

立法會
Legislative Council

LC Paper No. CB(1)566/12-13
(These minutes have been seen
by the Administration)

Ref : CB1/PS/2/12/1

Panel on Environmental Affairs

Subcommittee on Issues Relating to Air, Noise and Light Pollution

Minutes of the meeting
held on Friday, 11 January 2013, at 10:45 am
in Conference Room 3 of the Legislative Council Complex

- Members present** : Hon Cyd HO Sau-lan (Chairman)
Hon WU Chi-wai, MH
Hon Gary FAN Kwok-wai
Dr Hon Kenneth CHAN Ka-lok
Hon KWOK Wai-keung
Hon Dennis KWOK
Dr Hon Helena WONG Pik-wan
Dr Hon Elizabeth QUAT, JP
Hon Christopher CHUNG Shu-kun, BBS, MH, JP
- Members absent** : Hon CHAN Han-pan
Hon SIN Chung-kai, SBS, JP
Hon Tony TSE Wai-chuen
- Public Officers attending** : **For item II**

Ms Christine LOH
Under Secretary for the Environment

Mr TSE Chin-wan, JP
Deputy Director of Environmental Protection (1)
Environmental Protection Department

Mr PANG Sik-wing
Principal Environmental Protection Officer (Air Policy)
Environmental Protection Department

Mr Maurice YEUNG
Principal Environmental Protection Officer
(Assessment & Noise)
Environmental Protection Department

Mrs Dorothy MA
Principal Assistant Secretary for the Environment
(Energy)²

Dr Albert AU
Senior Medical and Health Officer
(Environmental Health & Toxicovigilance)
Department of Health

Attendance by invitation : For item II

The Chinese University of Hong Kong

Professor WONG Tze-wai
Research Professor
School of Public Health and Primary Care

The University of Hong Kong

Professor Anthony Johnson HEDLEY
Honorary Professor
School of Public Health

Dr LAI Hak-kan
Research Assistant Professor
School of Public Health

Clerk in attendance : Ms Miranda HON
Chief Council Secretary (1)1

Staff in attendance : Miss Lilian MOK
Council Secretary (1)1

Miss Mandy POON
Legislative Assistant (1)1

Action

I. Confirmation of minutes

(LC Paper No. CB(1)380/12-13 — Minutes of the meeting held on 12 December 2012)

The minutes of the meeting held on 12 December 2012 were confirmed.

II. Impacts of air, noise and light pollution on public health and the associated medical costs

Meeting with the Administration and academics

(LC Paper No. CB(1)381/12-13(01) — Administration's paper on "Impact of air, noise and light pollution on public health")

Academics attending the meeting

Professor WONG Tze-wai, School of Public Health and Primary Care, The Chinese University of Hong Kong
(LC Paper No. CB(1)392/12-13(01)) (English version only)

Professor Anthony J HEDLEY and Dr LAI Hak-kan, Department of Community Medicine, School of Public Health, The University of Hong Kong
(LC Paper No. CB(1)406/12-13(01))

2. With the aid of a power-point presentation, Professor WONG Tze-wai briefed members on the impacts of air pollution and environmental noise on public health.
3. Professor Anthony J HEDLEY gave a power-point presentation on "Adverse health effects of the urban Hong Kong environment – Protection of child and adult health from noise, nocturnal light and air pollution". Dr LAI Hak-kan then briefed members on the "Hedley Environmental Index", which monitored and published in real time on the internet the economic cost of air pollution in terms of public health impacts and their monetary value.
4. The Subcommittee deliberated (index of proceedings attached at the **Annex**).

Action

III. Date of next meeting and item(s) for discussion

(LC Paper No. CB(1)381/12-13(02) — List of proposed items for discussion)

5. The Chairman proposed and members agreed that the item for discussion at the next meeting to be held on Tuesday, 29 January 2013, at 4:30 pm be revised to "Current legislation and administrative measures on the control of air pollution and the associated public expenditure", while the legislation and administrative measures in respect of noise and light pollution would be discussed at future meetings.

Clerk

6. The Chairman invited members to inform the Secretariat in writing before the next meeting if they wished to raise questions on the above discussion item for the Administration's response.

