

COUNCIL FOR SUSTAINABLE DEVELOPMENT

**Digest of the 36th Meeting
held on 26 January 2018 at 3:00 p.m.
in Conference Room, 33/F, Revenue Tower,
Wan Chai, Hong Kong**

Present:

Prof the Hon Arthur Li		<i>(Chairman)</i>
Dr Bunny Chan		
Mr Chu Hoi-shan		
Ms Betty Ho		
Prof Laurence Ho		
Ms Angelina Kwan		
Mr Kwok Lit-tung		
Ir Alkin Kwong		
Prof Leung Wing-mo		
Mrs Sandra Mak		
Dr Ng Cho-nam		
Ms Samanta Pong		
Prof Jonathan Wong		
Dr Thomas Yau		
Mr Tse Chin-wan	<i>Secretary for the Environment (Acting)</i>	
Mr Liu Chun-san	<i>Under Secretary for Development</i>	
Mr Tony Li	<i>Principal Assistant Secretary for Transport and Housing (Transport)²</i>	
Ms Jade Lai	<i>Political Assistant to Secretary for Home Affairs</i>	
Mrs Philomena Leung	<i>Principal Assistant Secretary for the Environment (Sustainable Development)</i>	<i>(Secretary)</i>

In Attendance:

Government Representatives

Environment Bureau

Mr Donald Tong	<i>Permanent Secretary for the Environment</i>
Mr Vincent Liu	<i>Deputy Secretary for the Environment</i>
Mr Patrick Lee	<i>Administrative Assistant to Secretary for the Environment</i>
Miss Joanne Kam	<i>Assistant Secretary for the Environment (Sustainable Development)1</i>
Ms Neve Leung	<i>Assistant Secretary for the Environment (Sustainable Development)2</i>
Mr Tony Wu	<i>Senior Town Planner (Sustainable Development)</i>
Dr Tom Tam	<i>Senior Environmental Protection Officer (Sustainable Development)</i>
Mr Eric Wong	<i>Senior Executive Officer (Sustainable Development)1</i>
Miss Renee Too	<i>Executive Officer (Sustainable Development)2</i>

Housing Department

Mr Martin Tsoi	<i>Assistant Director (Estate Management)1</i>
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For Agenda Item 4

Environment Bureau

Mr Paul Wong	<i>Principal Assistant Secretary for the Environment (Energy)</i>
Miss Noel Pun	<i>Principal Assistant Secretary for the Environment (Electricity Reviews) (Acting)</i>

Environmental Protection Department

Mr Francis Cheng	<i>Assistant Director (Cross-Boundary & International)</i>
Mr Dave Ho	<i>Assistant Director (Air Policy)</i>
Mr Davie Kan	<i>Principal Environmental Protection Officer (Cross-Boundary & International)</i>
Mrs Susanne Ip	<i>Chief Executive Officer (Community Relations)2</i>
Dr Sunny Cheung	<i>Senior Environmental Protection Officer (Cross-Boundary & International)5</i>
Mr Ray Leung	<i>Senior Environmental Protection Officer (Cross-Boundary & International)5 (Designate)</i>
Ms Tiffany Au-Yeung	<i>Environmental Protection Officer (Cross-Boundary & International)51</i>
Ms Yue Sze-wah	<i>Project Officer (Cross-Boundary & International)51</i>

Hong Kong Observatory

Mr Edwin Lai	<i>Assistant Director (Development, Research and Administration)</i>
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Absent with apologies:

Prof John Chai
Ms Chan Shin-kwan
Mr Daryl Ng
Mr Cliff Tang
Mr Eric Yeung

Agenda Item 1 – Confirmation of minutes of the last meeting

Members were informed that the minutes of the last meeting held on 26 April 2017 had been circulated to Members on 5 June 2017. As the

Secretariat had not received any proposed amendments, the minutes would be taken as confirmed.

