

**Minutes of the Seventh Meeting of the Environment and
Conservation Fund Research Projects Vetting Subcommittee
held on 10 September 2012 at 2:30 p.m.
at Room 502, 5/F., Southorn Centre, Wanchai**

Present

Dr Joseph LEE, SBS, JP	(Chairman)
Dr Kenneth MY LEUNG	
Dr Arthur PS LAU	
Mr Barry MC KWONG	
Dr SHUM Ho-cheung, Anderson	
Mr Luther LT WONG	
Mr Conrad PK LAM	ENB
Mr KW CHEUNG	AFCD
Mr Patrick LIU	EPD
Ms Anita SW TSUI	Secretary (EPD)
Miss Sharon TSAI	Assistant Secretary (EPD)
Miss Wendy HO	Assistant Secretary (EPD)

Absent with Apologies

Prof Jonathan WC WONG, MH
Prof CHAU Kwai-cheong, JP
Mr Paul KC CHAN
Ms Agnes NG

Welcoming Remarks

The Chairman welcomed all Members attending the meeting of the Environment and Conservation Fund (ECF) Research Projects Vetting Subcommittee (RPVSC).

Agenda Item 1: Confirmation of Minutes of the Last Meeting

2. The draft minutes of the previous meeting held on 18 July 2012 were circulated to Members on 27 July 2012. Suggested amendments received from Members were subsequently circulated on 3 August 2012, and no further

comments were received from Members. The minutes as amended were confirmed.

Agenda Item 2: Matters Arising from Minutes of the Last Meeting

3. Ms Anita SW TSUI referred to the revised Agenda tabled at the meeting. She said that at the previous meeting, Members had requested for additional information or clarifications on the proposed studies of various applications. She reported that the required information on four of these cases was received, and the applications in question were brought up for continued deliberations at this meeting.

ECF Project 32/2011 Persistent Organic Pollutants in Human Breast Milk *[RPVSC Paper 20/2012-13]*

4. Miss Sharon TSAI indicated that for the ECF Project 32/2011 under application, Members had requested the Principal Investigator (PI) to consider seeking local partnership for the laboratory testing of persistent organic pollutants (POPs) under the proposed study as a means to help build up local capacity, and to resort to competitive tendering in case this was not viable. A response from the PI of the application was since received, in which the PI explained that he had already obtained the support of a local academic for carrying out the laboratory analysis, and would not be using the services of overseas laboratories.

5. Note

6. After further deliberations, the Chairman concluded that the project should be supported. However, the salary of the proposed Senior Research Assistant should be capped at \$20,000/ month.

7. Dr Kenneth LEUNG declared interest for the following application submitted by The University of Hong Kong (HKU) and withdrew from the meeting.

ECF Project 30/2011 Demonstration of an efficient air pollutants scrubbing device for marine applications [RPVSC Paper 36/2012-13]

8. Miss Sharon TSAI said that Members had examined this project at the previous meeting and decided to support the project in principle on the condition that the PI would obtain a written consent from The "Star" Ferry Company, Limited (Star Ferry) for using the technology and all related data owned by the company for the purposes of the present project, including the future dissemination and technology transfer required under the ECF's funding procedures; and the PI would explore the feasibility of trying out the technology in marine vessels owned by other ferry operators. Miss TSAI informed the meeting that a response from the PI was received, which was circulated to Members vide RPVSC Paper 36/2012-13.

9. Note

10. After discussion, the meeting decided to support the project, but that the project team should be requested to actively share their data from the study with other ferry operators in the course of the project, and arrange a few on-site demonstrations of the proposed technology for Members at suitable times during the project period.

[Dr Kenneth LEUNG re-joined the meeting. Dr Anderson SHUM joined the meeting also at this juncture.]

11. Ms Anita TSUI informed Members that the next two items under Matters Arising were related to applications from the Hong Kong Baptist University. As the Chairman declared interest on these applications, the two items would be deferred for discussion at the latter part of the meeting after the Chairman's withdrawal.

Agenda Item 3: Project Completion

ECF Project 30/2010 Carbon Footprint Analysis of Hotels in Hong Kong
[RPVSC paper 23/2012-13]

12. Miss Sharon TSAI reported that ECF Project 30/2010, which was funded by the ECF and the Woo Wheelock Green Fund on an equal basis, was an empirical study undertaken by The Hong Kong Polytechnic to probe into the

sources and levels of greenhouse gas emissions of ten selected hotels. Under the project, PolyU had obtained the support of the Hong Kong Hotels Association (HKHA) in co-ordinating with the owners / operators of hotels for their participation in the study, and facilitating the data collection work. However, in the course of the project, HKHA decided to withdraw its support. As a result, the number of hotels which finally participated in the project was reduced to three. The project was recently completed. Members were invited to assess the results and effectiveness of the project in the light of the changes in the level of activities, and consider whether the grant approved for the project should be adjusted.

13. Note

14. After deliberations, the Chairman concluded that subject to the agreement of the Woo Wheelock Green Fund, the grant for the project should be revised and capped at \$159,840.