IV. Any other business

7. There being no other business, the meeting ended at 1:00 pm.

Council Business Division 1
Legislative Council Secretariat
22 February 2013

Panel on Environmental Affairs

Subcommittee on Issues Relating to Air, Noise and Light Pollution

**Proceedings of the meeting
on Friday, 11 January 2013, at 10:45 am
in Conference Room 3 of the Legislative Council Complex**

Time marker	Speaker	Subject(s)	Action required
<i>Agenda Item I - Confirmation of minutes</i>			
000427 - 000509	Chairman	The minutes of the meeting held on 12 December 2012 (LC Paper No. CB(1)380/12-13) were confirmed.	
<i>Agenda Item II - Impacts of air, noise and light pollution on public health and the associated medical costs</i>			
000510 - 001041	Chairman Administration	Opening remarks by the Chairman The Administration welcomed members' views and suggestions on the way forward to address the problems of air, noise and light pollution for better protection of public health.	
001042 - 003300	Chairman Prof WONG Tze-wai	Presentation on the impacts of air pollution and environmental noise on public health by Prof WONG Tsz-wai (LC Paper No. CB(1)392/12-13(01)).	
003301 - 010899	Chairman Prof Anthony J HEDLEY Dr LAI Hak-kan	Presentation on "Adverse health effects of the urban Hong Kong environment – Protection of child and adult health from noise, nocturnal light and air pollution" by Prof Anthony J HEDLEY (LC Paper No. CB(1)406/12-13(01)). Briefing on the "Hedley Environmental Index", which monitored and published in real time on the internet the economic cost of air pollution in terms of public health impacts and their monetary value, by Dr LAI Hak-kan.	
010900 - 0011624	Chairman Administration	The Administration advised that – (a) in keeping with the increasing public awareness of the possible association of adverse health effects with different kinds of pollution, relevant government bureaus and departments ("B/Ds") would cooperate with each other to set	

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		<p>priorities on initiatives to address various environmental problems and safeguard public health;</p> <p>(b) the Government had been engaging experts and academics to conduct applied research studies to support the formulation of environmental policies. The source of funding for these research studies would be confirmed at a later stage;</p> <p>(c) there were a number of proposals and initiatives in the pipeline to deal with specific air quality problems, such as emissions from ocean-going vessels ("OGVs") and roadside air pollution arising from old polluting vehicles;</p> <p>(d) closer collaboration with the Guangdong authorities would be pursued to tackle the regional air quality problem; and</p> <p>(e) the Government was working with experts and specialists from the World Health Organization ("WHO") on innovative measures to curb pollution.</p>	
011625 - 012732	<p>Chairman Mr Dennis KWOK Prof Anthony J HEDLEY Dr LAI Hak-kan Administration</p>	<p>Mr Dennis KWOK enquired whether Hong Kong's air quality was progressively worsening and what measures the Administration would take to cope with the situation.</p> <p>Prof Anthony J HEDLEY responded that –</p> <p>(a) although there was insufficient improvement in air quality, local studies on air pollution and its adverse health effects had made an impact on the Government in taking proactive measures to combat air pollution;</p> <p>(b) the roadside concentration of some of the major air pollutants (e.g. sulphur dioxide ("SO₂")) had dropped in recent years. However,</p>	

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		<p>their levels still exceeded the standards adopted in the Air Quality Guidelines of WHO;</p> <p>(c) after the introduction of a regulation to limit the sulphur content in fuel in July 1990, local studies had found that air quality near industrial areas like Tsing Yi and Kwai Chung had improved dramatically and the mortality rate of heart disease for people aged 46 or above had declined. The Administration should therefore make reference to this successful experience as well as the relevant statistics compiled over the years when introducing control measures to combat air pollution; and</p> <p>(d) nitrogen dioxide ("NO₂"), a major air pollutant in some Mainland cities such as Shanghai and Wuhan, emitted from road traffic had reached a fatal level and should be dealt with rapidly.</p> <p>Dr LAI Hak-kan supplemented that the NO₂ level at the roadside in Hong Kong had been increasing and exposure to increased level of NO₂ would impair the lung development of children.</p> <p>The Administration responded that –</p> <p>(a) a host of measures were in the pipeline to improve roadside air quality, including phasing out old diesel commercial vehicles, retrofitting selective catalytic reduction devices on franchised buses, providing subsidy to owners of petro and liquefied petroleum gas taxis/light buses to replace their catalytic converters and oxygen sensors, etc;</p> <p>(b) an incentive scheme to encourage the use of cleaner fuel by OGVs at berth in Hong Kong waters had been implemented to reduce the emissions of nitrogen oxides and</p>	

