

## **MEDIA RELEASE**

### **BCA PUSHES FOR ENERGY EFFICIENT BUILDING TECHNOLOGIES THROUGH \$20 MILLION GBIC-DEMO SCHEME**

**Singapore, 11 March 2015** – The Building and Construction Authority (BCA) has just released details of the \$20 million scheme, called the GBIC-Building Energy Efficient Demonstrations Scheme (GBIC-Demo), to spearhead the test-bedding of new energy-efficient technologies in fully operational buildings. GBIC-Demo scheme is one of the three key initiatives (refer to Annex A) under the \$52 million (Green Buildings Innovation Cluster) GBIC programme first launched by BCA in September 2014.

2. “The scheme will help mitigate the risks involved in trialling new technologies by co-funding incurred costs such as equipment, installation, and commissioning. In doing so, we hope to spur wider replication and eventual commercialisation of novel energy-efficient solutions for buildings in the longer term,” said Mr Tan Tian Chong, BCA’s Group Director of Research.

3. To push the boundaries of building energy efficiency, technologies to be test-bedded should achieve 20% to 40% improvement over the current best-in-class technologies. These technologies could come from successfully completed research and development (R&D) projects or proven technology, either local or overseas, that have not been implemented widely in Singapore yet. Examples include innovative air-conditioning technologies, such as chilled ceilings and under-floor cooling systems.

4. The scheme will also cover the cost of removing the technology should the trial be deemed unsuccessful.

5. United World College South East Asia (UWCSEA) is keen to participate in the GBIC-Demo scheme to facilitate the implementation of ‘3for2@UWCSEA’ at the college’s new high school block in Dover. Scheduled to be completed by 2017, the facility will boast several technologies that are new to Singapore such as a control and building management system (BMS) optimised for decentralised ACMV systems. The project will be developed by researchers at the Future Cities Laboratory of the Singapore-ETH Centre and engineers at Siemens Building Technologies.

6. Mr Simon Thomas, Director of Operations and Facilities at UWCSEA, said: “This GBIC-Demo scheme will provide a significant opportunity for building owners to reduce their

risk whilst providing a much needed platform for real world learning, the results of which could give a clear direction of future possibilities.”

7. “It is important to test new technologies in a real-world setting and the GBIC-Demo scheme helps remove some of the barriers towards the adoption of cutting-edge technologies for buildings.” said Mr Nilesh Y. Jadhav, Program Director of EcoCampus at Nanyang Technological University. “Apart from incentivising early adopters, the scheme also provides valuable data to subsequent adopters. The sharing of performance data provides opportunities for investigating further improvements in the technology and making it adoption-friendly.”

8. The GBIC programme was set up to serve as a one-stop integrated research, development and demonstration (RD&D) hub to experiment, exhibit and exchange knowledge of promising building energy-efficient solutions.

9. BCA will also be organising workshops to bring together academia, industry, building owners and developers to identify new opportunities for demonstration projects under the GBIC programme. The first workshop is scheduled to be held on 13 March 2015.

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#### About BCA

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. BCA’s mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, it aims to differentiate Singapore’s built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "a future-ready built environment for Singapore". Together with its education arm, the BCA Academy BCA works closely with its industry partners to develop skills and expertise that help shape a future-ready built environment for Singapore. For more information, visit [www.bca.gov.sg](http://www.bca.gov.sg).

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## ANNEX A

### THREE KEY ACTIVITIES UNDER GBIC

The three key activities under GBIC include: GBIC-Building Energy Efficient Demonstrations Scheme; GBIC-National Building EE Repository; and GBIC-Energy Efficiency Research and Development.

- a) **GBIC-Building Energy Efficient Demonstrations Scheme (GBIC-Demo):** GBIC-Demo is large-scale demonstrations of novel energy-efficient technologies in actual buildings. The goal is to validate the performance of the demonstrated technologies by requiring all projects to install calibrated instrumentation to monitor its performance. By doing so, the industry will be able to assess its feasibility for widespread implementation and eventual commercialisation of the technology.
- b) **GBIC-National Building EE Repository (GBIC-Repository):** GBIC-Repository is a central database that collects information from the GBIC-Demo projects, existing buildings and reports from successfully completed R&D projects. Researchers may access the data from the GBIC-Repository to analyse the performance of the demonstrated technology and carry out data analytics. At the same time, the wider public may also access the GBIC-Repository for best practices and success stories.
- c) **GBIC-Energy Efficient Research and Development (GBIC-R&D):** GBIC-R&D is tailored R&D programmes intended to build core capabilities in green buildings. The programmes will focus on five key areas, spanning across technology and non-technology clusters, as shown in the table below.

TECHNOLOGY CLUSTERS	NON-TECHNOLOGY CLUSTER
<ul style="list-style-type: none"><li>• Integrated Design</li><li>• Building Envelope and Façade System</li><li>• Building Management and Information System</li><li>• Air-Conditioning and Mechanical Ventilation</li></ul>	<ul style="list-style-type: none"><li>• Policy and Behavioural Studies</li></ul>