example, through more support in the promotion and development of energy-related industries and services, and facilitation programmes to influence businesses as well as their employees and customers to adopt energy efficient purchasing decisions and consumption behaviours.
34. There should be more aggressive promotion of voluntary temperature control for air conditioning in offices and shopping centres. A code of practice should be introduced for the design parameters and indoor temperature control of data centres and server rooms.
35. For energy companies, initiatives such as end-use energy efficiency, peak reduction and load shifting programmes have been promoted for some time with tangible results.

More ambitious targets may be considered and further incentive schemes should be devised to encourage energy companies to actively support end-user efficiency, which will also help prevent excessive production capacity in the longer term.

36. The effectiveness of GHG reduction measures relies on public support. To increase public awareness of the climate change issues, the energy providers could provide more information to their customers on the carbon footprints of their energy as it is consumed. Behavioral change is critical, as even when the most efficient air conditioning and lighting systems are installed, users do not always take the initiative to switch off the facilities when they are not in use. In addition to energy efficiency labeling, we should promote responsible energy consumption in the community to encourage changes of habits and practices.

Wider perspectives and further action plans

37. While it may be too soon to specifically address Hong Kong's Scope Three emissions, we as a major trading economy should begin to prepare for future measurement and disclosure of its Scope Three emissions and, ultimately, reduction actions. The Government can provide support for the trading and logistics sectors as they develop their sustainability plans.
38. We should continue to help Hong Kong-owned and controlled factories in the PRD to reduce GHG emissions. The scope of the Cleaner Production Partnership Programme mainly focuses on pollution reduction and energy efficiency improvement. The Government should consider extending the programme to cover eco-material selection, eco-product design, logistics management, and product end-of-use management.
39. The document should also address the issue of emissions from air travel, air freight and the aviation industry. Economic and wealth indicators underpin the argument that Hong Kong should adopt guidelines and positions aligned with developed economies. This includes forward-looking plans on aviation.
40. The Government should prioritize the creation of a climate change adaptation plan based on the identified 'key areas of vulnerability' in Hong Kong. In anticipation of extreme weather events and temperature fluctuations projected by the Hong Kong Observatory, a preparedness plan developed to deal with immediate physical environmental risks and long-term ecosystem damages should be executed with the climate change mitigation plan in tandem. Systematic cross-departmental cooperation should be encouraged in adapting to climate change, with a focus on managing impacts on buildings, banking, telecommunications, public transport services, and energy and food supply.
41. It is widely recognized that climate change and biodiversity are interconnected, not only through the effects of climate change on biodiversity, but also through changes in biodiversity and ecosystem functioning that affect climate change. It is therefore important to look into the current conservation policy and develop a sustainable approach in association with the climate change strategy.
42. Clean water supply and conservation is a relevant topic for the climate change strategy. Consumption patterns and water supply security, among others, are relevant topics in the broader environmental sense.

43. Looking forward, the Government should aim to incorporate climate change as a part of the broader sustainable development considerations that need to be addressed when planning re-development or new development. Integrating the consideration of sustainability issues, such as climate change, into the early planning and design phase can help reduce costs for future maintenance and/or potential impact mitigation.

Consultation document - clarification

44. The consultation document acknowledges important input from the consultancy study commissioned by the Government. To enhance understanding of the carbon intensity targets and proposed reduction initiatives, it would be helpful to release the consultancy study report in full, making available detailed calculation, technical data and assumptions.
45. We would like to highlight the importance of monitoring, reporting and verification of future activities to be adopted by the Government, which would increase the credibility of Government's actions and data. Credible third parties should be involved to verify Hong Kong's GHG data annually in accordance with international standards.
46. As mentioned earlier, the cost to consumers and businesses arising from the consultation document's proposals is not clear. Further information and/or possible analysis of potential costs is needed to produce a clearer picture. Again, the consultancy report may shed light on these questions.
47. Taking into account the economic lifetime of investments that Hong Kong businesses will need to make in supporting the proposed 2020 target and action agenda, as well as the significant amount of lead time required to complete the proposed actions, it is essential that the Government communicates longer term objectives and targets (such as those for 2030) as soon as possible, so as to help businesses optimize their investments and to enable them to begin action today.

Conclusion

48. There are significant benefits for businesses and individuals alike in transitioning to a low carbon economy. In the near term it will require careful planning, a clear set of objectives, time to make the adjustments, investment and Government's support. Businesses alone cannot make all the effort needed – it is a society-wide endeavour and we call on the Government to continue engaging with both business and the wider community, with a view to achieve the transition in an efficient, competent and comprehensive way.