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		<p>SO₂ around the port area;</p> <p>(c) a review on fuel mix would be conducted to reduce carbon emissions from electricity generation;</p> <p>(d) close cooperation with the Guangdong authorities would be maintained to improve regional air quality;</p> <p>(e) given the public concern about the cost implications of pollution control, the Government would be engaging experts and academics to undertake research to enhance community awareness of the benefits of environmental protection and to enlist public support for anti-pollution policies in the long run; and</p> <p>(f) it would examine how the costs of pollution reduction were to be shared in the community.</p> <p>Prof Anthony J HEDLEY urged the Administration to expeditiously implement effective measures to control pollution and allocate adequate resources to local academics for conducting research to inform environmental policies. He also hoped that the Administration would adopt a new funding mechanism to support research in this respect.</p>	
012733 - 014015	<p>Chairman Dr Helena WONG Administration Prof Anthony J HEDLEY Dr LAI Hak-kan</p>	<p>Dr Helena WONG expressed the following views and raised the following enquiries –</p> <p>(a) the Environment Bureau ("ENB") should ensure that sufficient funding would be earmarked by the Central Policy Unit for higher education institutions to conduct applied research studies to assist the Government in formulating policies on environmental protection;</p> <p>(b) whether it was feasible to establish a</p>	

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		<p>mechanism similar to the "Hedley Environmental Index" to assess the economic costs of other kinds of pollution, say, noise and light pollution, in terms of impact on public health (including both physical and mental health);</p> <p>(c) whether the Administration would consider introducing legislation to mandate OGVs to switch to cleaner fuels while berthing in Hong Kong waters so as to regulate their emissions more effectively; and</p> <p>(d) whether ENB would spearhead cross-B/Ds efforts in taking forward different environmental proposals and initiatives with a public health focus.</p> <p>The Administration responded that –</p> <p>(a) as fuel switching was required for OGVs berthing in some ports in North America and the European Union, it was the Government's ultimate goal to introduce new legislation to enforce the requirement of fuel switch in Hong Kong waters; and</p> <p>(b) given that pollution touched upon different policy areas, the Administration would adopt an inter-departmental approach to engage relevant B/Ds, such as the Food and Health Bureau, the Food and Environmental Hygiene Department and ENB, in formulating and implementing environmental initiatives. Appropriate professional support from within/outside the Government would also be sought as and when necessary. Detailed cooperation mode would be worked out based on the actual implementation plan of individual policy initiatives.</p> <p>On the measurement of costs of pollution, Prof Anthony J HEDLEY</p>	

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		<p>explained that in principle, it was technically feasible to estimate the costs of different kinds of pollution if relevant socio-economic and demographic variables could be identified.</p> <p>Dr LAI Hak-kan supplemented that a one-off study on light pollution in Hong Kong had been conducted by the University of Hong Kong. However, the nuisance caused by external lighting and noise were location-specific, largely depending on the exact location of the monitoring stations. As such, there might be difficulties in developing a system modelling on the "Hedley Environmental Index" to provide real-time measurement of external lighting and noise levels across Hong Kong. In addition to external lighting, some overseas studies had showed that indoor lighting might also be a public health issue and associated with cancer in occupational groups working night shifts.</p>	
014016 - 014914	<p>Chairman Mr WU Chi-wai Administration Prof Anthony J HEDLEY</p>	<p>Mr WU Chi-wai enquired about –</p> <p>(a) the reason for the significant increase in the estimated economic losses due to illnesses and diseases attributable to air pollution from \$1.7 billion a year in 2002 to nearly \$40 billion a year in 2012, both of which were based on the "Hedley Environmental Index"; and</p> <p>(b) the way forward to eradicate air pollution problems.</p> <p>The Administration responded that –</p> <p>(a) the estimates for 2002 had factored in the direct and indirect costs of vehicle-induced air pollution in terms of impact on public health and quality of life at the time, while the 2012 figures included the direct, indirect and intangible economic costs attributable to air pollution from different sources. Hence, there were discrepancies in the two estimates;</p>	

