

**Confirmed Minutes of the Third Meeting of the  
Environment and Conservation Fund Research Projects Vetting Subcommittee  
held on 27 May 2009 at 2:30 p.m.  
in the Conference Room, 28/F., Southorn Centre, Wanchai**

**Present**

Mr. Joseph Lee, SBS, JP	(Chairman)
Prof. Jonathan WC Wong	
Dr. Kenneth MY Leung	
Dr Arthur PS Lau	
Mr. Lawrence SH Cheung	ENB
Mr. Patrick CC Lai	AFCDD
Mr. Francis Wong	EPD (Secretary)
Ms Winifred Chan	EPD (Assistant Secretary)

**In Attendance for Item 2**

Ms Linda Choy	PA/SEN, ENB
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**Absent with Apologies**

Mr. Paul KC Chan  
Prof. Chau Kwai-cheong  
Mr. Barry MC Kwong  
Ms Agnes Ng

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**Welcoming Remarks**

The Chairman welcomed all Members to the third meeting of the Environment and Conservation Fund (ECF) Research Projects Vetting Subcommittee (RPVSC) and introduced Mr. Patrick Lai who attended the meeting for the first time and replaced Mr. Richard CHAN as representative of the Director of Agriculture, Fisheries & Conservation.

## **Agenda Item 1: Confirmation of the Minutes of the Last Meeting**

2. The draft minutes of the last meeting held on 24.2.2009 were confirmed subject to the following amendment:

In page 2, paragraph 5, lines 11-12, the sentence should read as “He quoted the example of \$12,000 per conference trip per year can be budgeted for each RGC project.”

## **Agenda Item 2: Matters Arising**

### Research Projects Vetting Subcommittee Vetting Conferences Applications

(RPVSC Paper 23/2009-10)

3. Mr. Francis Wong briefed Members on the proposed funding principles and details for attendance to overseas international conferences by applicants of ECF supported research projects and funding for organizing international conferences in Hong Kong that were further developed after Members’ discussion at last meeting.

4. On a proposed funding cap for supporting principal investigators (PI) of approved research projects to attend overseas conferences for presentation of research results, Members agreed to the proposed cap of **\$15,000** per head per project to cover the airfare (economy class), conference registration fee, subsistence allowance including accommodation (for a period beginning one day before the start of the conference and ending one day after the end of the conference for up to a maximum number of 7 days) and public means of transport between the nearest international airport and the place of conference. Only one person per project would be funded to attend one overseas conference throughout the whole project period though it might last for more than one year. As an interim measure to cater the needs of the PI of ECF-sponsored on-going research projects to attend overseas conferences for presentation of results, PIs of those researches that would be completed on or after 1 April 2009 could submit separate applications for the above conference grants at least 6 months in advance of the proposed conference date together with supporting invitation letter confirming the acceptance of paper or poster and the abstract of paper for presentation. On completion of the

ECF-supported conference trip, the PI would be required to provide a brief report on the conference and a copy of the paper or poster to the RPSVC.

5. In respect of organizing international conferences in Hong Kong, Mr. Francis Wong stated that a two-tier system would be introduced. A funding ceiling of normally \$500,000 per conference or 70% of the total actual expenditure was recommended for conference applications. Separately, the ECF Committee or RPSVC would set dedicated themes for conferences to help promote public awareness and encourage exchange of ideas on such topics. Funding applications for international conferences to promote a dedicated theme would be considered on their individual merits, but applicants should seek the prior endorsement of the ECF Committee or RPSVC on the topic/theme of the conferences concerned for applications above \$500,000. Upon Members' agreement on the themes and approach of conferences, the applicant organizations would then be invited to submit the funding proposals for detailed examination. On the other hand, for thematic international conferences decided by the RPSVC or ECF Committee, the funding cap would be decided on a case-by-case basis. Members agreed on this aspect and decided that applications must be made at least 6 months before the first day of the conference. The Secretariat would solicit the ECF Committee's views and write to invite suggestions from Members on the themes or environmental initiatives proposed for organizing thematic international conferences in Hong Kong or inviting research proposals from local tertiary institutes/professional bodies/research institutes.

6. Subject to the above remarks, Members agreed to the proposed funding scope and expenditure items for supporting PI of approved research projects to attend overseas conferences and organizing conferences in Hong Kong as stipulated in the RPSVC Paper 23/2009-10. The amended funding principles would be reported to the ECF Committee and the Secretariat would arrange updating of the funding guidelines accordingly.

ECF Project 9/2008 Environmental payback time analysis of building-integrated photovoltaic (BIPV) applications in Hong Kong

[RPSVC Paper 14/2009-10]

7. Mr. Francis Wong briefed Members on the reply and explanation from the PI stating the duties of the research assistant on data collection and documentation and thus the Research Associate could focus on development of simulation model, analysis of different BIPV applications and report preparation in 18 months.

8. Note

9. After deliberation, the Chairman concluded that the project proposal was supported with a total sum of \$406,000 including the overseas conference attendance and 3-month staff cost for the research assistant.

