**GREEN BUILDINGS INNOVATION CLUSTER - ENERGY EFFICIENT DEMONSTRATIONS SCHEME**

**(GBIC-DEMO) APPLICATION FORM**

1. Applicants should read the Green Buildings Innovation Cluster – Energy Efficient Demonstrations Scheme (GBIC-Demo) information in **Annex A** of this document before filling in this form.
2. All fields in this application are compulsory. Where information is not applicable, a “N.A” is necessary.
3. Where terms or phrases are not defined herein, applicants should write to BCA for clarifications.
4. All application forms must be accompanied with the necessary supporting documents and submitted to:

[BCA\_Challenge\_Call@bca.gov.sg](mailto:BCA_Challenge_Call@bca.gov.sg)

1. The applicant’s submission of this application form shall constitute a written indication of intent to seek funding support. BCA may thereafter, at its discretion, issue a Letter of Offer to the Applicant containing an offer by duly completing and returning the letter of acceptance (enclosed with the letter of offer) in the manner set out in the Letter of Offer. Upon receipt of the said letter of acceptance by BCA, a binding agreement between BCA and the Applicant shall come into effect.

**PART 1 – PARTICULARS OF APPLICANT**

1. **Lead Applicant (Developer/Building Owner)**

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1. **Lead Applicant (Developer/Building Owner)**

*Please provide a copy of the ACRA printout.*

|  |
| --- |
| Name of Developer/Building Owner: |
| Address: |
| UEN: |
| Name & Designation of Contact Person: |
| Contact Number: (Office) (Mobile) |
| Email Address: |

**Declaration:**

We have not received any funding from other agencies for the same project.

1. **ESD Consultant (GBIC Consultant)**

*Please provide a copy of the ACRA printout.*

|  |  |
| --- | --- |
| ESD Consultant (GBIC Consultant) |  |
| Address of ESD Consultant (GBIC Consultant) |  |
| UEN: |  |
| Name & Designation of Contact Person: | |
| Contact Number: (Office) (Mobile) | |
| Email address |  |

1. **M&V Consultant**

*Please provide a copy of the ACRA printout.*

|  |  |
| --- | --- |
| M&V Consultant |  |
| Address of M&V Consultant |  |
| UEN: |  |
| Name & Designation of Contact Person: | |
| Contact Number: (Office) (Mobile) | |
| Email address |  |

**PART 2: INFORMATION ON BUILDING**

|  |  |  |
| --- | --- | --- |
| Building Name |  | |
| Address of Building |  | |
| Gross Floor Area (GFA) |  | |
| Number of Floors |  | |
| Building status | □Existing  Age of Building: | □New  Expected TOP: |
| Building Typology | * Healthcare * Retail * Mixed development: *List the various building typologies.* * High Rise Hotel (>12 storeys) | |

**PART 3A – DEMONSTRATION SPACE**

*Note: Demonstration must be able to achieve* ***75% energy efficiency improvement*** *or better, from 2005 baseline.*

|  |  |
| --- | --- |
| Demonstration space in m2 (sqm). | * Whole Building * Floor (GFA: m2)   *(Please provide an updated floor plan indicating the area where the demonstration will be carried out.)* |
| Expected Project Start and End date: |  |

*Project period should include the Defects Liability Period (DLP).*

**PART 3B: ENERGY EFFICIENCY** *(Evaluation Weightage 20%)*

|  |  |  |
| --- | --- | --- |
| **Indicators** | **Current** | **Proposed** |
| Energy Consumption (MWh/year) |  |  |
| Energy Use Intensity (EUI in kWh/m2/year) |  |  |
| % Energy Efficiency Improvement from 2005 baseline |  |  |
| Maintenance Cost ($) |  |  |

Green Mark Certification:

|  |  |
| --- | --- |
| Current Green Mark Certification: |  |
| Target: Green Mark Certification *(must be Platinum SLE\* and above)* |  |

*\*GM Platinum SLE – Green Mark Platinum Super Low Energy certification*

**PART 4A: NOVELTY AND INNOVATION** *(Evaluation Weightage 20%)*

*Please provide details for each of the technology/solution in a separate document*

|  |  |
| --- | --- |
| Name of Technology Supplier/Solution Provider: | |
| Address of technology supplier/solution provider: | |
| Name & Designation of Contact Person: | |
| Contact Number: (Office) (Mobile) | |
| Email address: | |
| Company information: SG Start-ups SME LLE MNC | |
| Please provide a copy of the following:   * ACRA printout, * Project reference, * Business plans, * Financial statements for the last 3 years on profit, revenue, value of projects, paid up capital and local shareholding. | |
| Technology/solution information |  |
| Description of the novelty of this technology/solution |  |
| How would this technology/solution help to improve the energy efficiency of the building? |  |
| Was the technology/solution developed from a research project? | □Yes □No  *If yes, please provide info on funding programme.* |
| Has the technology/solution been used in any of the buildings in Singapore/ other countries | □Yes -  *Please provide details of the projects.*  *(e.g. name of building, location and year of implementation)*  □No |
| Technology Readiness Level (TRL) |  |
| Is the technology/solution commercially available (e.g. Can it be procured “off-the-shelf”) | □Yes  □No -  *Please state reason.* |
| Contribution of technology/ solution in reducing building’s overall energy consumption in kWh/year and in %. | Reduction of overall energy consumption in:  kWh/year:  % reduction: |

**PART 4B – SCALABILITY** *(Evaluation Weightage 30%)*

*Please provide details for each of the technology/solution in a separate document.*

1. For technology and solution providers to complete:

|  |  |
| --- | --- |
| What are your plans to scale up the technology/solution? |  |
| Have you secured any interest from other building projects to implement your technology/solution |  |