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		<p>(b) although the number of deaths and hospital admissions a year caused by illnesses possibly related to air pollution had remained steady, a number of studies had established a strong correlation between respiratory and cardiovascular diseases and air pollution. Given that there was little evidence to suggest a threshold level of an air pollutant below which no adverse health effects would be anticipated, no safe level of pollutants in the air could be recommended; and</p> <p>(c) a cost-benefit analysis of improving air quality was required to help make decisions on the way forward. It was anticipated that there would be more and more debates about how the costs of implementing pollution reduction measures were to be shared in the community.</p> <p>Prof Anthony J HEDLEY agreed to the Administration's explanation that the estimates for 2002 had not taken into account the intangible costs derived from the population's willingness to pay to avoid a day of symptoms, an admission to hospital and a premature death attributable to air pollution.</p> <p>Mr WU Chi-wai urged the Administration to accord a high priority to improving air quality and establishing a set of assumptions applicable to Hong Kong so that a reasonable estimate on air pollution impacts could be made.</p>	
014915 - 020110	<p>Chairman Dr Elizabeth QUAT Administration Prof WONG Tze-wai</p>	<p>Dr Elizabeth QUAT expressed the views that –</p> <p>(a) the Administration should conduct timely studies on the impacts of different kinds of pollution to further heighten public awareness in this regard;</p> <p>(b) other economic losses such as decrease in foreign investments in Hong Kong should be included in</p>	

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		<p>the calculation of air pollution costs; and</p> <p>(c) the Administration should come up with innovative measures, for example, establishing low-emission zones, to address air pollution problems at district level.</p> <p>The Administration responded that concerted efforts of different B/Ds were essential in environmental protection. After implementing its end-of-pipe solutions, ENB would collaborate with relevant B/Ds and the Guangdong authorities to incorporate environmental concepts into public policies.</p> <p>Being a member of the Advisory Panel on the Review of Air Quality Objectives of the Environmental Protection Department, Prof WONG Tze-wai commented that the Government was not proactive enough in tackling air pollution problems, resulting in delay in devising effective measures to improve air quality. He also expressed dissatisfaction that a significant portion of the funding of the Research Grants Council had been granted to basic research. To address the perceived bias in favour of basic research, the Administration should strike a balance between basic and applied research in funding allocation. Prof WONG further advised that whether overseas research findings in respect of environmental noise were applicable to Hong Kong should be examined.</p> <p>The Chairman stated that support from District Councils in rolling out transport-related environmental initiatives was important, and all B/Ds should earmark adequate funding for research in respect of their policy areas.</p>	
020111 - 0020435	Chairman Mr WU Chi-wai Administration	<p>Mr WU Chi-wai enquired –</p> <p>(a) whether the Administration would implement "carbon trading" initiatives to reduce carbon emission; and</p>	

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		<p>(b) whether any air quality improvement measures would be unveiled in the Chief Executive's 2013 Policy Address.</p> <p>The Administration assured members that the Government had been endeavouring to improve air quality on all fronts, and different environmental-related initiatives would be unveiled in due course. It also undertook to brief members on the new Air Quality Objectives and the environmental impact assessment mechanism at a later stage.</p>	
<i>Agenda Item III – Date of next meeting and item(s) for discussion</i>			
020436 - 020923	<p>Chairman Mr WU Chi-wai Mr Gary FAN Administration</p>	<p>The Chairman proposed and members agreed that the item for discussion at the next meeting to be held on Tuesday, 29 January 2013, at 4:30 pm would be revised to "Current legislation and administrative measures on the control of air pollution and the associated public expenditure", while the legislation and administrative measures in respect of noise and light pollution would be discussed at future meetings. The Chairman invited members to inform the Secretariat in writing before the next meeting if they wished to raise questions on air pollution for the Administration's response.</p> <p>The Administration suggested and members agreed to defer the discussion of light pollution, pending the issuance of a study report on the subject in May 2013.</p>	<p>Clerk to follow-up on subsequent meeting arrangements</p>