Agenda Item 2 – Matters arising from minutes of the last meeting

2. Members were informed that following discussion at the last meeting, the Report on the Public Engagement on Promotion of Sustainable Consumption of Biological Resources had been finalised and submitted to the Government on 2 June 2017. The Secretary for the Environment (“SEN”) provided a response on 8 November 2017. Both the report and the Government’s response had been circulated to Members and posted onto the Council for Sustainable Development (“SDC”)’s website.

Agenda Item 3 – Report on the Work of the Education and Publicity Sub-committee *(SDC Paper No. 01/18)*

3. Members were briefed on the work of the Education and Publicity Sub-committee (“EPSC”) as set out in SDC Paper No. 01/18. The following were highlighted:

- (a) There were four on-going Sustainable Development Fund (“SDF”) projects, details of which were set out at Annex of SDC Paper No. 01/18. The 13th round of SDF applications was launched on 23 November 2017. Projects that could help carry forward SDC’s recommendations in the PE exercise on promotion of sustainable consumption of biological resources would receive priority consideration. 2 200 invitations had been sent to interested organisations and a briefing session was held on 11 December 2017. The application period would close on 22 February 2018;
- (b) A new round of the Sustainable Development Promotion Award for Students of Higher Education Institutions (“SDPA”) was launched on 18 December 2017. All full-time students of local undergraduate programmes were eligible to compete for the SDPA. Invitations were sent to various tertiary institutions, such as offices of student affairs, student organisations and student residences.

The entry period would close on 29 March 2018; and

- (c) To carry forward SDC's recommendations in the last public engagement ("PE") exercise, the EPSC agreed that the next (2018-20) round of the School Award Programme would incorporate sustainable consumption of biological resources as one of the assessment considerations. To qualify for the Community Project Award, a school would have to either arrange activities to enhance students' awareness of sustainable consumption of biological resources or implement policy to procure goods involving the use of biological resources from sustainable sources. The school's performance in this respect would also be taken into account in the assessment for the Outstanding Performance Award.

4. The meeting noted that in the last round of the SDPA, 19 entries were received. After the launch of this round, the Secretariat had liaised with the tertiary institutions to encourage students' participation. No entries had yet been received but there was still some time before the deadline of the entry period. The SDPA was launched in December 2017 when the school semester just ended and followed by school/public holidays. It was hopeful that more entries might emerge in February 2018 after students had time to make preparations with commencement of the second semester in mid-January 2018.

Agenda Item 4 – Public Engagement on Hong Kong's Long-term Climate Mitigation Strategy *(SDC Paper No. 02/18)*

5. Members were informed that following the conclusion of the PE exercise on promotion of sustainable consumption of biological resources, the Government would like to invite the SDC to conduct a fresh PE on Hong Kong's long-term climate mitigation strategy. The timeframe of the coming exercise was tight as the SDC was expected to conclude the PE by 2019, so as to allow time for the Government to submit its report to the Central People's Government ("CPG") which would in turn send its report to the United Nations Framework Convention on Climate Change ("UNFCCC") Secretariat by 2020. Members were briefed on the new PE exercise as set out in SDC Paper No. 02/18.

6. The following views/enquiries were raised:

I. Proposed PE topic

- (a) Said that it was encouraging to know that the Government had put forward the suggestion of conducting a PE on climate mitigation, as climate change had entered a critical stage affecting survival of mankind and therefore focus as well as efforts on this must be made;
- (b) Supported the proposal to proceed with a PE exercise on Hong Kong's long-term climate mitigation strategy;
- (c) Remarked that the coming PE exercise would be very challenging as the general public might not readily recognise the impact of climate change on them and the timeframe of the coming exercise was tight as SDC was expected to conclude the PE by 2019; and
- (d) Said that it was unclear whether the coming PE exercise aimed to gauge public views on new ideas or prompt them to take action on suggestions already put forward. Measures proposed to combat climate change had been discussed for almost a decade and different charters were in place. However, there was still inertia on the part of the public and it was unclear if the commitments in the charters were actually implemented. It was perhaps time to take stock and analyse the reasons for this, identify those aspects that could be worked on, the responsible parties as well as their roles.