15. Dr Kenneth LEUNG and Dr Anderson SHUM declared interest for the following application submitted by HKU and withdrew from the meeting.

Agenda Item 4: Project Variations

ECF Project 1/2011 Living on the edge: coral growth in marginal environments
[RPVSC Paper 24/2012-13]

16. Miss Sharon TSAI reported that the recipient organization, HKU, had proposed variations to the details of this project, including a change in the PI and Co-investigators (Co-Is), as well as a deferred commencement of the project to April 2013. The proposed project variations were circulated to Members on 2 August 2012, and divergent views from Members were received. The Secretariat had since obtained further information in light of the views expressed, and put up the case at this meeting for further deliberations.

17. Note

18. The meeting concluded that the proposed variations were not accepted and the project should be considered as terminated. The meeting also noted that the expertise and experience of the PI were factors to be considered

in assessing whether an application should be supported. In case HKU would like to further pursue the study, a new application had to be submitted with full information on the proposed PI to be furnished.

[Dr Kenneth LEUNG and Dr Anderson SHUM re-joined the meeting.]

Agenda Item 5: New Applications

ECF Project 49/2011 Study on Strategic Energy Policy of Hong Kong towards Renewable Energy Applications [RPVSC Paper 25/2012-13]

19. Miss Sharon TSAI briefed Members on the proposal by PolyU seeking funding support at \$1,339,000 for a 36-month project to investigate the local energy supply and demand patterns, the global energy structure and trends, the local energy structure and future targets, and renewable energy applications for developing new local energy strategy towards energy security and sustainable development of energy supply and energy uses in Hong Kong for policy makers.

20. Note

21. The meeting concluded that the project should not be supported.

ECF Project 48/2011 Feasibility of Utilizing Sewage Sludge Incinerator Ash for Concrete Blocks Production [RPVSC Paper 26/2012-13]

22. Miss Sharon TSAI briefed Members about the proposal by PolyU seeking funding support at \$994,000 for a 36-month project to assess, through a comprehensive laboratory and pilot plant study, the feasibility of using sludge incineration ash for the production of concrete blocks.

23. Note

24. Note

[Prof CS Poon was discharged from the meeting.]

25. Note

26. The Chairman concluded that the PI should be requested to consider reducing the project duration to 24 months, and adjust the project schedule so as to use real sludge ash generated from HKSTF. In addition, he should obtain the formal consent of the facility's contractor for providing sludge incineration ash for the study, as well as the written support of cement manufacturers for production of concrete blocks with sludge incineration ash as a trial. The PI should then submit a suitably revised study proposal and budget for Members' consideration.

ECF Project 44/2011 On the Study of Effect of Aesthetics Appearance of Vegetated Noise Barriers on Noise Annoyance Moderation [RPVSC Paper 27/2012-13]

27. Miss Sharon TSAI briefed Members about the proposal submitted by PolyU seeking funding support at \$492,200 for a 24-month project which aimed to evaluate the effects of aesthetics appearance of vegetated noise barriers on annoyance moderation, and to investigate whether the configuration of vegetation would have an influence on annoyance moderation effects.

28. Note

29. After deliberations, the meeting concluded that the project should be supported. The PI should seek EPD's approval for his questionnaire before conducting the survey under the project, to ensure that the information obtained would be of practical use.

ECF Project 6/2012 First International Conference on Performance-based and Life-cycle Structural Engineering (PLSE 2012) [RPVSC Paper 28/2012-13]

30. Miss Sharon TSAI briefed Members about the PolyU's application for funding of \$450,000 for a 3-day conference to be held in early December 2012. The project aimed to start a conference series for scientific exchanges and international cooperation in the areas of performance-based structural engineering and life cycle structural engineering for a wide range of civil engineering structures.

31. Note

32. The meeting decided that the project should not be supported.

ECF Project 43/2011 Developing a Phase Change Materials (PCM) based Air Cooler for Vehicles with a Switched-off Idling Engine [RPVSC Paper 29/2012-13]

33. Miss Sharon TSAI briefed Members about PolyU's proposal for a grant of \$1,764,200 for a 36-month project which aimed to develop a phase change material (PCM) based air cooler for vehicles.

34. Note

35. After deliberations, the meeting decided that this project should not be supported.

36. Dr Kenneth LEUNG and Dr Anderson SHUM declared interest for the next item concerning an application from HKU, and withdrew from the meeting.

ECF Project 9/2012 2012 Forum on Urban Geoenvironment and Sustainable Development [RPVSC Paper 31/2012-13]

37. Miss Sharon TSAI briefed Members about HKU's application for funding support at \$127,500 for a 5-day conference, which aimed to provide a platform to study and review Hong Kong's urban development and preservation in the aspects of effective use of land resources, protection of geo-environment, sustainable development, and promotion for building a greener and safer city.

38. Note

39. After discussion, the Chairman concluded that this project should not be supported.

[Dr Kenneth LEUNG and Dr Anderson SHUM re-joined the meeting.]

