

Category Description

Please submit your proposal under one of the following categories.

1. Carbon Tech

- Technology to reduce the carbon emissions for zero carbon building or climate positive. Particularly focusing on in-building energy-efficient equipment, appliances, and other tangible capitals.

Some concepts	Examples
Reduce Carbon Emission	Replace fossil fuels with renewable energy Install energy efficient appliances including air-con, lighting devices, clothes drying facilities, etc.
Reuse and Recycle Carbon Emitted	Reuse CO2 into new chemicals Recycle CO2 used during industrial processes
Remove Carbon Emitted	Increase green areas and plantation

2. Smart and Green Building

- Technology to enable efficient and innovative use of resources, minimize emissions and energy costs while creating a comfortable environment for occupants. Particularly focusing on in-building smart systems and other intangible capitals, and relevant green building certifications such as BEAM and LEED.

Some concepts	Examples
Automation and Integration of Systems	Smart Lighting system that adjusts its brightness automatically based on lux value of nearby area Linking air monitors with ventilation system such that less ventilation will be applied for less human activities

Incorporation of Weather	Integrating weather forecast or real time weather information to building's management systems for saving energy with thermal comfort
Remote Maintenance and Management	AI that detects abnormal usage and malfunction to reduce needs of physical inspection Remote control of doors and rooms for reducing operation staff and emission from transportation

3. Construction Tech

- Technology used during the construction phase of a project but not after, such as green construction innovative tools, machinery, modifications, software, etc. Particularly focusing on innovative products used during the design stage, and specific structural items in construction sites.

Some concepts	Examples
Robots	Using robots to replace simple tasks
Heat Insulation	Paints that insulate heat from leaking or moving in an area after coating on interior or exterior walls Green roof that reflects extra heat radiation from sunlight
Augmented Reality (AR)	Replaces the need of looking at printed building plans while having a clear 3-D picture of projects
3D Printing	3-D print structures with cements to avoid manual errors

4. Waste Reduction

- Technology that helps reduce the waste generated by our building users to achieve zero waste and self-sustaining building. Particularly focusing on waste generated, and resources wasted from building’s daily operations.

Some concepts	Examples
Waste Monitoring	Smart recycling bins that sort recyclables and also track waste and recyclable volumes continuously
Recycling or Upcycling Technology	<p>Patent that turns polystyrene into liquid form for easier transportation and recycling</p> <p>Optical sensors that separate different types of plastics for further processing</p>
Resources Management System	<p>Wastewater treatment and recycling systems that clean buildings’ wastewater for reuse</p> <p>Condensate water recovery system can reuse the heat energy used for boiling water during daily operation</p>

5. Other Green Solutions

- PropTech solutions that address reduction of carbon footprint but are not fall into the above categories.