II. Target to be set

- (a) Asked what target the PE would like to achieve in the 18-month engagement process. If the strategy to be formulated would include specific carbon emission reduction targets, then the public would need to be informed of the options to achieve the targets and the price to pay as well as trade-offs in respect of each option. That said, there needed to be certain flexibility with the targets as technological advancement and new knowledge might call for review of the targets;

- (b) Said that the Government should work out the emission reduction targets for the different sectors, which would then need to be matched with appropriate policy changes if necessary; and
- (c) Once a target was set, it had to be cascaded down to each individual estate, company, household, etc. so there was a clear target for everyone to work towards.

III. Decarbonisation of the electricity generating sector

- (a) Agreed that multi-pronged measures including decarbonisation, imported power etc. should be explored;
- (b) Believed that carbon emission targets could only be achieved by adopting multi-pronged measures including decarbonisation, imported power etc. to bring together the efforts of the Government, property management companies, owners, residents etc.;
- (c) Noted that carbon reduction was unlikely to be achieved if Hong Kong continued to largely rely on local generation of electricity. However, in a public consultation exercise conducted a few years ago, the majority of the public did not favour the option of importing electricity;
- (d) Said that in view of the current political climate as well as the disruption of electricity supply Macau experienced last August, the public might not favour the import of electricity from the Mainland. Suggested giving more details to the public to facilitate informed discussion such as whether electricity, if imported from the Mainland, would be generated from nuclear, whether there was possibility of importing renewable energy (“RE”) from the Mainland, and if so, the tariff implication, etc. Some people might perceive the subject as rather distant to them and it was important to close this gap;
- (e) Opined that the suggestion of “buying energy from the Mainland” might adversely arouse public concern including the use of nuclear energy. It was suggested rephrasing to say, “explore more areas of other possibilities within Hong Kong;

- (f) Wondered if the estimated 3% to 4% of RE should be reviewed bearing in mind pilot projects of floating solar power system at reservoirs as well as the suggestion from a research by The Hong Kong Polytechnic University that solar panels installed on rooftops could generate 11% of our electricity needs. All these should be taken into consideration in estimating our RE potential. If our target of generating electricity through RE was set too low, this might affect the degree of efforts that the Government would make; and
- (g) Suggested that the Government could provide incentives to encourage building owners to generate RE at their rooftops by installing solar panels or wind turbine. Relevant government departments such as the Buildings Department and the Environmental Protection Department had to work together to provide necessary advice to the owners.

IV. Energy saving and conservation for buildings

- (a) Noted the efforts the Government had made such as carrying out retro-commissioning in six existing government buildings. This demonstrated the benefits of retrofitting in saving money and protecting the environment. Such were good examples that should be more widely publicised to showcase to the public;
- (b) Agreed with the importance of green building. While owners of existing land leases could perhaps only be encouraged to pursue green measures, more could be done in respect of new land leases, for example, by including green building certification as a mandatory condition. Such requirement was needed as people might not have the urge to act voluntarily;
- (c) Drew reference to Mainland's experience where motion or sound sensor lights were installed in the backstairs or refuse collection chambers to save energy, and suggested that similar mechanisms could be adopted in Hong Kong. If such devices were installed territory-wide, this would go a long way to saving energy;

- (d) Said that the Internet of Things could be widely adopted in shopping malls and commercial buildings to automate the drawing of sunshading devices as the temperature changed, which was in line with the Government's smart city plan as well as conducive to carbon reduction. Other good energy saving practices, such as installing a window film to reduce penetration of heat and block ultraviolet radiation, should also be promoted;
- (e) Suggested that other measures such as introducing funding schemes to encourage buildings to conduct voluntary energy and carbon audits, and organising competitions could be considered;
- (f) Said that Hong Kong was facing the problems of aging population and aging buildings. An overall strategy to promote a more sustainable city through green building and healthy living should be formulated and reduction of carbon emission could be part of this strategy; and
- (g) Said that in view of the guaranteed rate of return under the Scheme of Control Agreements ("SCA"), less energy used might lead to higher per unit tariff under certain circumstances – this was a dilemma which was not easy to resolve.