40. As the Vice Council Chairman of the Hong Kong Institute of Vocational Education (IVE), a member of the Council of the City University of

Hong Kong (CityU), and a member of the Court of the Hong Kong Baptist University (HKBU), the Chairman declared interest for the remaining items [i.e. ECF Project 41/2011 from IVE Tsing Yi; ECF Projects 26/2011, 47/2012 from CityU; ECF Projects 8/2011 and 36/2011 from HKBU]. He invited Mr Conrad LAM to chair the discussion and left the meeting.

ECF Project 41/2011 Improvement of Urban Air Quality by Photocatalytic-film-coated Curtain Walls for Higher-rise Buildings [RPVSC Paper 30/2012-13]

41. Miss Sharon TSAI briefed Members about an application from the IVE Tsing Yi seeking funding support at \$486,560 for a 12-month project. The project aimed to develop a thin clear photocatalyst coating technology, which would be applied on both the interior and exterior glass surfaces of curtain wall façades on high-rise building for improvement of indoor air quality and reduction of outdoor air pollutant concentrations in urban areas.

42. ^{Note}

43. After discussion, the meeting decided that the project should not be supported.

ECF Project 26/2011 High Resolution Measurements of NO₂ in Hong Kong using a Portable Cavity-Enhanced DOAS Instrument [RPVSC Paper 32/2012-13]

44. Miss Sharon TSAI briefed Members about CityU's proposal for a 24-month project at a requested funding of \$646,000, which aimed to utilize a portable NO₂ monitor based on cavity-enhanced differential optical absorption spectroscopy (CE-DOAS) to investigate the values and characteristics of NO₂ for critical areas in Hong Kong with high temporal resolution and accuracy. Miss TSAI reported that the original PI, Prof Mark WENIG had just left CityU, and the applicant organization had requested to swap the role of the PI with that of the Co-I (i.e. Dr Zhi NING).

45. ^{Note}

46. After further deliberations, the meeting decided that the project should not be supported.

ECF Project 47/2011 Environmental, Energy and Economic Evaluation of Solar Cooling and Heating for Buildings [RPVSC Paper 33/2012-13]

47. Miss Sharon TSAI briefed Members about the proposal from CityU for funding of \$497,570 for a 30-month project. The project aimed to develop potential types of solar cooling and heating systems for air-conditioning, and space heating and water heating for buildings, and evaluate these from the environmental and energy perspectives with a view to recommending feasible options for office and residential buildings.

48. ^{Note}

49. After discussion, the meeting decided that this project should not be supported.

Continuation of Agenda Item 2: Matters Arising from Minutes of the Last Meeting

ECF Project 8/2011 Erosion and growth of massive corals in Hong Kong [RPVSC Paper 21/2012-13]

50. Miss Sharon TSAI reported that Members had examined this application from HKBU at the previous meeting. Considering the rather long project period of 42 months, and that the lengthy field experiment would result in much passive time, Members had suggested the PI to consider conducting the study in two phases, and pursuing the field surveys and sampling as a first phase research. The meeting also requested the PI to provide a written confirmation from the two Co-Is on their continual involvement in the study. Miss TSAI said that the PI had since revised his proposal as suggested, and provided written confirmations from the two Co-Is.

51. ^{Note}

52. The meeting decided that the application as revised should be supported.

ECF Project 36/2011 Development of a Bioluminescence-based Biosensor for Fast Screening and Detection of Plasticizer Phthalate Contaminants [RPVSC Paper 22/2012-13]

53. Miss Sharon TSAI said that Members had examined this application at the previous meeting, and requested the Secretariat to refer the study to an EA specializing in biosensors for a second opinion. An EA was subsequently invited to assess the proposal.

54. Note

55. After deliberations, the meeting decided that the project should not be supported

Agenda Item 6: Any Other Business

56. Ms Anita TSUI reported that at the previous meeting, Members had examined an application for a study on "Marine Energy: Preliminary Resource Assessment of Hong Kong Coastal Waters and Performance Testing of a Prototype Device" (RPVSC Paper 16/2012-13), but decided not to support the proposal. While Members considered the use of marine energy was a subject worth exploring, the meeting opined that the application had not provided any detailed proposal or plan for implementation. The meeting also considered that in case the PI would like to re-submit an application, his application should include a detailed implementation plan, comparing possible alternative technologies available in the market, and identifying suitable options for Hong Kong. Ms TSUI informed Members that in response to the meeting's decision, the PI had made a submission to further explain his proposal, which was circulated to Members on 5 September 2012.

57. Note

58. After deliberations, the meeting decided to maintain their earlier views on the application.

Agenda Item 7: Date of Next Meeting

59. Mr Conrad LAM informed Members that this was the last meeting held under the current term of the ECF RPVSC. He thanked all Members for their support and valuable contributions over the past two years.

60. There being no other business, the meeting ended at 4:35 p.m.

**Secretariat, ECF Research Projects Vetting Sub-committee
September 2012**

Note:

The paragraph will not be included in the version of notes to be uploaded to the webpage of ECF according to the standing practice of not disclosing the detailed reasons for supporting or rejecting an application. The ECF 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".