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FOR IMMEDIATE RELEASE

REPUBLIC POLYTECHNIC’S NEW CAMPUS WINS GREEN MARK PLATINUM AWARD

Use of Thermal Energy Storage System a first for Singapore tertiary institutions

Republic Polytechnic’s new Woodland’s Campus was today awarded the Building and Construction Authority’s (BCA) Green Mark Platinum Award.

The award recognises excellence in environmentally friendly building design such as a building’s capacity to save energy and water, provide a healthy indoor environment and the use of vegetation in the project.

“Republic Polytechnic is proud to be awarded this prestigious award that recognises buildings that are environment friendly,” said Professor Low Teck Seng, Principal and CEO of Republic Polytechnic.

"When we first started planning our new 20-hectare Woodlands Campus we knew we wanted a place where students and local residents could relax, connect and have fun. We had the opportunity to influence the total design and concept, so we tasked all our consultants to include special state of the art technology and features to make the Campus eco-friendly The eco-friendly features of the RP Woodlands Campus include:

Thermal Energy Storage System

RP is the first building project in Singapore to make use of a purpose built Thermal Energy Storage (TES) System designed to reduce its energy bill substantially.

TES technology allows building owners to store energy into specially designed storage tanks during the night
when the electricity tariffs are lower. Simply by using cheaper energy alone, RP will enjoy a savings of $380,000 per annum compared to the cost of a conventional air-conditioning system.

**Integration with Nature**

The design of the Campus deliberately incorporates lots of greenery and landscaping to replace the displaced nature. This includes the Agora Lawn – 4 hectares of grassed area where trees are planted to provide shade and to minimize heat transfer to facilities below air-conditioned spaces of the lawn. Water features with surrounding landscaping are also used to lower the surrounding ambient temperature.

The rooftop garden at the Promenade helps to reduce solar heat transfer hence reducing the need for air conditioning. In addition, it also incorporates a special low-maintenance planting media which allows rainwater to drain through without flooding, and stores water and fertilizer which are released during dry weather.

The multi-storey car park features a “green wall” and “green roof” where creepers grow from vine trays acting as “bio-lungs”. The objective of having the greenery is to reduce the effects of a “heat island” in and around the car park. The creepers absorb carbon dioxide and release oxygen, helping to cool its surroundings.

**Better Air Quality**

Good indoor air quality was a prime consideration at the early design stage. A nighttime air purge system and a smoke extract system were incorporated in the building ventilation system to improve indoor air quality.

**Hygienic Waste Disposal**

RP adopted the Pneumatic Waste Conveyance System on Campus. This is a fully enclosed system that removes rubbish discreetly via a network of underground pipes using suction mechanisms mounted on the refuse collection truck. It helps to improve hygiene by minimizing pest and odour related issues on Campus.

**Energy Saving Features**

*Photocell of External Lightings*

Another energy saving feature is the use of Photocell external lighting. By sensing the amount of sunlight, the external light will be turned on and off according to lighting needs, achieving energy efficiency.

*Motion Detectors for Lightings*

Motion detectors are also used in toilets instead of light switches. The light will turn on automatically when the
motion detector senses activity. A preset timer turns off the lighting if there is no activity in the toilet.

**Multi-mode Ventilation**

The Sports Hall is innovatively designed with multi-mode ventilation to allow switching from air-conditioning to mechanical ventilation (fans) to natural ventilation. When in operation, it will be naturally ventilated by opening up the perimeter louvers. Air-conditioning and mechanical ventilation can be turned on when necessary.

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**About Republic Polytechnic**

Republic Polytechnic is the first educational institution in Singapore to fully adopt the Problem-Based Learning approach. It is a progressive polytechnic with five schools offering 19 diploma courses. This includes courses in Engineering, Information and Communications Technology, Applied Science and Technology for the Arts and Sports, Health and Leisure.

Republic Polytechnic is committed to nurturing innovation and entrepreneurial learning in an environment that develops problem-solving skills and a lifelong learning attitude. Its holistic, broad-based curriculum, covering culture, enterprise development, and personal development prepares students for an active, meaningful role in society.

Republic Polytechnic’s quest for excellence is recognised through various national and international accreditations such as People Developer Standard, ISO 9001, ISO 14001, OHSAS 18001, Singapore Quality Class, Family Friendly Employer, Singapore Health Award (Silver), and Singapore Innovation Class Award.

For more information, visit [www.rp.sg](http://www.rp.sg)