V. Wider user of electric vehicles ("EVs")

- (a) Opined that more efforts should be made on reduction of vehicular emissions. The Government should take the lead to replace existing government vehicles with EVs. Given that government vehicles usually parked at designated spots after office hours, there should be ample time and sufficient facilities to recharge government EVs;
- (b) Pointed out that the "cleanliness" or carbon emission of EVs would depend on the "cleanliness" or carbon emission of the electricity used by the vehicles. Therefore if the power plants generating the electricity failed to reduce their carbon emission, EVs would not reduce the carbon emission expected;

- (c) Said that EVs only constituted less than 2% of the total number of private vehicles in Hong Kong, and thus the focus on using EVs as a means to reduce carbon emission should be seen in this perspective. The increasing growth of the number of private vehicles was extremely worrying. Recalled that the annual growth of private vehicles was about 3% to 5%, which well exceeded the rate of population growth or the rate of expansion of our road network. If the number of private vehicles was not reduced, the promotion of EVs as a means to reduce carbon emission would not achieve the results as expected;
- (d) Suggested that similar to the incentive scheme on replacement of diesel taxis with liquefied petroleum gas taxis, the Government could offer incentives to replace taxis and minibuses with electric ones. The Government had to demonstrate its determination and commitment to mitigate climate change;
- (e) Suggested that the Government might use EVs as a condition for approving non-franchised buses for residents' service, which would reduce the number of private vehicles and encourage the use of mass transport, thereby relieving congestion and improving roadside air quality; and
- (f) Noted that the removal of tax waiver on EVs had actually pushed up their prices, thus discouraging buyers.

VI. Public education and publicity

- (a) Opined that the public engagement on climate change conducted in 2011 did not attract sufficient awareness, even amongst those in the relevant fields and the interested groups. It was hoped that the coming PE would have stronger and wider publicity to arouse public awareness and register the message in people's minds. This would be essential to ensure success of the exercise;
- (b) Opined that many people perceived climate change as a "wicked problem". It was an issue most people would claim to be knowledgeable about, yet it involved a wide range of issues including scientific, social, economic, legal, etc. Without clear

background and relevant information, the public would not be able to engage in informed discussions, thereby compromising the results of the PE. The Government should take a step further by explaining to the public exactly how they would be affected in different aspects of their lives such as their health and their daily living. The message should be simple, clear and consistent. A compelling and visually engaged message would facilitate the conduct of the PE exercise;

- (c) While the public were willing to take actions, the willingness was not translated into actual actions. The public would need to be educated on how to achieve carbon reduction;
- (d) Education and publicity should follow as to how the target could be achieved and prompt for behavioural change. Reference could be drawn to successful overseas experience, and good practices could be shared;
- (e) Suggested providing more facts and figures to the public to better engage and educate the public in the coming PE, for example, the tariff implications of using RE;
- (f) Said that the PE should make the public understand the connection between carbon emissions and their daily habits and that mitigating climate change required the efforts of all, and not just the Government and the business sector. The key to the PE would be to enhance public understanding that carbon reduction was everyone's responsibility;
- (g) Concurred that public education was crucial to impress upon the public the importance of combating climate change, the opportunities and constraints this presented, as well as the role they could play;
- (h) Opined that the issue was not whether or not actions were needed or targets should be set, but rather what price the public were willing to pay and what actions they had to take for a better and sustainable future. The PE could provide the mandate and the public needed better information on how to pursue the targets.