ECF Project 13/2008 The Building Energy Efficiency Programme (BEEP): Initial Phase of Development

[RPVSC Paper 15/2009-10]

10. Mr. Francis Wong briefed Members on the PI's reply to the RPVSC's enquiry. The PI provided detailed work allocation and justifications of requiring a relatively large pool of research staffs including one from the Cardiff University. The proposed simulation programme to be developed would base on HTB2 and BECON, which software was developed by Cardiff University and the applicant organisation respectively. The research staffs would be required to assist the co-investigator in the pilot energy audit and post-improvement measurement and verification. Besides, the PI conducted a survey to solicit support from potential users of the simulation programme. According to the result of the survey, over 90% of respondents (total=158) would be interested in using the simulation programme and attending the training course.

11. Note

12. After discussion, the Chairman concluded that the project proposal was supported with a total sum of \$1,983,120. The proposed budget of \$700,000 for the equipment and the staff cost of \$426,240 for one research assistant for 24 months were not supported.

ECF Project 17/2008 Development of an Automatic Switching Off System for Idling Engine to Achieve Enhanced Fuel Economy and Improved Environment  
(RPVSC Paper 16/2009-10)

13. Mr. Francis Wong briefed Members on the reply from the applicant organisation. The budget of manpower was based on the standard charge rate for government research projects. The applicant organisation had not charged for the time spent by the senior staff in guiding research direction and strategies. As such the applicant organisation had devoted an in-kind contribution of at least \$1.4 million to this project and this part would be covered by recurrent subvention from the government.

14. Note

15. After further deliberation, Members agreed to support the project proposal with a total sum of \$3,008,150. It included the staff cost for two research staff (one for 15 months and one for 12 months) and the rate would be capped at the current rate of \$28,450 per month. The proposed sum of \$100,000 for patent fee would not be supported. As the total project cost exceeded the approving limit of the RPVSC (\$2,000,000), the project would be recommended to the ECF Committee for formal endorsement.

ECF Project 11/2008 Antibiotics and antibiotic resistant genes in potable water and soil environment of Hong Kong  
(RPVSC Paper 13/2009-10)

16. As a member of the Court of the Hong Kong Baptist University (HKBU), the Chairman declared interest and requested Mr. Lawrence Cheung to chair the discussion of this project. Prof Jonathan Wong also declared interest as he was the Co-investigator (Co-I) of the Project 11/2008 and withdrew himself from the Conference Room.

17. Mr. Francis Wong remarked that Members examined the project at the meeting held on 12.12.2008 and noted that Water Services Department (WSD) had reservation in supporting the project while Department of Health supported the project. Members also agreed the Secretariat to invite two external assessors to conduct the assessment to facilitate Members' consideration of this proposal. Both external assessors (EA) supported the project. EA1 considered the project could have important public health implication. EA2 considered the project would contribute to the management of water supply, pharmaceuticals and wastewater treatment in Hong Kong. EA2 also suggested the PI to focus the study on drinking water supply.

18. Note

19. After deliberation, Members agreed to invite the PI to refine the proposal for further discussion at the coming meeting:

- (1) refining the study objectives by focusing on the drinking water related path such as water course along the Dong Jian, water before and after treatment as well as sludge from treatment plant. While the proposed soils and composts in Hong Kong might be possible sources, the sink and source relationship of the antibiotics and antibiotic resistant genes between the water and sediment phase along the river course would be more significant to the potable water and more public health relevant; and
- (2) reviewing the sampling size to yield scientific and statistical significant representations for data interpretation as the proposed four samples per site was not sufficient for such purpose.

### **Agenda Item 3: New Applications**

ECF Project 25/2008 Impact of Sea Urchin Bioerosion on Coral Communities in Hong Kong

[RPVSC Paper 23/2009-10]

20. Mr. Francis Wong briefed members on the proposal. The PI applied for \$249,940 for a 12-month research to determine the abundance and size-structure of *Diadema steosum* and coral-eating gastropods as well as percent coverage of

corals; to quantify the contribution of various biotic and abiotic factors to sea urchin bioerosion; and to assess whether management intervention would be required to control sea urchin bioerosion in the study sites.

21. Note

22. After discussion, Members agreed to support the project with an allocation of \$249,940. In view of the limited presence of Members at the meeting, Members present agreed that the recommendation of supporting this project would be circulated to all Members for formal endorsement. (Post-meeting note: The project and Members' recommendation was circulated to all Members of RPVSC by email on 1 June 2009. A majority of Members voted to support the project with an allocation of \$249,940.)

ECF Project 22/2008 Study on the Feasibility and Cost-Effectiveness of a Hybrid Desiccant and Evaporative Cooling System Applied in Hong Kong

[RPVSC Paper 17/2009-10]

23. The Chairman took the lead of the discussion of the project. Prof Jonathan Wong re-joined the meeting. Mr. Francis Wong briefed Members on the project proposal. The PI applied for \$234,600 for a 12-month study with the aims to study a hybrid desiccant and evaporative cooling system dedicated to application in Hong Kong. EMSD pointed out that the project would use water as refrigerant to replace conventional CFCs and HCFCs, which could improve indoor environment quality and reduce emission of carbon and other pollutants, and thus could contribute to the environment of Hong Kong. Two representatives of the project team attended the meeting to answer Members' question.

