Building and Construction Authority

We shape a **safe**, **high quality**, **sustainable** and **friendly** built environment.

Our Ref: BCA RID 94.9.2

Date: 15 April 2014

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Circular to Professional Institutes

Dear Sir / Madam,

ENHANCED SUSTAINABLE CONSTRUCTION CAPABILITY DEVELOPMENT FUND (SC FUND) FOR BUILDING PROJECTS WITH GOOD SC DESIGNS

Objective

1 The Sustainable Construction Capability Development Fund (SC Fund) was set up to develop capabilities of the industry in delivering sustainable materials and adopting sustainable construction methods. The fund is intended to build up capabilities of industry players such as demolition contractors, recyclers, ready mixed concrete suppliers and other industry players who wish to test-bed SC-related technologies or materials.

2 As part of the drive to incentivize efforts and develop capabilities in designing building projects with low Concrete Usage Index (CUI), the fund will be enhanced to extend funding support for demonstrating design efficiency to achieve low CUI without compromising safety, productivity and buildability.

3 The evaluation of each project is based on 2 indicators, the design aspect, with an emphasis on optimal usage of concrete, and innovation aspect, to encourage adoption of innovative materials/technologies capable of concrete usage reduction. Please refer to *Annex A* for detailed evaluation criteria of the enhancement.

Funding Support

4 The grant quantum is capped at 50% of the total qualifying cost of the project or $250,000, whichever is lower. The grant quantum is worked out as the incremental efforts required by the structural engineers in seeking new solutions to achieve low CUI building projects. The qualifying costs can be in terms of the

incremental man-hours for the personnel directly involved in the project, additional equipment/material/software costs required for the inclusion of specific technology types or additional consultancy services necessary for novel systems/technologies.

Application

5 The enhancement is effective from 15 April 2014 and firms can submit their proposals to BCA at any time starting from the launch.

6 The full details of the scheme, such as application guidelines, application forms and FAQs pertaining to the enhancement can be found on our website at http://www.bca.gov.sg/Professionals/GovAsst/govasst.html.

7 We would appreciate it if you could convey the contents of this circular to your members.

8 For more information, please contact:

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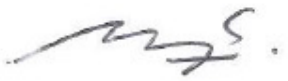
Thank you.



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ANNEX A – Detailed Evaluation Criteria

Design (70%) **Emphasis on upstream design by advocating design for optimal usage of concrete therefore optimizing the use of building materials and natural resources.**	**Innovation (30%)** **To encourage global technology scanning & approaches undertaken in the areas of adoption of new materials/technologies, capable of reducing/replacing overall concrete usage**
Able to achieve the pre-requisite criteria of min. CUI value **0.5** or below. **(50%)**	Innovative practices/approaches in use of **new** materials / methods / technologies
Use of recycled / alternative materials **(20%)**	

Design (70%)

Emphasis on upstream design by advocating design for optimal usage of concrete therefore optimizing the use of building materials and natural resources.

Able to achieve the pre-requisite criteria of min. CUI value **0.5** or below **(50%).**

Project CUI (m^3/m^2)	**Points allocation** [80 - 100 x (Project CUI)]
≤ 0.50	30
≤ 0.45	35
≤ 0.40	40
≤ 0.35	45
≤ 0.30	50

$$\text{Concrete Usage Index} = \frac{\text{Concrete Volume in m3}}{\text{Constructed Floor Area in m2}}$$

Use of recycled / alternative materials **(20%).**

1. Recycled concrete aggregates
2. Ground Granulated Blast Furnace Slag
3. Wash Copper Slag
4. Crushed Sand
5. Fly Ash
6. Incineration Bottom Ash
7. Recycled Steel elements
8. Recycled Timber elements etc.

Extent of Usage	Points Allocation
≥ 50% of total material Vol.	20
≥ 40% of total material Vol.	18
≥ 30% of total material Vol.	15
≥ 25% of total material Vol.	12

Innovation (30%)

To encourage global technology scanning & approaches undertaken in the areas of adoption of new technologies, capable of reducing/replacing overall concrete usage

Innovative practices/approaches in use of **new** methods / technologies / systems **(30%)**

1. Cross-Laminated Timbre (CLT)
2. Fibre-reinforced concrete building elements
3. High Strength Concrete building elements
4. Design for Disassembly etc.

High Impact	Points Allocation
Cross-Laminated Timber (CLT) building elements	30
Steel Structure system	
Medium Impact	**Points Allocation**
Cobiax System	20
Precast system	
In-situ High Strength concrete building elements	
Fibre-reinforced Concrete building elements	