1. For building owner/developers to complete:

|  |  |
| --- | --- |
| Portfolio of buildings |  |
| Upcoming new projects |  |

**PART 5 – COMMERCIAL VIABILITY AND COST** *(Evaluation weightage 30%)*

*(Note: Cost should exclude GST)*

1. Technologies (includes Equipment, Software, Materials & Consumables, Manpower)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No** | **Item** | **Cost per item (SGD)** | **Unit** | **Total (SGD)** | **ROI/Payback**  (compared to the cost of GM 2021 platinum technologies/solutions) |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

*\*Applicant to install Information Technology and Communication (ITC) system with dashboard (web-portal format) function to allow central monitoring and reporting capabilities and to provide secured Rest API service to allow BCA to access the data in real time (view only)*

1. M&V instrumentation (to carry out M&V for the technologies proposed).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No** | **Item** | **Cost per item (SGD)** | **Unit** | **Total (SGD)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

1. Professional Services (Consultancy Services & 3rd party M&V services etc).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No** | **Item** | **Cost per item (SGD)** | **Unit** | **Total (SGD)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

**PART 6 – THIRD PARTY RISK MANAGEMENT**

To safeguard against data leaks/breaches, depending on the nature of the demonstration project may be required by BCA to attain one of the data and/or cybersecurity standards certification listed below (hyperlinked) as a pre-requisite to receive data requested or execute the data collection (e.g. survey) for the demonstration project. *Exact requirements will be determined after evaluation and BCA will officially inform the applicants selected for award in writing*[[1]](#footnote-1). Failure to obtain the required certifications may affect project progress leading to delays in payment milestones, and potentially termination of the award.

|  |  |
| --- | --- |
| [Cyber Security Agency (CSA) Cybersecurity Standards](https://www.csa.gov.sg/our-programmes/support-for-enterprises/sg-cyber-safe-programme/cybersecurity-certification-scheme-for-organisation)**[[2]](#footnote-2)** | **Inforcomm Media Development Authority (IMDA) Data Security Standards** |
| Cyber Trust Essentials (CTE) | [Data Protection Essentials (DPE)](https://www.imda.gov.sg/how-we-can-help/data-protection-essentials) |
| Cyber Trust Mark Tier 2 - Practitioner |
| Cyber Trust Mark Tier 3 - Promoter | [Data Protection Trust Mark (DPTM)](https://www.imda.gov.sg/how-we-can-help/data-protection-trustmark-certification/dptm-consumers) |
| Cyber Trust Mark Tier 4 - Performer |
| Cyber Trust Mark Tier 5 – Advocate |

**PART 7 – TIMELINE**

Please provide the proposed project timeline stating the start and end dates. This should include the period for data collection preferably after the Defects Liability Period (DLP) or when once the building is fully occupied, whichever is earlier, for a minimum period of 12 months, inclusive of the final report.

Note: Data collected and validated should follow the *International Performance Measurement and Verification Protocol (IPMVP).*

**PART 8 – UNDERTAKING BY APPLICANT**

In signing the application for GBIC-DEMO, the Applicant undertakes the following:

* All information submitted in this form is accurate and true to the best of their knowledge at the time of submission,
* Not to send similar versions or part(s) of this proposal to other agencies for funding,
* Ensure that the requested equipment/resources are not already funded by another agency or research proposal.

|  |  |  |
| --- | --- | --- |
| **Organisation** | **Name & Designation** | **Signature & Date** |
| **Developer/Building Owner** |  | *Please sign here* |
| **GBIC Consultant** |  | *Please sign here* |
| **M&V consultant** |  | *Please sign here* |

**ANNEX A: GBIC-DEMO INFORMATION**

Evaluation Criteria

The proposal will be evaluated based on the following criteria:

1. Energy Efficiency:

* Ability to meet the 75% energy efficiency target for this challenge call.

1. Scalability:

* Plans to scale up the technology/ solutions by technology / solution providers.
* Plans to replicate the solutions to building owners’ building portfolio.

1. Commercial viability and cost:

* Good return on investment and payback period, reasonable delta cost increase compared to GM2021 Platinum technologies.

1. Novelty and innovation:

* Uniqueness of technologies and the energy improvement compared to best-in- class (platinum) technologies.

Funding Support

* Singapore-based building owners and developers are eligible to apply for up to 70% funding support or $3 million (whichever is lower) for the demonstration project.

Qualifying cost will cover:

a) Design and consultancy services,

b) Energy performance modelling and simulation work,

c) Equipment and Installation,

d) Testing and commissioning,

e) Consultancy and instruments for measurement and verification,

f) Dashboard and graphic user interface,

g) Documentation work such as M&V Report and Final Report

How to Apply

Thematic challenge calls will be launched for Building owners/developers/industry partners to co-create innovative solutions to address the challenges and push energy efficiency boundaries. Please submit the completed application form, including supporting documentations via [BCA\_Challenge\_Call@bca.gov.sg](mailto:BCA_Challenge_Call@bca.gov.sg).

Please direct your enquires to [BCA\_Challenge\_Call@bca.gov.sg](mailto:BCA_Challenge_Call@bca.gov.sg).

1. Should there be new data request or new data collection works identified later over the course of the project, BCA reserves the right to require additional certifications to be attained during the project’s progress (i.e. after project is awarded). [↑](#footnote-ref-1)
2. Cyber Trust Mark controls are also mapped to (and is a subset of) ISO/IEC 27001:2022. Applicants may use ISO/IEC 27001:2022 certification to meet all tiers of Cyber Trust Mark certifications. [↑](#footnote-ref-2)