# PROCORE - FRANCE/HONG KONG JOINT RESEARCH SCHEME COMPLETION REPORT

Project Reference Number 9052007 (F\_HK05/11T)

Objective(s) as per original application

**Project Title** 

	Hong Kong team	French team
Name of Project Co-ordinator (with title)	English: Dr. T.T. CHOW Chinese: 周天泰博士	Prof. Christophe MENEZO
Name of Co-Investigator (if any)	English: Chinese:	
Institution or Institutional affiliation	√ CityU HKU   CUHK HKUST   HKBU LU   HKIEd PolyU	CEA INRA CNRS No. INRIA INFREMER INSERM No. University of  Others: INSA of Lyon
Other project team members (if any)	Dr. Square Kwong-fai FONG (BST) Dr. Gongsheng HUANG (CA)	Dr. Stephanie GIROUX-JULIEN (INSA of Lyon, France) Dr. Herve PABIOU (CNRS, France
Funding Period		
	. 1 <sup>st</sup> year	2 <sup>nd</sup> year (if applicable)
Start Date	1 January 2012	-
Completion Date	31 December 2012	-

1. To arrange technical visits to both sides for knowing better the potentials for future research collaboration

2. To seek opportunities for joint research grant application and joint publications

[Please attach relevant document(s)]

### i) Outline of proposed research and results obtained

1. Two visits were paid by each side to the other side. The first visits were mostly for knowing better the research team members and facilities. Technical presentations were made to express academic interests and exchange information for key research areas and academic strengthens of both sides. Preliminary joint research activities were then started.

2. The second visits were mainly for discussing the future research collaboration opportunities, including meeting the potential industrial partners for facilitating future applied research in

buildings of the two places at different climate zones.

#### ii) Significance of research results

1. The key collaborative research area of "zero carbon building technology" has been identified and a joint research application for conference/workshop grant has been submitted and finally approved.

Amongst the various ZCB technologies, the photovoltaic/thermal hybrid solar technology has been
identified as the first collaborative research topic to work on. A special issue on "Hybrid Solar
Technology for Power Poly-generation and Energy Saving" has been proposed and accepted by the
International Journal of Photoenergy (current impact factor 2.663).

#### iii) Research output

1. The application for conference/workshop grant (France/Hong Kong Joint Research Scheme) has been successful with a sum of HKD150,000 awarded for organizing a workshop in Hong Kong on "Potential Technologies for Zero Carbon Building Development" in 2013.

2. The Special Issue on "Hybrid Solar Technology for Power Poly-generation and Energy Saving" has been published in the International Journal of Photoenergy in 2012. Dr. T.T. Chow was the Chief Guest Editor, and Prof. C. Menezo of INSA Lyon and Prof. G.N. Tiwari of IIT Delhi were the Guest Editors. See the Editorial (Article ID 957425) attached to this report.

3. Two joint research/review articles on PV/T technology has been published in the special issue. See

the original articles (Article ID 265838 & 307287) attached to this report.

## iv) Potential for or impact on further research collaboration

1. The ZCB workshop to be held in Hong Kong will give opportunity for the local building professionals in Hong Kong to meet the experts and researchers from France and Hong Kong and to explore the future strategic developments of zero carbon buildings in meeting the international/regional goals.

2. The preliminary joint research works and publications of both sides have successfully laid the stone

for further research collaboration on the related topics.