This then needed to be matched with greater efforts on education and publicity to inform and convince the public to take actions in their daily lives;

- (i) There was already general consensus over the need to tackle climate change. The public were also willing and ready to play their part, but they might not know how. The experience of a project carried out by the Hong Kong Women Professionals and Entrepreneurs Association in reducing household food waste was shared. Through educating households about food cycle management, the factors to be taken into account when buying and cooking food, and ways to handle food remains, food waste was reduced by 12% in the 18-month programme. This demonstrated that the bottom-up approach was efficacious;
- (j) Said that if the public at large was the target group, then it would be useful to do more promotion work amongst students as they could help spread the message to their parents. Inculcating the messages at an early age would also help establish the good habits among the population; and
- (k) Suggested sharing green tips with the public during prime time television programmes.

VII. Others

- (a) Opined that different Government departments should work together and that the Government should lead by example (e.g. replacement of retired government vehicles by EVs). This could encourage the public to follow suit and to demonstrate its determination and commitment to mitigate climate change;
- (b) Shared the observation that the Mainland Government had been very proactive and played a leading role in pushing forward green measures, from setting up green platforms (to centrally handle the applications required by different departments and divisions), pursuing green finance (to facilitate the issue of bonds and securing of funds for environmental protection purposes) to promoting green industries (with various incentives and subsidies), green business,

green research, green technology, green resources, and promulgating black and white list of green products, etc. A multi-pronged approach was adopted involving all stakeholders at Government, business and community level. Wondered if Hong Kong should also have an over-arching policy and central coordination of the efforts of various bureaux and departments to push forward the measures needed;

- (c) Opined that implementation was of utmost importance. In this regard, staff of property management companies and resident representatives of housing estates could be appointed as Environmental Protection Ambassadors. Given the responsibility they shouldered, they would be motivated to devise ways to meet the target set;
- (d) Suggested encouraging the listed companies to take the lead and set their own plans, which could be seen as part of their corporate social responsibility;
- (e) Noted that the issue on neon sign installation and advertising light boxes had been discussed for some time, it was suggested that legislation to mandate the switching off of external lighting at night, say after 11:00 p.m., should be considered to minimise energy use and improve the overall environment. Residents nearby might then require less air-conditioning;
- (f) Considered that given Hong Kong's compactness and heavy reliance on public transport, our energy consumption per capita might not be that high when compared to other places. The tone of the paper could be more assertive and optimistic and that Hong Kong could further build on our strengths by say, further developing the railway network. The new MTR South Island Line, for example, had greatly eased the road traffic at Aberdeen Tunnel;
- (g) Suggested that carbon emission trading scheme could be considered to penalise the emitters and incentivise the environmentally conscious;

- (h) Considered that there was no dispute on the need for actions to tackle climate change. The PE exercise could provide the opportunity to build up community spirit towards reaching a common goal; and
- (i) Opined that the Government could perhaps think out of the box and out of the confines of Hong Kong territory such as moving our environmental industries to Pearl River Delta west or setting up RE farms in the waters south of Hong Kong, etc. Hong Kong could consider raising this with the CPG to seek its support bearing in mind the latter's care about Hong Kong.

7. The meeting noted the following responses:

I. Proposed PE topic

- (a) The PE was an opportunity to engage the public on discussions regarding our constraints and trade-offs with a view to securing their buy-in on the implementation of new initiatives. It was important to have community consensus on the actions to be taken;
- (b) The PE would provide an opportunity to inform the public of the actions that had been taken/planned, the achievements made, and the areas where further work was required. The Government had promulgated Hong Kong's Climate Action Plan 2030+ which set out actions up to around 2030. The task ahead was to formulate a further action plan up to 2050 and submit it to the CPG by late 2019 or early 2020 for communication to the UNFCCC Secretariat. There were difficulties in implementing relevant environmental measures, for example, identifying land for building phase two of the organic resources recovery centres and securing approval from the Legislative Council on implementation of municipal solid waste charging; and
- (c) Actions to tackle climate change would require concerted efforts from society as a whole including the Government. Members were assured that there had been good communication among bureaux and departments concerned on the combat against climate change before inviting SDC to conduct the PE, and that they were

all prepared to take part in implementing the strategy.