24. Note

25. The Chairman concluded that the project would be supported on the condition that the PI could obtain documentary proof from a local company indicating the support and possible adoption of trying the proposal in the building.

ECF Project 14/2008 Environmental Sustainability Indicators for Hong Kong – 10 years on: From passive measuring to measuring action

[RPVSC Paper 18/2009-10]

26. To avoid conflict of interest, Dr. Kenneth Leung of the University of Hong Kong (HKU) declared interest as the PI for the Project 14/2008 also came from the HKU and withdrew himself from the Conference Room.

27. Mr. Francis Wong briefed Members on the proposal. The PI applied for \$2,121,000 to update and expand the initial indicators developed by the PI ten years ago and to develop a time series set of sustainability indicators that can be reviewed and updated regularly. The indicators would be used to measure the state of Hong Kong's environmental progress on a regular basis. Both Plan Department and EA1 considered the objective of the project not clear. EA2 suggested the project should be conducted in a pilot scale so that the PI would review the worldwide environmental sustainability indicators and identify the suitable indicators for Hong Kong. The overall budget of the proposal was also considered on the high side.

28. Note

29. After discussion, Members agreed not to support the project. In view of the limited presence of Members at the meeting, Members present agreed that the recommendation of not supporting this project would be circulated to all Members for formal endorsement. (Post-meeting note: The project and Members' recommendation was circulated to all Members of RPVSC by email on 1 June 2009. A majority of Members voted not to support the project.)

ECF Project 20/2008 Quantitative measurement of acidic ultrafine particles in the atmosphere

[RPVSC Paper 19/2009-10]

30. To avoid conflict of interest, Dr. Arthur Lau of the Hong Kong

University of Science & Technology (HKUST) declared interest as the Co-I of the Project 20/2008 also came from the HKUST and withdrew himself from the Conference Room. Dr. Kenneth Leung rejoined the meeting.

31. Mr. Francis Wong briefed Members on the proposal. The PI applied for \$1,978,140 to conduct a 36-month study to develop a novel method which can measure ambient acidic ultrafine particles and to assist in providing air quality assessment tools specific to ultrafine particles. Members noted that the PI had revised the proposal for several times to address comments from external assessors and included a sum of \$888,780 to purchase a set of equipments for collecting particles directly onto grids for scanning electron microscopy (SEM) analysis.

32. Note

33. After discussion, the Chairman concluded that the PI would be invited to refine the proposal as suggested above with additional site monitoring work but no equipments for the nano particles study. Upon receipt of the revised proposal as suggested by Members, the Secretariat would circulate it to all Members for formal endorsement.

ECF Project 21/2008 Water Reclamation from Greywater and Domestic Sewage as Part of the Total Water Management Initiatives

[RPVSC Paper 20/2009-10]

34. Dr. Arthur Lau rejoined the meeting. Mr. Francis Wong briefed members on the proposal. The PI applied for \$2,731,820 for a 18-month project to demonstrate to the public the feasibility and effectiveness of water reclamation from greywater and domestic sewage. Among the total budget of \$2.7 million, the applicant requested for \$1.5 million which was half of the total budget covering the minor works and equipments including system fabrication, installation of equipments, civil and builder works, alternation of pipeline, EIA study and decommission of the system. The applicant had solicited the agreement from the management of a non-governmental organization (NGO) youth campsite for the installation works and subsequent demonstration to public and users of the campsite. Two representatives of the project team joined the meeting to answer Members'

questions.

35. Note

36. Note

37. After further deliberation on the life cycle and estimated payback period for such installation, the Chairman concluded that the project was not cost effective and carried little demonstration value. The proposed system was not sustainable and the project was not supported.

ECF Project 23/2008 The Methodology to Assess the Impact of Structure-borne Noise inside Buildings

[RPVSC Paper 21/2009-10]

38. Mr. Francis Wong briefed Members on the proposal. The PI applied for \$249,500 for a 18-month project aiming at identifying noise and vibration characteristics inside buildings from various vibration sources near the foundation with a view to improve the prediction and measurement methods for assessing noise impact of structure vibration for typical buildings in Hong Kong. EPD had reservation in supporting the proposal as it carried limited practical values.

39. Note

40. After discussion, the Chairman concluded that the proposal was not supported.

#### **Discussion Item 4: Date of Next Meeting**

41. Next meeting would normally be held around 2 to 3 months from now. The Secretariat would inform Members of the date of the next meeting in due course.

42. There being no other business, the meeting ended at 5:15 pm.

**Secretariat, ECF Research Projects Vetting Sub-committee**

**July 2009**

Note: The paragraph will not be included in the version of notes to be uploaded to the webpage of ECFC according to the standing practice of not disclosing the detailed reasons for supporting or rejecting an application. The ECFC webpage contains a general disclaimer that “Reasons for supporting/rejecting an application had been made known to the project proponents concerned, and the public could ask the project proponents direct for such information.”