

Our Ref: BCA ID 94.16.1
Date: 02 September 2014

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Circular to Professional Institutes / Associations

Dear Sir / Madam,

2nd ENERGY INNOVATION RESEARCH PROGRAMME (EIRP) GRANT CALL FOR BUILDING ENERGY EFFICIENCY

Background

- 1 In September 2013, BCA in partnership with the Energy Innovation Programme Office (EIPO), co-led by the Economic Development Board (EDB) and Energy Market Authority (EMA), launched the inaugural Building Energy Efficiency Grant Call under the Energy Innovation Research Programme (EIRP). The grant call was in the areas of Air-Conditioning & Mechanical Ventilation (ACMV) system and Building Management & Information System (BMIS). Eight (8) projects were awarded in June 2014.
- 2 Following the success of the 1st grant call, the 2nd EIRP Building Energy Efficiency Grant Call was launched on 1 September 2014. This grant call seeks innovative technologies and solutions to complement the on-going R&D efforts in the area of ACMV system, raising the bar for building energy efficiency further for both new and existing buildings. Greater emphasis will be placed on better human thermal comfort, health, satisfaction and Indoor Environmental Quality (IEQ) for the Tropics.

Scope of Grant Call

- 3 Singapore's climatic conditions include high moisture content (or high latent cooling load), thus requiring high amounts of energy to dehumidify indoor air. Technologies that can remove moisture from the air using less energy can help achieve significant savings in energy costs. A minimum of 40% energy savings should be achieved over the conventional air conditioning and delivery system.
- 4 Another area is to improve the effectiveness of air delivery and ventilation system in the most energy efficient manner to provide for healthy indoor environments. Innovative air treatment to treat contaminants such as fine particles, gaseous pollutants, bio-related issues and CO₂ as part of the overall proposal will be accessed favourably.
- 5 Self-adapting air distribution system is also a challenge, as occupants' thermal comfort is affected by more parameters than temperature and humidity. The monitoring and control systems should address a broader spectrum of parameters for good IEQ and human satisfaction. Localized self-adaptive cooling, ventilation and controls should also be considered.
- 6 The proposed technologies/ solutions should be space efficient and cost effective.
- 7 Other innovative solutions will also be considered if they improve the overall efficiency of the air-conditioning system. Examples of such solutions include R&D to reduce friction and improve efficiency by reducing pressure losses in duct and pipe design, materials, filters, etc and innovative Thermal Energy Storage (TES) for energy conservation.
- 8 As this grant call is meant to address current industry challenges, projects led by a Principal Investigator (PI) from the Institute of Higher Learning (IHLs), research institutes, public sector agencies and non-profit organisations are strongly encouraged to have at least one relevant industry partner.

Funding Support

9 IHLs, research institutes, public sector agencies and non-profit organisations will qualify for up to 100% funding support of approved direct qualifying costs of a project. Private sector companies will qualify up to 70% of funding support of the approved direct qualifying costs of a project.

Application

10 Interested applicants are invited to submit their proposals via EIRP's RITA website at <https://rita.nrf.gov.sg/ewi/BuildingEE2/default.aspx>. Submission of white paper is open until **20 October 2014, 2355 hrs Singapore time (GMT +08:00)**.

11 The proposals will be evaluated in two stages (i) White Paper stage; and (ii) Full Proposal stage.

12 The full details of the scheme can be found on EIRP's RITA website at <https://rita.nrf.gov.sg/ewi/BuildingEE2/default.aspx>

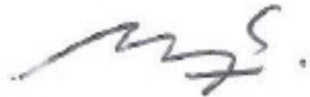
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Thank you.



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