II. Target to be set

- (a) The aim of the coming PE exercise was to set a carbon reduction target for 2050 and devise a strategy to achieve that target. The target for 2020 was to reduce carbon intensity by 50% to 60% (compared with 2005 level) and this could be achieved by revising the fuel mix to use more natural gas for local electricity generation. The target for 2030 was to reduce carbon intensity by 65% to 70% (compared with 2005 level) and to achieve this, over 10 coal-fired generation units which were due to retire would have to be replaced by new generation plants using cleaner resources.

III. Decarbonisation of the electricity generating sector

- (a) In respect of the question as to why the Government had not done more to tackle the problem, the question was rather whether or not the public would be prepared to pay the price associated with the actions, for example by having an increased tariff following the phasing down of coal-fired power plants. Unlike many other places, our densely populated landscape had limited the capacity for the generation of RE including from hydro or wind sources;
- (b) It would be extremely difficult not to import electricity if Hong Kong was to achieve a higher carbon reduction target. Solely relying on replacement of coal-fired power plants would not be adequate if Hong Kong was to reduce the carbon intensity further by 2050. Import of electricity or use of RE had to be pursued to meet more aggressive targets;
- (c) Opined that it was possible to specify the kind(s) of energy to be imported, such as RE but that had to take account of the location where the RE was generated and the transmission network e.g. it would be very costly if Hong Kong was to import RE from the inner parts of the Mainland;
- (d) Regarding Hong Kong's potential for generating RE, not all rooftops could install solar photovoltaic panels as some were meant

for fire escape purposes and some were reserved for greening. The Electrical and Mechanical Services Department had been tasked to study the potentials and constraints of installing solar panels on buildings. The Government would continue to promote the development of RE in both public and private sectors, such as introduction of feed-in tariff and issuing RE certificates by the power companies with a view to encouraging the private sector and the community to take part in generation and use of RE; and

- (e) The public should be informed of the considerations and trade-offs of the different options involved, such as cost, possible import of power from nuclear plants, etc. in gauging their views on the way forward and they should be thoroughly deliberated.

IV. Energy saving and conservation of buildings

- (a) Green building and energy saving were also major measures in reducing carbon emissions. Under the new SCA with the power companies, promotion of energy efficiency and conservation would be enhanced. More resources would be allocated to encourage the public and building owners to carry out retrofitting and retro-commissioning.

V. Electric vehicles

- (a) Railway remained the backbone of Hong Kong's transport system. The current ceiling of first registration tax ("FRT") concessions for private EVs at \$97,500 was not low compared with other jurisdictions. Statistics had shown that about two-third of EV buyers did not own a car before or were buying the EV as a second car. This might mean that the FRT concessions might have contributed to the increase in the total number of vehicles in Hong Kong, thereby worsening traffic congestion and increasing carbon emissions; and
- (b) The Government had wanted to replace diesel-run public buses with electric ones, yet the technology was not yet mature for double decker buses. Current electric buses were primarily single decker buses. That said, the Government would keep in view

technological advancement.

VI. Public Education and publicity

- (a) Announcement of Public Interest, featuring Big Waster and singer Mr Ram Chiang, promoting the message of climate change had been produced and broadcast. More publicity work would be launched. For instance, a carbon calculator measuring our carbon emissions in daily life, as well as a set of green tips would be rolled out soon.

8. The meeting agreed that SDC should proceed to conduct the proposed PE exercise. Members also noted that in line with past practice, a Support Group would be formed to assist the SDC to take forward the PE exercise. A Programme Director would be engaged to help prepare the PE document as well as conduct the engagement events.

Agenda Item 5 – Any other business

9. There was no other business raised.

Agenda Item 6 – Date of the next meeting

10. The Secretary would confirm the date of the next meeting nearer the time.

Secretariat
Council for Sustainable Development